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ESDGC in primary schools : exploring practice, development and influences

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**ESDGC in primary schools:
exploring practice, development and
influences**

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Learning, Bangor University**

2012

**This dissertation is submitted in fulfilment of the
requirement for the degree of PhD of
Bangor University**

ABSTRACT

Education for Sustainable Development and Global Citizenship (ESDGC) has received little detailed research attention, especially in Wales where it is now a key theme in the Revised Curriculum for Wales. The thesis explores issues in the development of ESDGC through case studies of five Welsh primary schools which had received positive mention for ESDGC. The schools' practice is first examined against established criteria for ESDGC. A detailed investigation follows of the influences and dynamics that had shaped their development.

All schools were found to be carrying out a substantial number of ESDGC activities and taking a flexible, pupil-centred, skills-based approach; this was further encouraged by the nature of the revised curriculum. One school displayed some characteristics of transformative change. ESDGC was found to widen pupils' horizons and to give them enjoyment and motivation for learning. Although schools had begun developing ESDGC for varied reasons all had at some time been influenced by national guidance. Key factors in development included: having a supportive head teacher who gave attention to ESDGC; a knowledgeable, enthusiastic ESDGC coordinator; a collaborative ethos; being alert to, and taking advantage of, external opportunities to enrich learning. Key players had often received substantial professional development but other teachers were dependent on learning opportunities within the school. ESDGC coordinators had extensive external networks which gave them access to intellectual capital and new ideas. Where there were strong learning communities and frequent opportunities to discuss ESDGC there appeared to be greater understanding of ESDGC and a shared vision of its relevance.

Several progressive models are proposed to explain the mechanisms of ESDGC development within schools and regionally. These draw on a combination of action research models, socio-historic activity theory and social network theory. Implications for national funding strategies, school networking, teacher training and educational change in general are noted.

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ABBREVIATIONS

BC	British Council
BU	Bangor University
CPD	Continuing Professional Development
DEC	Development Education Centre
DFES	Department for Education and Science (England)
DFEE	Department for Education and Environment (England)
DFID	Department for International Development (UK Government)
DGSP	DFID Global School Partnerships
EfS	Education for Sustainability
ENSI	Environment and School Initiatives
ESD	Education for Sustainable Development
ESD/GC	Education for Sustainable Development and/or Global Citizenship and/or similar topics
ESDGC	Education for Sustainable Development and Global Citizenship (as defined in Wales)
ICT	Information and Communications Technology
LA	Local Authority
LEA	Local Education Authority
MFL	Modern Foreign Languages
NGO	Non-Governmental Organisation
PSE	Personal and Social Education
SEED	Sustainability and Environmental Education
WEC	World Education Centre, Bangor University

INTRODUCTION

This study explores the development of Education for Sustainable Development and Global Citizenship (ESDGC) in primary schools in north-west Wales. This is an area of education which has received much attention in Wales in recent years but there is still a dearth of research on its impact. The study has been conducted with the support of a bursary from the Welsh Assembly Government.

THE CONTEXT OF THE STUDY

My background

From my early years I have undergone learning related to this field of study. My appreciation of the natural world was gained during my early family and school years. I found geography fascinating at school and it excited my curiosity in the wider world. When I was introduced to biology and zoology at university I was fascinated by the variety, complexity and interdependence of life. Working in marine ecology made me further aware of this interdependence and of the delicate balance within systems. During a period at home with my young children I tended our smallholding and gained an even closer understanding of our interdependence with our environment. I then trained as secondary science teacher and in my subsequent work as education officer in a zoo, I learned more about conservation and found holistic approaches and cross curricular planning to be preferable ways of working. In 1993, I moved to work in the World Education Centre, a development education centre in Bangor University. I began to extend my understanding of the importance of global interconnections, and also of the variety of methodologies for introducing these topics to children and young people. I worked in this centre for seventeen years until my retirement in 2011, first as the primary schools project officer, then as coordinator of projects to embed ESDGC in Initial Teacher Education and Training and Higher Education and finally as Director. I see ESDGC as a core, holistic element of learning, relevant for all ages, across the whole curriculum and in our everyday lives; it helps people to appreciate the world and its interconnections and to evaluate their own role in shaping its future. It also provides a very motivating context for learning.

From 1997 to 2000 I studied for a part-time M.Ed. incorporating a study of global school learning partnerships in which schools compared issues of relevance to them all; I subsequently taught for ten years on this master's course. During this period I was also a member of the teams which conducted the research for three of Wales' ESDGC school guidance documents. This emphasised the complexity of designing curriculum guidance to satisfy a wide range of interest groups. My last project before retirement was a three year ESDGC teacher mentor project funded by the UK Department for International Development; this ran concurrently with my doctoral research.

I have thus had a long history of working within the field of ESDGC and have witnessed at first hand, and been involved in, the changes taking place. All of this experience has given me an insight into some of the issues requiring research in this field. For example I have noted that some teachers will introduce ESDGC whatever guidance is, or is not, in place – it is in their hearts and minds. Others may find it harder to see connections between local and global issues and the relevance of these to their own lives. However, from my own personal experience I believe that people can learn about this and also change their opinions and values. One of my interests in this research study is to find out how this happens within schools.

The national context

Wales is one of the four countries making up the United Kingdom. In 1999, the Welsh Assembly Government (WAG) came into being as a result of devolution in the UK government (HMSO, 1998). Its constitution included a commitment to consider sustainable development in all its activities; this was a fairly unique move at the time. The curriculum guidance booklet *Education for Sustainable Development and Global Citizenship: Why? What? How?* (ACCAC, 2002) was first introduced to schools in Wales in 2002. This fairly brief document contained several school case studies and described ESDGC as being,

concerned with,

- the links between society, economy and environment and between our own lives and those of people throughout the world;
- the needs and rights of both present and future generations;
- the relationships between power, resources and human rights;

- the local and global implications of everything we do and the actions that individuals and organisations can take in response to local and global issues.’ (ACCAC, 2002, p. 2)

There was then a lull in ESDGC developments until 2005. This saw the first in a series of new ESDGC developments with Estyn (Her Majesty’s Inspectorate for Education and Training in Wales) producing its first set of guidance for schools (Estyn, 2005). In 2006 the Welsh Assembly Government published the ESDGC Strategy for Wales (Welsh Assembly Government, 2006). This set targets for all phases of education. Within the school sector it emphasised that ESDGC is a holistic overarching concept linking schemes such as Eco-Schools, Healthy Schools and Global School Partnerships. Recommended actions included:

- the development of a baseline statement on ESDGC;
- the development of common standards for ESDGC;
- appointing ‘champions for ESDGC’ e.g. within counties;
- ensuring training and support for head teachers, teachers, ancillary staff and parents;
- ensuring delivery of the Enabling Effective Support initiative to support delivery of ESDGC and the formation of school networks;
- local authorities developing local ESDGC strategies and including sustainable development and global citizenship in future requirements for educational strategic plans (ESPs) and School Improvement Plans;
- schools reviewing their management in relation to sustainable, ethical procurement and biodiversity;
- ensuring training for staff in initial teacher education, new teachers in their induction period.
- reviewing the place of sustainable development and global citizenship in the curriculum as part of ACCAC’s curriculum review. (abbreviated from Welsh Assembly Government, 2006, pp. 14-19)

Actions were then put in place to deliver these recommendations. The Welsh Assembly Government commissioned Estyn to develop a position statement on ESDGC in schools and further education colleges. I was a member of the team contracted to carry out this

research. The statement, which resulted from phone surveys to a sample of schools, showed a significant disparity of delivery of ESDGC throughout Wales (Estyn, 2006a). Although all schools were said to be doing some work concerned with ESDGC it found that,

about $\frac{3}{4}$ of schools give little coherent and consistent attention to it and it has a central and well organised place in the life and work of less than $\frac{1}{10}$ of the total. (p. 10).

These latter schools were almost exclusively primary schools. There was said to be more work being done on sustainable development than on global citizenship. They also noted that ‘Teachers and advisers do not have a clear and consistent understanding of the definition, purpose and benefits of ESDGC.’ (p. 10)

Further guidance to promote ESDGC followed. First Estyn revised its existing ESDGC guidance (Estyn, 2005) to emphasise the need for a global dimension in schools (Estyn, 2006b). The document *Education for Sustainable Development and Global Citizenship: A Common Understanding for Schools* (Welsh Assembly Government, 2008b) was published together with an accompanying document for teacher trainees and new teachers (Welsh Assembly Government, 2008c). I was a key member of the teams which contributed to both these publications. These documents were much more explicit than the earlier 2002 documents, describing ESDGC and areas to address in detail. The common understanding document was delivered to all schools in September 2008, along with many other documents for the Revised Curriculum for Wales, an innovative pupil-centred, skills-based curriculum which emphasised increased flexibility in teaching approaches. The summary curriculum document *Making the most of learning – implementing the revised curriculum* (Welsh Assembly Government, 2008a) includes reference to ESDGC as one of the curriculum aims; ESDGC is highlighted in many subject areas and it is named as one of five themes in Personal and Social Education. A full description of changes within, and influences on, the curriculum in Wales over this period can be found in Norcliffe and Bennell (2010) and Bennell and Norcliffe (2011).

Since its first introduction there have been many individual initiatives to support ESDGC in schools and Initial Teacher Education and Training in Wales; many of these have benefited the study area of north-west Wales. There has been support from a variety of

environment and development non-governmental organisations (NGOs) and development education centres, from school awards schemes, and from several projects funded by the UK Department for International Development (DfID) and the Welsh Assembly Government. This plethora of initiatives was commented upon by Estyn (2006a) as a possible barrier to schools' development of ESDGC. ESDGC support became more coordinated with the introduction of the Enabling Effective Support (EES) initiative in Wales, funded by DfID and the Welsh Assembly Government (DfID, 2003). This established fora in various regions of Wales. With members from schools, LEAs and NGOs and with a small sum of money each year, these fora publicised ESDGC support and coordinated local events to further support teachers. Pitts (2009, unpublished report) found, from a survey of a random sample of a quarter of the schools in Wales (30% return; 144 responses), that 55% of primary schools had attended at least one ESDGC support event supported by Enabling Effective Support in the previous five years; almost a third of these had attended more than one event. In their evaluations of events the most common follow-up activity intended was planning for ESDGC, followed by raising the profile of ESDGC and following up on 'an award scheme or initiative' (p. 3).

RATIONALE FOR THE STUDY

Evidence of longer term impact of these curriculum changes and ESDGC support in Wales has been few and far between. School inspection reports began to increasingly mention ESDGC, and more recent school inspection results for Wales (www.estyn.org.uk, accessed 20/05/2010), showed that some schools were judged to be doing ESDGC very well. The definition of 'very well' is, however, a contentious issue. Morgan (2009), in an unpublished study of inspection comments on ESDGC in Wales in the years 2006-07 and 2007-08, found that 28% (41) of those inspected were awarded a grade 1 for ESDGC. Of these he said it was clear that in most reports it was Education for Sustainable Development (ESD) that was the outstanding feature. In his judgment around only 20% of the reports suggested that Global Citizenship had similar outstanding features to ESD. Further to this, on closer inspection of the comments he found that although a few reports did describe schools as engaging in a large range of global citizenship activities, many of these consisted of comments praising children's charitable initiatives. Whilst not criticising these, and recognising that inspection reports are necessarily brief and may not

give the full picture, he states ‘they should be looked on as starting points rather than finishing lines in what a school does to promote global citizenship’ (p. 3).

Discussion with education advisers in north-west Wales and self-reflection on my own experience of working with schools in this area has confirmed these findings. In a study of schools involved in an ESDGC mentoring project (Bennell, 2011, unpublished) I found that although most head teachers knew something about ESDGC and wished to develop it, in some schools head teachers were still only faintly aware of the Welsh Assembly Government guidance on ESDGC; they were doing elements of it only because they were part of school award themes. However, it was also noted that some head teachers and individual teachers were particularly enthusiastic about ESDGC and that they had taken advantage of a variety of training and development opportunities whenever available (North-west Wales ESDGC Forum reports 2006-2010, unpublished; World Education Centre reports, 2002-2010, unpublished). Additionally, some relatively new teachers who specialised in ESDGC during their initial teacher education course had secured jobs locally and moved on with their development of ESDGC in their school to be acknowledged locally and nationally for their work; some of these teachers have also been mentoring other teachers (Bennell, 2011, unpublished). However, there have been no further studies in Wales to find out *in depth* about the extent and success of schools’ ESDGC development and also about what has influenced this. Having worked in this field for a lengthy period of time I was particularly keen to find out about any longer term impacts on ESDGC in schools.

In England, where education for sustainable development and the global dimension have been introduced to schools in different ways (Bourn, 2008), there have been some studies of the impacts of this implementation (e.g. Cheadle, 2004; EES-SW, 2007; Hren et al., 2007; Jackson, 2007; Ofsted, 2008; Gayford, 2009). Symons (2008) has summarised research on implementation of areas related to ESDGC and found some ‘enablers’ and ‘barriers’ for schools. However, only three studies, Jackson (2007) and Gayford (2009) on sustainable schools and EES-SW (2007) on the global dimension in schools, include detailed accounts of individual schools actions. Jackson notes,

this is a largely un-researched area of school practice. Whilst a number of schools have been working in ways which would be identified as comprising a sustainable or green school, research has focused on short-term outcomes and has tended to be anecdotal.

There has been little evaluation of staff or leadership practices which enable successful sustainable development in schools. (p. 8).

AIMS OF THE THESIS

Based on the lack of evidence from Wales and Jackson's (2007) comment about the lack of detailed evidence on school practice the main aim of the thesis is to explore factors which have influenced the development of ESDGC competence in primary schools. The study addresses the *detail* of how primary schools in Wales have gone about integrating ESDGC and *which factors* have enabled some to do it well. It aims to discover what influences schools to begin developing ESDGC and what then enables them to continue onwards to develop it comprehensively across the school. It aims to find out about the intricacies of developing ESDGC, the 'micro-issues', rather than simply gaining an overall, less detailed impression.

The study aimed to answer the following main research question and associated key questions:

How does ESDGC competence develop in primary schools?

- a) What are the characteristics of schools recognised for their ESDGC practice?
- b) What factors influence the development of a comprehensive approach to ESDGC in primary schools?

The study was based in north-west Wales, a region which has received substantial support for ESDGC development and which, as noted above, has some nationally recognised ESDGC primary schools. The research takes a largely qualitative, interpretive approach, focusing on case studies of the five schools which had received positive mention of their ESDGC development. These findings are complemented by interviews with Local Education Authority (LEA) advisory and support officers, and a survey of ESDGC support provision. A discussion follows about what lessons can be learned from the study and whether the findings can be extrapolated to the development of ESDGC in schools across Wales.

Relationship of the study to research theories

The literature review conducted for this study revealed very many research theories of relevance to ESDGC implementation and to educational change in general. Several of these theories have played a key role in this research. Those of interest included theories with their roots in constructivism (Vygotsky, 1978) such as situated learning and communities of practice (Lave and Wenger, 1991), learning communities (Stoll, 2004), social network theory (Fox et al., 2007), social capital theory (Lin, 2001), transformational learning theory (Mezirow, 2000) and socio-historic activity theory (Engeström, 1987, 1999). Anderson's (1993) continuum of system change and Gladwell's (2000) application of diffusion theory were also of interest. Although all of these theories were found to be of some degree of relevance to the research, certain ones more strongly influenced the approaches and methods used in this study and others, the analysis of the findings. For example, social network and social capital theory influenced the investigation of teachers' ESDGC-related interactions; socio-historic activity theory and Anderson's continuum of system change were found to be most useful in framing models to explain the research findings, particularly as they incorporated many of the features of the other theories.

To whom will the study be of interest?

The way in which schools and teachers gain expertise and implement ESDGC should be of relevance not only to those in Wales who are interested in this aspect of education, but to those who are attempting to introduce similar aspects of education, wherever they may be based. It should also be of interest to a wider audience of all those concerned with educational change and responses to the implementation of new educational strategies. The results of the research will be shared with relevant policy makers within the Welsh Assembly Government, especially those with responsibility for ESDGC, with the Welsh schools inspectorate, Estyn, and with others interested in researching and developing ESDGC in schools.

LAYOUT OF THE THESIS

Chapter 1 discusses the literature relating to the first research question. It describes the characteristics of ESDGC-related educations and the rationale for addressing these issues.

It then discusses whether there is any consensus on the characteristics and actions of experienced ESDGC schools and teachers. It compares these characteristics with those suggested for 'effective schools'. It then discusses criteria for assessing and evaluating levels of ESDGC development in schools, discussing the levels which might indicate transformative change.

Chapter 2 examines literature relating to the second research question, exploring evidence for factors which may affect schools' and teachers' development of ESDGC. The similarity between those factors and those said to impacting on general school innovation is noted. Each factor is then discussed in detail. Finally, some frameworks and theories designed to help understanding of the process of change are discussed.

Chapter 3 describes a little of the background to, and influences on, the nature of ESDGC in Wales. It then critically discusses how ESDGC and the whole current school curriculum in Wales reflect the key characteristics of ESDGC-related educations described on Chapter 1. It also asks whether they incorporate any of the suggested factors for change and whether, together, they have the potential to transform society.

Chapter 4 revisits the research issue and the research questions and proposes some more detailed questions in the light of issues raised in the literature review. It describes the rationale behind the overall research approach and methodology and the key literature that influenced it. This is followed by a discussion of the choice of study location and its characteristics, a description of the methodology, the research procedures and methods of analysis. Limitations of the research methodology, ethical issues, issues of subjectivity and reactivity are also given attention.

The analysis of the outcomes of the research is spread across six chapters, Chapters 5 to 10. Chapter 5 first describes the layout of the analysis chapters and then the outcomes of two early studies, namely interviews with Local Education Authority officers and a survey ESDGC support organisations to find out about the levels of support they gave to schools.

Chapters 6 to 10 provide an analysis of the data from the five case study schools. Chapter 6 presents profiles of each school and its teaching and learning activities. Chapter 7 describes teachers' view on their school's level of ESDGC development and benefits they

felt ESDGC had brought to their pupils. It compares these with evidence from pupil focus group interviews. The schools' actions are then discussed in relation to certain criteria for ESDGC development. Chapter 8 presents the key factors that teachers believed had impacted on their school's development, including reasons why they began developing ESDGC. Chapter 9 presents a detailed examination of factors relating to leadership and management. Chapter 10 discusses levels of teachers' interest, knowledge, understanding and competence, and factors which have impacted on individual teachers. The extent to which teachers network within the school and with others outside of the school is examined and related to a discussion of learning communities. Several progressive models which build on the findings of ESDGC development are presented in Chapters 8 to 10.

Chapter 11 brings together the findings of the research and considers how the research findings pertain to some of the theories discussed earlier. It presents one final model of ESDGC development. Conclusions are drawn from the research findings and limitations of the study discussed. Areas for further research are suggested. Some implications for the development of ESDGC in Wales and wider afield are considered, and some recommendations made for future developments at national and regional level.

CHAPTER 1 CHARACTERISTICS OF ESDGC-RELATED EDUCATIONS AND CRITERIA FOR EVALUATION

An introduction to Education for Sustainable Development and Global Citizenship (ESDGC) in the school curriculum in Wales was presented in the Introduction. It was shown that formal developments of ESDGC in Wales began from around the year 2000. However, although ESDGC may be a relatively new term for schools in Wales it has in fact been practised by schools and practitioners for many years under a variety of names. This chapter describes the origins of ESDGC and the various rationales which have been proposed for addressing it. Theoretical characteristics of ESDGC and characteristics of ESDGC from empirical research in schools are then discussed. Finally, there is a comparison of some criteria against which ESDGC in schools can be evaluated. Chapter 2 then discusses evidence for factors affecting the development of ESDGC-related educations. The nature of ESDGC in Wales is returned to in Chapter 3 where it is critically compared with the characteristics of ESDGC presented in the literature.

First, a note on terminology used in this thesis. For the sake of clarity, and because there are many names for this kind of education, the term ESDGC will be used in this thesis when discussing the situation in Wales. When discussing other situations, unless specific terms are noted in the literature, the term used will be ESD/GC. This is not ideal, given the importance attached by different groups to their chosen titles, but it avoids over-confusing the reader.

1.1 ORIGINS OF ESDGC AND RELATED EDUCATIONS

ESDGC has its roots in many educational movements and it has been influenced by a range of theories and perspectives on education. Examples of the related types of education include: global education, world studies, development education, peace education, anti-racist education, environmental education, human rights education, multicultural education, futures education, and more recently, education for global

citizenship, education for sustainable development and education for sustainability. The latter three attempt to encompass many of the issues addressed by the earlier educations.

There is a comprehensive set of reviews of these types of educations, for example: O’Riordan (1988), Adams (1991), Osborn-Jones (1994) and Huckle (1996) on the origins of education for sustainability; Osler and Starkey (1996) on the relationship between development, human rights and the teaching of values; Osler and Vincent (2002) on development education; Hicks (2003, 2004) on global education, development education and peace education; and Bourn (2008) on development education, education for sustainable development and education for global citizenship. The relationship between ESDGC and these other ‘educations’ is discussed further by Bennell and Norcliffe (2011).

Early influences are suggested to have come from movements such the World Education Fellowship in the 1920s, spurred by the desire for peace following the First World War, the formation of United Nations after the Second World War together with UNICEF, the World Studies Project in the 1970s (Richardson, 1976a), the development NGOs such as Oxfam and Christian Aid, and the Rio Declaration on Environment and Development (UNCED, 1992).

Theoretical and pedagogical influences are reported to have come, for example, from Dewey (1916) on progressive education, from Giroux and McLaren’s (1986) moral and democratic aims for education and their views of teachers as transformative intellectuals (Huckle, 1996) and the emancipatory education aims of Freire (1972). Pike and Selby (1998) also attribute pedagogical influences to constructivist theories based on Vygotsky (1978), and to Montessori (1949), Lipman, Sharp and Oscanyan (1980), McCarthy (1981), Rogers (1983) and Kolb (1984).

Huckle (1996) attributes many of the critical thinking elements of ESD/GC to Habermas’ (1978) critical theory. He notes a re-evaluation of attitudes in the 1980s as a result of ‘top-down, bureaucratic reform’ in education (p. 105) and the emphasis on science as ‘universal and value-free’ (p. 5). This led some teachers to turn to critical theory. This emphasises connectivity and proposes that in order to empower people to think and act rationally and autonomously, and to be able to challenge systems of domination or dependence, it is necessary to develop a form of self-reflective knowledge. Habermas’ (1981) theory of

communicative action maintains that only the force of better argument decides the issue. Although Huckle (1996) believes that this theory is very apt for education for sustainability he notes that it has been criticised by Eckersly (1992) for taking an overly homocentric approach. Huckle, himself, also suggests that discussion can lead to one seemingly correct answer when there may actually be many answers. Andreotti (2006) developed a Critical Global Citizenship based on the idea of Critical Literacy, suggesting that the ‘lenses we use to make sense of the world’ are at the heart of Critical Literacy.

1.2 DIFFERING VISIONS, RATIONALES AND PURPOSES

The educations described above have different aims and visions and sometimes different values behind them. An examination of these aims is important here as it may inform discussion on why certain teachers and schools persevere with the development of ESDGC. Some of the key aims of global education and ESDGC, still promoted today, can be found in a seminal book for secondary schools published in 1976, *Learning for Change in a World Society* (Richardson, 1976b). It gives three reasons for studying world society: for an informed public opinion, for individual self-fulfilment and for participation in social and political change. The authors note that these reasons are based on even more fundamental questions ‘Why teach at all? What are schools for? What is the relation between a school and the wider society of which it is part?’ (p. 5). The book stresses the importance of learning about interconnectedness in a global society, both between humans in different places and humans and environment. Many of the contributors to this book have continued to play a major role in this field to the present day, still promoting these issues. Key publications for schools in the UK which followed in this vein include Fisher and Hicks (1985), Hicks and Steiner (1989) Pike and Selby (1988, 1998), Huckle and Sterling (1996), Oxfam (1997); Hicks (2001) and Hicks and Holden (2007).

Giroux and McClaren (1986) promote the concern of education with the suffering and struggle of the disadvantaged. In their opinion teachers should be transformative individuals i.e. ‘someone capable of articulating emancipatory possibilities and working towards their realization (p.215). This kind of philosophy is reflected in the curricula promoted by UNESCO (1995) and by Oxfam (1997) which lists the characteristics of an ideal Global Citizen. It is also reflected in the arguments of Osler and Vincent (2002).

In the environmental and sustainability fields there has long been debate on whether education should be about, in, or for the environment (Gough, 1987; Huckle, 1988; Orr, 1991; Fien, 1993, Sterling 2001). Some perspectives often saw environmental issues as separate from social factors. The most commonly promoted view now is learning about the complexity of the planet through systems thinking in an ecological framework (e.g. Orr, 1992; Meadows, 1994; Sterling, 2001). Scott and Gough (2003) describe this move to thinking about the complex relationship between environmental, social and economic factors as a move from type 1 theories to type 3 theories. Sterling (2004) suggests that the aim should be to move to an ‘ecological postmodern worldview which is appropriate to the deeply systemic nature of the world’ (Sterling 2004, p.70). Drawing on points by Stacey (1997) and Smyth (2002), Sterling (2004) points out that because the complexity of the world means that the future is uncertain, there is little point in making fixed goals for education as these will constantly need changing. He notes that the whole purpose of education is seen as,

participative inquiry and systemic coherence in the learning situation which should – where possible and appropriate – relate to, and engage with, real contexts, issues and places (p. 329)

Jickling (1992) had earlier expressed a similar sentiment,

Clearly I would not want my children to be “educated for sustainable development”. The very idea is contrary to the spirit of education. I would rather have my children educated than conditioned to believe that sustainable development constitutes a constellation of correct environmental views or that hidden beneath its obscurity lies an environmental panacea. (reproduced in Scott and Gough, 2004, p. 132)

Despite these different takes on education, however, almost all of the forms of education discussed above emphasise interconnectivity and most promote a form of critical pedagogy which promotes critical thinking and values debate.

1.3 CHARACTERISTICS OF ESD/GC CURRICULA

In a study which looks at schools recognised for their ESDGC achievements it is important to provide some kind of baseline against which to judge the school practice. Many writers

have described characteristics of curricula for ESD/GC and related educations in schools. There are many commonalities but some noticeable differences, often depending on the perceived purpose of the education. This section looks at characteristics of this kind of education promoted in the theoretical literature and those which have arisen from empirical studies of schools.

1.3.1 ESD/GC characteristics from theoretical literature

The characteristics presented here are amalgamated from suggestions from a variety of authors.

ESD/GC content

Orr (1992) proposes that the curriculum should be locally-relevant and draw links to our place in ecology. Sterling (2003) also suggests that the learning should take place in ‘real and localised contexts’ (p. 329), although the meaning of ‘local’ in the current interconnected world is not defined. Hlebowitsh (1992), further, notes that it should go *beyond* local traditions and Oxfam (1997), Osler and Vincent (2002) and Hicks and Holden (2007) argue that it should make global connections. Oxfam (1997), Pike and Selby (1998), Osler and Vincent (2002), DFES(2005), Hicks and Holden (2007) and UNESCO (2005) suggest that topics discussed should include economic and political development, social and economic justice, environmental systems and changes, gender and race equality, peace and conflict resolution, rights and responsibilities, citizenship and stewardship, globalisation, sustainable development, new technologies. Oxfam (1997), UNESCO, (2000) and Osler and Vincent (2002) suggest that it should promote respect for human rights and challenge inequality. Pike and Selby (1998) suggest attention to the temporal dimension, the spatial dimension, the issues dimension, and central to these, the inner dimension. Hicks (2001) also notes that pupils should be given opportunities to envisage possible, probable and preferable futures.

Methods of approach

There is much agreement that the curriculum should also be holistic, connective and inter- and multi-disciplinary, with themes and topics running across boundaries of both subjects

and different elements of the school life (Pike and Selby, 1988, 1998; Orr, 1992; Sterling, 2001; 2004); Scott and Gough, 2003).

Sterling (2001) notes that learning and teaching approaches should be multi-method, catering for a wide variety of learning styles. Pike and Selby (1998) and Hicks (2003) suggest that methods should include democratic, constructivist, reflective, participative, experiential and holistic methodologies, co-operation and collaboration, and various forms of communication. Importance is placed on developing skills such as critical and creative thinking, decision making, developing empathy and the ability to argue effectively, learning to negotiate and challenge situations, to question the basis of their values, and to make connections so that an understanding of how the world can be discovered rather than learned didactically (Pike and Selby, 1998; Sterling, 2001). Gough and Scott (2001, in Scott and Gough, 2004, p.106) stress the importance of both pupils and teachers being open to learning. Young (1998) agrees, 'It [the curriculum] does not begin with the structure of knowledge but with how knowledge is produced by people acting collectively.' (in Scott and Gough, 2004, p. 114). It should also encourage innovation and creativity amongst staff *and* pupils (Rowe, 1996; Scott and Gough, 2003).

The United Nations Decade of Education for Sustainable Development also lists some similar basic requisites for teachers in the draft version of *Training Guidelines on incorporating Education for Sustainable Development (ESD) into the curriculum* (UN Decade of Education for Sustainable Development (UNDESD, 2009). They should recognize that ESD is concerned with lifelong skills for sustainable living, and various stakeholders' perspectives and values. It lists recommendations for implementation in the classroom such as curriculum mapping, noting opportunities for ESD integration, building on local values and assessing students' attitudes on the issues.

Whole school ethos

On the whole school scale Rowe (1996) notes that a school environment should be pleasant and stimulating and that it should show respect for rights and freedoms. Sterling (2001, 2003) and Scott and Gough (2003) suggest that systems thinking should be embedded in leadership, management and partnerships. Rowe (1996), Sterling (2001) and Estyn (2006) note that the whole school should be acting in a sustainable, ethical way. Rowe (1996)

also suggests that members of staff should be skilled in conflict resolution and giving their pupils opportunities to practise this.

The use of concepts in ESD/GC curricula

Concepts have been widely used in the UK for giving a framework for learning in ESD/GC. They cover topics, values and critical thinking. The UK Government Panel for Sustainable Development (1998), writing for English schools, identified eight key concepts of sustainable development which should be approached across the curriculum and school life: Interdependence, Citizenship and Stewardship (including rights and responsibilities, participation and cooperation), Needs and rights of future generations, Diversity (cultural, social, economic and biological), Quality of life, Equity and justice, Sustainable change (development and carrying capacity, and Uncertainty and precaution. The DFEE/DFID (2000) and DFES (2005) used a very similar set of concepts as the framework for the global dimension in education, adding Global citizenship, Values and perceptions and Conflict resolution. In Wales, the qualifications and curriculum body drew on both of these sets of concepts in its initial guidance document on ESDGC (ACCAC, 2002). Of these three sets of concepts (Table 1.1) only those used for the global dimension in England are still in prominent use today (www.think-global.org.uk/, accessed 11/10/11).

Table 1.1 Comparison of the concepts used in three frameworks for schools

UK Government Panel for Sustainable Development (GPSD) (1998) - England	Global Dimension in education (DFEE/DFID, 2000; DFEE, 2005) England	ACCAC (2002) ESDGC - Wales
Citizenship and Stewardship	Global citizenship	Citizenship and Stewardship
Interdependence,	Interdependence	Interdependence
Equity and justice	Social justice	
	Conflict resolution	Conflict resolution
Diversity	Diversity	Diversity
Needs and rights of future generations	Human rights	Needs and rights
	Values and perceptions	Values and perceptions
Sustainable change	Sustainable development	Sustainable change
Quality of life		Quality of life
Uncertainty and precaution		Uncertainty and precaution

Northern Ireland currently uses a set of concepts for the global dimension (www.globaldimensioninschools.org/, accessed 23/01/12). In England, the now defunct Sustainable Schools framework and its four doorways replaced the sustainable development concepts, however Scott (2010) still believes that concepts are a viable framework for learning. Their demise in Wales followed research with schools that showed that they were not well understood by teachers (Estyn 2006a) and seven themes were then promoted as a way of addressing learning in ESDGC (Welsh Assembly Government, 2008b) (this will be discussed further in Chapter 3).

1.3.2 Characteristics of ESDGC practice in schools from recent research in schools

Many of the theoretical characteristics discussed above have also been suggested from empirical research in schools. Symons (2008) reviewed research studies on education for sustainable development, environmental education in schools and the global dimension in schools. Some of these studies are reviewed here together with others e.g. by Inman and Burke (2002) on democratic schools and Gayford (2009) on pupil responses in sustainable schools. Table 1.2 highlights details and limitations of the most relevant studies. They varied widely in approach and the rigour of their methodology, with the studies by Jackson (2007), EES-SW (2007) and Gayford (2009) being the most comprehensive and the most clearly described. Jackson observed that there is a dearth of studies in this field; her suggestions for further research were listed in the introduction to the thesis.

Symons summarises some characteristics of schools that are practising ESD. These are:

- a. A whole school approach to sustainability which is embedded in school policies and curriculum (Ofsted, 2003, 2008; DFES, 2006c; Hren 2004; Jackson, 2007). This included having a coordinator; developing appropriate teaching and learning, and ESD in the staff development programme (Ofsted, 2003); inclusion in the subject schemes of work and the school development plan (Ofsted, 2003; Hren, 2004); distributed leadership and ‘an ethos which pervades all aspects of the school and its external relationships’ (Jackson 2007, p8). Ofsted (2003) also found that involvement in specific initiatives only was not so effective as it ‘tends not to involve all pupils and is often not sustained’ (p. 6);

Table 1.2 List of studies quoted by Symons (2007) and other relevant studies

Authors and title	Focus of study	Methods	Limitations/ strengths
BMRB Social Research (2000) <i>Sustainable Development Education Surveys</i> , Sustainable Development Education Panel	The provision of, and attitudes towards, sustainable development education	Phone interviews in 751 schools with the teacher most responsible for the provision of ESD.	Older study but comprehensive
Ofsted (2003) <i>Taking the first step forward towards an education for sustainable development:</i>	ESD practice related to the seven key ESD concepts	14 primary, 2 middle and 10 secondary schools, selected as likely to exemplify good practice in ESD, visited by school inspectors.	Little information on how evidence was gathered
Cheadle, et al. (2004) <i>Education for Sustainable Development: A needs analysis of teachers in Citizenship</i> , GA/DfES (unpublished)	How ESD is perceived in schools, and the difficulties in incorporating ESD in subject, classrooms and schools	Six focus groups in different curriculum subjects and regions. Participants recruited through a researchers' network	Secondary school study only.
Hren B, et al. (eds.) (2004) <i>One School at a Time: A Decade of Learning for Sustainability</i> , WWF-UK	Studies of schools engaged with WWF on action research to embed learning for sustainability.	33 case studies gathered over a period of several years	Little information about details of case studies
DfES (2006a, b, c) <i>Sustainable Schools for pupils, communities and the environment</i>	Sustainable schools	870 consultation responses	No raw data available
ESTYN (2006) <i>Establishing a position statement for education for sustainable development and global citizenship in Wales</i>	The extent, methods and quality of ESDGC teaching and learning in schools / colleges in Wales	Questionnaire and phone interviews with sample schools	Limited number of sample schools; interviews with one person per institution
Murphy C and Fawcett L (2006) <i>Environmental Education Survey: Final Report</i> , Queen's	Mapping of environmental education provision in Northern Ireland with a focus on external provision	Questionnaires to all schools and all providers in Northern Ireland, with a 46% response	Survey responses only; no detailed interviews
Jackson L (2007) <i>Leading</i>	The current state of sustainable	Literature review; focus groups; case studies of	Carried out by a team of

<i>sustainable schools</i> , National College for School Leadership (NCSL)	development in schools and the skills and qualities required by school leaders.	schools actively engaged with SD education; survey of school leaders and business managers 1,739 responses (> 10% of sample.)	researchers
EcoLocal (2007) <i>Annual Sutton Schools Environmental Survey 2006/7</i> , Sutton LEA	Green issues in one local authority	Surveys sent to 63 schools of which 48 (76%) responses, (higher response from primary schools.	Survey only. No detail of who responded
EES-SW (2007) <i>A Global Dimension: Change your school for good</i>	Characteristics of schools with strong commitments to the global dimension.	14 primary, middle, secondary and special schools in the SW of England. Analysis of school documents, questionnaire returns; interviews	Carried out by a team of researchers using different methods. Little information on depth or number of interviews.
Ofsted (2008) <i>Schools and sustainability: A climate for change?</i>	Assessment of how schools teach about sustainability, and progress within the National Framework for Sustainable Schools	Inspectors visited representative sample of schools (large and small, rural and urban) - 25 primary and 16 secondary schools in 35 local authorities in England.	
Anderson B (2008) <i>Supporting Sustainable Schools in the South East</i> , (GOSE)	LA self-evaluation to gauge level of school activity and identify training needs and possible barriers	Voluntary 'sustainable schools survey' to all SE Sustainable Schools Network members. 245 completed surveys, 6% of all schools.	Survey only. Not all schools would have received to survey.
Gayford (2009) <i>Learning for Sustainability: from the pupils' perspective</i> , WWF-UK	Pupil perspectives on sustainability practice in schools	70 visits over 3 years to 15 schools where good quality learning for sustainability was likely to be found. Teacher interviews, pupil focus groups using participatory action research	Detailed study.
Critchley and Unwin (2008)	Global Dimension	Survey and interviews of support organisations; Discussions at 2 conferences	Mostly practitioner information
Inman, and Burke (2002), <i>School Councils: an apprenticeship in democracy?</i> AUT.	Role of school councils	Qualitative study - literature, interviews with 'experts'; two case study schools, primary and secondary. First-hand observation; in-depth interviews with teachers and pupils	2 case studies only

- b. Outward looking: involved with the local and global community and a range of initiatives (Ofsted, 2003; Hren et al., 2004; Global Action Plan, 2007; Jackson, 2007). This includes involvement of pupils in active citizenship in the community, bringing parents and community members, businesses and organisations into the school and international school links;
- c. Student participation in decision-making (Ofsted, 2003; Jackson, 2007 p8; Hren, 2004). Actions included having an active school council; pupils measuring energy consumption and improving the school grounds. Jackson (2007) found that the development of student participation through formal structures such as school councils, or less formally, fosters a sense of collaboration and shared vision. It also builds skills for active citizenship and a greater enthusiasm for learning' (p. 47);
- d. A broad understanding of sustainability (Jackson, 2007; Ofsted, 2008). For example, Jackson (2007) reported that successful sustainable school leaders 'see sustainability as a broad agenda, including environmental, social, economic and governance aspects of their schools'. Schools included schemes such as healthy eating and links to fair trade, inclusion in subjects and ensured that pupils knew why they were studying topics (Ofsted, 2003).

Recommendations from the research included more student participation, systems thinking and action learning: (DCSF 2008; Hren 2004; DEA 2008). Another study on ESD by Breitling, Mayer and Mogensen (2005) presents fifteen criteria compiled from national reports on Eco-school development in thirteen member countries of the ENSI and SEED networks in Europe. To the characteristics listed above it adds:

- perspectives for the future;
- a culture of complexity where teaching includes seeking out relationships, multiple influences and interactions;
- values clarification;
- the school develops its own locally relevant criteria.

Pupil participation was also stressed by Gayford (2009) in his findings from a series of repeated focus group interviews with pupils in fifteen schools (including five primary schools). In this study, that used approaches from the field of participatory action research (e.g. Reason and Bradbury, 2001; Gayford, 2003; and Kindon, Pain and Kesby, 2007),

pupils were encouraged to decide what they thought was an important focus for discussion and how they thought outcomes might be evaluated. In later discussions with pupils, additional foci included aspects that enquired more closely into attitudes and possible behaviours. Studies on citizenship, democratic schools and global schools have noted similar characteristics. For example, Inman and Burke (2002), also drawing on studies by Trafford (1997), Holden and Clough (1998), Griffith (1998), Apple and Beane (1999) Inman and Stiasni (1987) and Inman and Buck (1995), found that democratic schools take opportunities to promote teaching and learning styles in which pupils are given opportunities to actively participate and develop a range of 'democratic' skills,

Any school that attempts to democratise must inevitably develop some kind of council or assembly in order that the students', – and possibly the teachers' and other staffs', views can be voiced and discussed, unless the school is so small that every member can be involved in meetings' (Inman and Burke, p. 26).

They note that providing a forum through school councils can ensure that pupils can have their voices heard and ensure that their pupils have the opportunity to exercise their rights as described in the United Nations Convention on the Rights of the Child. They suggest also that pupil training is required from an early age to effectively chair and participate in such meetings.

EES-SW (2007), in its study of schools which had successfully brought in a global dimension, found that they, too, had many community links, the pupils were active citizens, teachers were innovative and curious, there were key members of staff with responsibility for the work and the school took part in appropriate awards which could help them with their mission.

Although these characteristics are representative of schools that are actively addressing ESDGC, some of research noted that many schools were still not doing ESD well, e.g. Ofsted (2008). This was also noted earlier by NFER research on citizenship (Ireland, 2006) and for ESDGC by Estyn (2006).

1.4 CHARACTERISTICS OF EXPERIENCED ESDGC TEACHERS

The sections above have listed many characteristics of ESD/GC schools. However schools would not be schools without their teachers. Some specific characteristics have been noted for ESDGC teachers. Firstly, the Development Education Commission (1999) suggests some dispositions for those educating for world citizenship and democracy. These are,

respect for self; respect for others; a sense of social responsibility; a sense of belonging and a commitment to learning and willingness to adopt a critical stance towards information; willingness to give reasons why one holds a view or acts in a certain way, and to expect similar reasons from others; respect for evidence in holding and forming opinions; and willingness to be open to the possibility of changing one's own attitudes and values in the light of evidence. (p. 24).

This critical stance was also noted by Giroux and McClaren (1986). A critical and transformational influence was also noted by Inman and Burke (2002) for democratic school leaders and by Griffin et al. (undated) for teacher trainees. Inman and Burke (2002) note that teachers interviewed admitted that effective leaders of democratic schools are often people who display personal characteristics linked to notions of charisma and that they listen to pupils. They have a strong presence and are 'meaning-makers' to others (p. 35). These leaders also had the following characteristics,

- the ability to take risks and to live with uncertainty;
- the ability to facilitate others to take leadership and power;
- visionary;
- a commitment to the good of children;
- value staff as well as children;
- outward looking, involving the school community in the wider communities and welcoming external projects into the school;
- able to admit to mistakes, self reflective and analytical;
- inclusive (p. 35).

Key characteristics of democratic teachers included:

- the teacher being able to 'give of themselves';
- treating pupils with respect;

- reflection on personal experiences;
- a belief in the transforming qualities of education;
- a sense of personal security;
- an awareness of themselves as learners. (p. 37)

Griffin et al. (undated) discuss the personal values, attitudes and dispositions of potential secondary teachers in the context of teaching for a sustainable future. As well as recognising some of the general attributes for teachers suggested by the Government Standards for the Award of Qualified Teacher Status (General Teaching Council for England, 2001) such as the ability to reflect, and good interpersonal, communication, presentational and organisational skills, they also looked for an understanding of the principles relating to equal opportunities, social justice and inclusion and how school ethos and values underpin the whole curriculum. They found that life experience, flexibility in terms of being able to ‘step into someone else’s shoes’ (p. 21), being able to explore issues from a different perspective and an openness to ideas were key attributes. They equate this to the development of empathy and ‘skills of participation and responsible action’ (p. 21).

Scott and Gough (2001, in Scott and Gough, 2004, p.106) also stress the importance of being open to learning,

.....educators should not insist on their own particular preferred combinations of facts and values, but accept that they themselves are just as much in need of learning as everybody else, just as likely to be surprised by what they learn, and not much more likely to turn out to be right in the end. (p. 106)

The United Nations Decade of Education for Sustainable Development in the draft version of *Training Guidelines on incorporating Education for Sustainable Development (ESD) into the curriculum* (UN Decade of Education for Sustainable Development (UNDESD, 2009) also lists some similar basic requisites for teachers. It recommends that teachers themselves should understand the principles of ESD and the issues which threaten the sustainability of the planet and understand the cross-cutting and multi-disciplinary nature of ESD.

Sleurs (2004), in an edited report of a multinational European Comenius project on competences for ESD teachers, draws heavily on definitions from Rychen and Salganik

(2005) and McKeown (2002). Five competences for ESD teachers are noted. These are: knowledge (of content and pedagogy); systems thinking; emotions; ethics and values; and action. For each of these three levels are considered: the teacher as an individual; the teacher in the educational institution; and the teacher in society. All aspects are seen to interact.

Related to these characteristics of ESDGC teachers is the notion of robust and fragile learners (Claxton, 1999; Perkins, 1999; Lyle and Salmon, 2003). Claxton (1999) provided four concepts of robust learners,

- resilience in the face of difficulty, characteristics of persistence and determination;
- resourcefulness, can draw on a range of strategies to help when they are 'stuck';
- reflectiveness, able to use meta cognitive strategies;
- reciprocity, able to work effectively and empathetically with others.

Lyle and Salmon (2003), in investigating student teachers' grasp of the global dimension, also identified qualities of robust teacher mentors, namely, the ability to model good practice in global education; to provide an apprenticeship approach by demonstrating and coaching good practice; and sustained intellectual curiosity by continuing with their own study and work on global education after the project.

In summary, there is consensus that teachers should be open-minded, reflective, critical thinkers, empathetic, and ideally visionary and transformative. They should value others, be willing to take risks. They should also have some knowledge of ESDGC topics and be open to learning.

1.5 CHARACTERISTICS OF GENERALLY EFFECTIVE SCHOOLS

1.5.1 General characteristics

It is possible that some of the characteristics described above are simply general characteristics of effective schools. In fact, Scott (2010) suggests that the first three indicators of leaders from his 2008 study (Scott, 2008), i.e. vision, high trust culture and

the institutional qualities, are not specific to sustainable schools but instead describe a particular view of an effective school. There are many different definitions of effective schools depending on the criteria used and the perceived purpose of education, however, some characteristics are frequently mentioned. In studies in the UK these include:

- strong leadership and management;
- distributed leadership;
- having a strong sense of purpose;
- strong systems;
- shared values and vision;
- a focus on student learning
- collaboration and collegiality, or good inter-staff relationships and trust;
- professional development.

(compiled from: Reynolds and Teddlie et al. (2000); Teddlie, Springfield and Reynolds (2000); Harris (2008a).

Contextual factors such as the community in which the school is set and the socio-economic status of pupils have also been mentioned as influences on school effectiveness (Teddlie, Springfield and Reynolds, 2000). All of these characteristics have also been mentioned in the context of ESD/GC schools, although not always in the same manner. Some of the debates around them will be discussed in Chapter 2. It is also notable that pupil participation, systems thinking, futures perspectives, and special attention to sustainability, all factors mentioned for ESD/GC schools, are not mentioned in this list for generally effective schools, even although, apart from the latter, they do not appear to be necessarily specific to ESD/GC schools. This omission may be significant to understanding different views of what makes a school effective.

1.5.2 Characteristics of effective primary schools in Wales

In the Welsh primary school context, which is of particular relevance to this study, James et al. (2006) describe a study which aimed to find out about the nature of schools in disadvantaged areas where the level of pupil attainment was high. Case studies of eighteen schools in Wales were undertaken. These included two infant schools, two junior schools

and fourteen primary schools; five were Welsh medium. They use Mortimore's (1991) definition of an effective school, i.e. 'one in which students progress further than might be expected from a consideration of its intake' (p.8). Their choice of schools was based on a range of criteria including suggestions from local authority education services, favourable inspection reports, high levels of pupil achievement and free school bands 4 to 6. Data was collected through group discussions with pupils, parents, support staff, teachers, and individual interviews with senior staff, the chair of the governing body and/or a governor.

The schools displayed many of the characteristics discussed above, namely: very strong leadership, including delegation of leadership roles; a strong, positive and collaborative culture both within the school and with the community; a shared vision or sense of purpose; trust and professional ethics. Additionally, they found that long-standing head teachers and staff were a benefit, teachers were passionate and fully-committed and the professionalism of each teacher was highly valued and nurtured. Notable, however, was that although the community was supportive of the school's 'main task', it was mainly interested in how their children could be 'helped to 'do well'' (p. 172). This could perhaps be a drawback for schools wishing to develop areas such as ESDGC which may not be always be considered academic. However, interestingly for this current study, these schools were also effective at taking on new initiatives in the curriculum (although not jumping at everything new), and they often took part in many enriching innovative projects including international projects and after-school activities. Pupils were happy and confident learners and older ones expressed a sense of responsibility. It appeared it was possible to achieve success in formal tests *and* also have a rich, varied and stimulating curriculum which placed high demands on the teachers and pupils.

1.5.3 Summary of common ESD/GC and effective school characteristics

In summary, there are many common characteristics between generally effective schools and schools said to be practising ESDGC-related educations well. They include: strong leadership; strong systems with a strong sense of purpose whilst still valuing the views of individual staff members; trust and delegation of responsibility; strong inter-staff relations or collegiality; collaboration between teachers; strong community and other partnerships, the valuing of professional development; and good experiences for, and high expectations

of students. Teachers should be open-minded, reflective, empathetic and critical thinkers. Additional characteristics of effective ESD/GC schools include attention to sustainability and other global issues, systems thinking, futures perspectives, critical thinking, pupil participation, innovation and creativity amongst staff *and* pupils and using sustainable practice e.g. in school buildings and procurement as opportunities for learning. Many of the characteristics discussed above could also be seen as *factors* in a school's development. They will be discussed in detail in the next chapter together with other suggested factors.

1.6 METHODS OF EVALUATING LEVELS OF ESDGC DEVELOPMENT

Criteria for estimating *levels* of ESDGC development are relevant to this study for two reasons. Firstly, they are useful for schools' self evaluation and for external evaluation; if a school regularly examines its behaviour against criteria it can note levels of practice to which it can aspire and revisit them at a later date to see how it has progressed. This self evaluation element is seen to be important (Ofsted, 2008; Estyn, 2006b; 2010). Torney-Purta (1989) puts this simply,

The process of evaluation should be collaborative. It should involve those who have an interest or stake in the programme. (p. 163)

Secondly, it is interesting to compare the different criteria descriptor levels to find out how various authors perceive levels of achievement which could be possible for schools.

Many sets of criteria have been devised for evaluating levels of ESD or GC. These include those from: Oxfam (1997; 2006) on Education for Global Citizenship; Pike and Selby (1998) on global education; Estyn (2006a) on ESDGC; Sterling (1996), Huckle (1996), Jemmott, (2002), UNESCO (2002) and Webster and Johnston (2009) on education for sustainability (EfS); Sterling (2001) on Sustainable Education; Gayford (2009) on learning for sustainability; DCSF (2008) on Sustainable Schools (this scheme has now been discontinued); Scott and Gough (2003) on sustainable development and learning and Scott (2008; 2010) on leadership for sustainable schools. Like the differences in views of the purpose of education, these criteria differ according to the nature of who, or what, they are describing outcomes for. For example in some EfS descriptors the global dimension is

fairly implicit, becoming obvious only at higher levels; in others it is clearer. Some, such as Oxfam's (1997; 2006) and Gayford's (2009) criteria, emphasise pupil outcomes, whereas others emphasise whole schools as sustainable entities (Scott, 2010); yet others are somewhere in between emphasising both pupil and whole school outcomes. Some use three levels of descriptors, some four, and some five. Some stop at levels where major, but not radical, changes have occurred in schools whilst others, most notably Sterling (2003); Webster and Johnson (2009) and Scott (2008, 2010), suggest a final level where a complete transformation in learning at whole school level has occurred and the nature and purpose of the school is seen in a different way. These differences make the criteria very difficult to compare. Due to limitations of space only those sets of criteria deemed most useful for comparison are discussed below.

1.6.1 Whole school criteria

Scott (2008; 2010), in papers on leadership for sustainable schools, has put much effort into exploring how aspirational levels of schools' achievement can be raised above those suggested in the Sustainable Schools Framework's 's3 self evaluation' (DCSF, 2008). He first develops a set of five descriptors, *vision, high trust culture, institution, organisation's issues around sustainability, and social learning community with a systematic view of the world* (Scott, 2008). He takes these further in a study carried out for the Specialist Schools Academy (Scott, 2010). He first compares his earlier five descriptors (Scott, 2008) to Webster and Johnston (2009) who use four stages: *Exploratory, Assimilating, Strategic* and *Evolved to eco-restorative*. Their fourth and Scott's fifth stage sees the idea of school, and perhaps education, changed. Although Scott (2010) notes that this stage is much more demanding and in line with sustainable development than that used in the Sustainable Schools' final stage (DCSF, 2008) he suggests that neither of these two sets of descriptors differentiate sufficiently between separate ideas of sustainable development. Therefore he continues beyond the idea of indicators to encourage a reflection on a series of four more detailed stages through which schools may pass on their way to becoming a fully sustainable school: *Initial exploration, Some assimilation, More strategy* and *Towards Restorative*. Using the metaphor of capital he examines progress of leadership, human and social capital, and natural and built capital (after Daly, 1973 and Meadows, 1998) through these stages. For example, in 'Human and Social Capital' (p. 18) a school may move from

the ‘initial exploration’ level, where they see learning in academic terms and sustainability issues as external to the school, to the third ‘more strategy’ level where learners are encouraged to be open minded and creative thinkers and the school shows learners that it takes sustainability seriously. The fourth level ‘Towards restorative’ would perhaps see even more conceptual learning of, for example, interdependence and quality of life. Scott, however, is clearly still exploring possibilities at this level.

He notes that schools may be at different stages for different aspects of sustainability and, reflecting the self evaluation theme, stresses the importance of schools being able to understand their journey and to learn from it. He concludes by stressing that leadership sets limits on what can be achieved, ‘unless school leaders understand the issues and are in the vanguard of change, however, little of real substance is possible.’ (p. 24). Scott believes that these recent sets of criteria take schools to a much higher level of development than the Sustainable Schools criteria (DCSF, 2008) and also further than the Eco-Schools’ criteria (www.keepbritaintidy.org/ecoschools, accessed 22/01/12) which he describes as fragmented.

Parts of of these frameworks, i.e. Scott (2008; 2010) and Webster and Johnson (2009), do have considerable potential for looking at schools’ ESDGC development. However, they are hampered by the fact that Webster and Johnson’s concentrate on learning outcomes in secondary schools and global aspects are almost completely missing from their criteria; Scott’s (2010) is incomplete for learning at the *Towards restorative* level. Key features at the highest levels are:

- co-created policy with regular open reviews
- distributed leadership extending through the school and into relationships with parents and community;
- leadership demonstrating innovation, risk-taking, security, resilience and flexibility;
- the school at the heart of the community and a model and beacon for sustainability actions;
- comprehensive pupil participation in all aspects of the school;
- valuing of exploratory, experiential, outdoor and environmental learning as a means of effectively engaging with real-world issues in authentic settings.

In Chapter 3 these criteria will be compared to levels of achievement put forward in Welsh governmental guidelines for ESDGC in schools (Welsh Assembly Government, 2008b). Such a comparison should show if Welsh schools are really expected to aspire to transformational levels of ESDGC expertise and learning or to lower, more achievable, levels of development. For these reasons a comparative table of some sets of criteria has been compiled (Appendix 1). This will be returned to in Chapter 3.

1.6.2 Criteria based on pupil outcomes

On pupil outcomes Oxfam (1997; 2006) describes five age group based levels for a pupil's knowledge and understanding, skills and values and attitudes for education for global citizenship. This document has been widely used by teachers over many years in England and Wales, and it will be seen in the analysis of this research study that some schools still use them today.

Gayford (2009) describes two parallel but interconnected aspects of progression within sustainable schools, i.e. 'Content knowledge and understanding' and 'Process abilities'. In the content categories he looked for indications of breadth, connections, consequences, thinking creatively, widening perspectives and rationale. In the process categories he noted relevant activities and decision making and a range of process abilities related to learning in a more general way, such as problem solving, accessing information, taking responsibility for their own learning and communicating new information. These are very wordy descriptions but could form a very useful basis for comparison with pupil focus group information in this study.

1.7 CHAPTER SUMMARY

This chapter has discussed the origins of ESDGC and some of the rationales given for addressing it in education. It has discussed how the purpose of ESD/GC education can be seen from different points of view. It has also brought together some recognised characteristics of effective ESD/GC schools and teachers. These include strong leadership, a strong sense of purpose, trust and delegation of responsibility, good inter-staff relations

collaboration between teachers, strong community and other partnerships, the valuing of professional development and open-minded critically thinking teachers who can inspire others. Particular characteristics of effective ESD/GC schools include attention to sustainability and other global issues, systems thinking, futures perspectives, pupil participation, innovation and creativity amongst staff *and* pupils and using sustainable practice e.g. in school buildings and procurement as opportunities for learning.

The chapter has shown that there are some common characteristics between ESD/GC schools and generally effective schools, although there are some debatable points. It has suggested that some characteristics of ESDGC may also be *factors* in its successful development. Some criteria for evaluating levels of ESDGC development were also discussed and these will be compared later to ESDGC development guidance in Wales.

Chapter 2 now moves on to discuss literature relating to the second research question on factors influencing the development of ESDGC competence in schools and how individual teachers gain ESDGC competence. Many of the issues raised in this chapter will be further analysed there.

CHAPTER 2 LITERATURE REVIEW

FACTORS AFFECTING ESDGC COMPETENCE IN SCHOOLS

Chapter 1 defined some of the characteristics of effective ESDGC schools. This was important in order to set a baseline for the research. However, key question 2 of this study asks *how* these characteristics can come about in schools, i.e. what factors are instrumental in the development of ESDGC at whole school level and at individual teacher level? The criteria for evaluating levels of ESDGC development discussed in Chapter 1 have suggested that some characteristics of ESDGC-related educations could also be factors in enabling schools to change. For example, a strong leader might be a characteristic of an ESDGC school but, as Scott (2010) suggests, the existence of a strong leader could also be a factor in determining how ESDGC is developed. Therefore many of the characteristics discussed in Chapter 1 will also arise in this chapter.

The research for this chapter was carried out in two phases. The first phase examined factors identified by studies on ESD/GC in the UK and Europe and by studies of innovation and change in schools; many of the latter were large detailed studies in the USA and Canada. Other accounts of influences were of a more theoretical nature. These findings helped with the formulation of the subsidiary research questions and the research design. The second phase of the literature review was carried out after the initial analysis of results. The results indicated that interactions among teachers and between schools could be important factors in dissemination and adoption of ESDGC practice. Therefore, a more in depth review of the literature relating to issues such as professional learning communities and learning networks was undertaken.

This chapter first lists key factors in, and barriers to, ESD/GC development which have been identified by empirical research in schools. The similarity between these factors and those believed to be impacting on general school innovation is noted. Individual factors are then considered one by one. Discussion draws on both these fields of study together with a discussion of some conflicting views on their impact. Finally, some frameworks and theories designed to help understanding of the process of change are discussed.

2.1 FACTORS IN ESDGC DEVELOPMENT: EVIDENCE FROM RESEARCH IN SCHOOLS

2.1.1 Enabling factors

Some of the key studies which address factors influencing the development of ESD/GC were described in Symons' (2008) review of research. Those studies, together with other key studies on related aspects, such as democratic schools and the global dimension in schools, were summarised in Table 1.2 in Chapter 1, together with notes on their limitations. The findings on enabling factors from all these papers and also from other relevant publications by authors not necessarily writing about first hand research e.g. Sterling (2001), Shallcross and Robinson (2007), Harris (2008), and Scott (2010) are summarised below. The factors were found to be:

- leadership (Sterling, 2003; Jackson, 2007, Scott, 2010);
- distributed leadership (Apple and Beane 1995; Griffith; 1998; Inman and Burke, 2002) on democratic schools; (Hren, 2004; Jackson, 2007; Harris, 2008; Scott, 2010) on sustainability; EES-SW (2007) on the global dimension in schools;
- time to create a shared vision: (Sterling, 2001; Estyn, 2006a; Jackson 2007; EES-SW, 2007; Gayford, 2009);
- good communication within the school and with partners and parents (Sterling, 2001; Gayford, 2009);
- formalisation: for example, embedding sustainability in policies, curriculum, budgets and staffing (Hren, 2004, Cheadle et al., 2004; Murphy and Fawcett, 2006; Jackson, 2007; EES-SW, 2007; Ofsted; 2008);
- a joined-up approach: clearly linking initiatives, supported by senior management, subject associations, and national policy (Shallcross; 2003; Henderson and Tilbury, 2004; Jackson, 2007; Shallcross and Robinson, 2007; Gayford, 2009);
- an open, creative approach (Inman and Burke, 2002; Global Action Plan, 2007; Anderson, 2008);
- support from authority e.g. senior management, the local authority or nationally through policies (Sterling, 2001; Cheadle et al., 2004; Estyn, 2006a; Jackson, 2007; Anderson, 2008);

- training (including leadership, staff, governors): (Sterling, 2001; Cheadle et al., 2004; Hren 2004; Jackson, 2007; Anderson 2008);
- external partnerships and networks, both local and international. (Sterling, 2001; Jackson, 2007; Shallcross and Robinson, 2007);
- student participation and leadership (Inman and Burke; 2002; Ofsted, 2003; Cheadle et al., 2004; Ireland et al., 2006; Ofsted, 2008; Gayford, 2009);
- self evaluation (Sterling, 2001, Webster and Johnson, 2009; Scott, 2010).

2.1.2 Barriers to ESD/GC development

Some barriers to ESD development were also identified. These were:

- lack of time and money (DFID 2003; Cheadle et al., 2004; Jackson 2007; Anderson 2008);
- lack of priority given to sustainability (Cheadle et al., 2004; Estyn, 2006a; Jackson, 2007; Anderson, 2008; Ofsted, 2008);
- a knowledge gap (Estyn, 2006a; Jackson, 2007);
- lack of training (Ofsted, 2003; Cheadle et al., 2004; Environmental Audit Committee, 2005; Anderson 2008);
- overlapping initiatives (Estyn, 2006a; Global Action Plan, 2007; Critchley and Unwin, 2008);
- limitations with school buildings and estate management (Cheadle et al., 2004; Scott, 2010);
- lack of evidence of impact; with the link to raising standards being unrecognised and under-researched (Ofsted, 2003).

Symons (2008) also notes several areas requiring further research. These include: finding out about schools' progression with ESDGC; their motivation to incorporate sustainability and the global dimension; and the impact of teacher training and professional development.

2.1.3 ESD/GC as an innovation in schools

Although some of the barriers listed above appear to be specific to ESDGC, for example, limitations with school buildings, the enabling factors are fairly general, and *all* have also received attention in the research on general innovation in the school curriculum. Table 2.1 compares these factors. ESDGC in Wales, having been formally introduced to schools in stages from 2001 to 2008, can certainly be viewed as an educational innovation, that is, a new introduction to schools which requires adaptation and change on behalf of individual teachers and whole school systems.

Table 2.1 A comparison of suggested factors in ESD/GC development and innovative schools.

Key factors noted for ESD/GC	Key factors noted in innovative schools
leadership distributed leadership	leadership distributed leadership
time to create a shared vision	sharing values and visions; overcoming the dominance of an existing cultural institution
a joined-up approach	
an open, creative approach	
support from authority	impact of change at a macro-level e.g. new national policy
good communication within and outside of school	reactions and interactions at an individual teacher level; impact of learning communities
training	impact of professional development
external partnerships and networks	impact of external contacts and networks
student participation and leadership	the impact of pupil participation
allowing time for change	allowing time for change
complex nature of change	complex nature of change
self evaluation	self evaluation

The discussion below therefore embraces both areas of research i.e. ESD/GC and school innovation and change. Although it will be shown that there are indeed many similarities between the two areas, it will also be shown that the situation is not simple. With so many factors involved, the process of change can be very complex, and issues

which may sometimes appear to be facilitators can also, at other times, be barriers. Each factor is now considered in turn.

2.2 LEADERSHIP AND MANAGEMENT

2.2.1 General leadership issues

In education as a whole, leadership and management have been found to be important for both effectiveness and innovation (Teddlie et al., 1989). In a more recent empirical study Thoonen et al. (2011), in a survey of teachers in 32 elementary schools in the Netherlands, found that a combination of transformative leadership behaviour is required to improve school organisational conditions.

In ESD/GC also, the criteria used to describe the degrees of ESD/GC development at the highest levels imply that leadership is crucial to the development process. Scott (2010) suggests that all other types of change needed for ESD are dependent on the leadership qualities. He notes the following qualities of leadership: innovative, risk-taking, resilient and flexible, valuing a diversity of views as a way of engaging people; committed to learning by everybody. Jackson's (2007) research concludes that the emerging model of green or sustainable leadership builds on what we already know about effective school leadership. She too suggests (p. 7) some common characteristics of leaders of sustainable schools i.e. that they: are optimistic and outward looking, passionate about sustainability, have an integrated, systemic understanding of the world and their place in it and can communicate this to others; and they understand how society, the environment and individuals connect within these contexts.

However, Harris (2008b p. 42), writing on leadership in sustainable schools, believes that the qualities outlined by Jackson (2007) are not completely adequate for such leaders. She adds that they must also address: the care agenda; involve school stakeholders in both short and long term decision-making; use real-life learning opportunities to enhance pupils' enjoyment, progress, standards and achievements; develop individuals with knowledge values and attitudes that can affect others and the future of the planet; and ensure that

approaches to leadership and management promotes best value, best practice and sustainability. This list is much closer to that of Scott (2010). Many of these qualities are similar to those identified for leaders in democratic schools by Inman and Burke (2002). They also note, somewhat reluctantly, that good leaders are often seen to be charismatic individuals. Levin (2008) suggests a reason for this reluctance, saying that such teachers are in short supply and that these characteristics cannot be relied on as the main factor in affecting change across a wide range of schools; other more practical factors need to be addressed on a wider, more realistic scale. Hargreaves and Harris (2009), in a large UK/USA research study of leaders in business, sport, education and health, found that although being charismatic is often a key feature of leaders in schools which perform beyond expectation (PBE), other qualities associated with it are equally important. They note,

PBE leadership is much more than simply being a magnetic personality. It is about having the ability to maximise leadership potential at all levels in the organisation through the power of example, persuasion, personality and passion. (p. 21)

On a more radical note on leadership, Sterling (2003, p. 336), quotes Stacey (1996),

the true role of the leader of a creative system is, not to foresee its future and take control of its journey, but to contain the anxiety of its members as they operate at the edge of chaos where they are creating a future that none could possibly foresee. (Stacey, 1996, p. 346)

2.2.2 Distributed leadership

Jackson (2007) also found that *distributed* leadership rather than just leadership appears to be the best model for fostering sustainability in schools. This is supported by Sterling (2003), Harris (2008b) and Scott (2010) on sustainable schools/sustainability and Griffin et al. (undated), Apple and Beane (1995) and Griffith (1998) on democratic schools. Harris (2008b) notes that distributed leadership is *essential* for the development of sustainable schools (Harris, 2008b),

Leadership for sustainability is not based on hierarchies or power bases but rather is a collective set of influences that overlap and connect..... Leadership for sustainability is distributed leadership. (p. 40)

Distributed leadership is promoted in general school development by Fullan (1991; 2001), Spillane et al. (2001), and later by Spillane (2006) and Spillane and Diamond (2007), Leithwood et al. (2007) and Harris (2008a). Spillane et al. (2001) suggest that it is best understood as ‘practice which is spread over leaders, followers and their situation and incorporates the activities of multiple groups of individuals’ (p.20). Spillane et al. (2009) further note that,

leadership is not simply a function of what a school principal, or indeed any other individual or group of leaders, knows and does. Rather, it is the activities engaged in by leaders, in interaction with others in particular contexts around specific tasks. (p. 5)

This suggests that distributed leadership has many commonalities with, and links to, collaboration, communities of practice and teacher networks; these are discussed below. In fact, Gronn (2002) sees distributed leadership as an ‘emergent property of a group or network of interacting individuals’ (p. 226). It could equally be assumed that distributed leadership could lead to further collaboration when leaders are working towards a common cause. This is suggested by Camburn et al. (2003) and Harris (2008a). The role of key players in distributed leadership will be discussed in the section on socio-historic activity theory later in this chapter.

Considering that distributed leadership has been proposed for many years it is interesting that Harris (2008a) and Spillane et al. (2009) note that there is still limited empirical evidence for the benefits of distributed leadership. Harris does, however, point to encouraging evidence which has emerged from the studies by Camburn et al. (2003), Spillane and Diamond (2007) and Leithwood et al. (2007). The latter study confirms Apple and Beane’s (1995) proposition, that participants in distributed leadership gained a sense of ownership not only for their own work but for that of their peers. The benefits of this sense of ownership will be returned to later.

2.3 FORMALISATION OF ISSUES IN EDUCATION

2.3.1 Impact of national policy on schools

National policy is a particular aspect of leadership. It is also a form of formalisation. Scott and Gough (2003) describe it as an organisational aspect that can impact on change. It is of special interest in this study where there have been substantial changes in the overall national education policy and in national ESDGC guidance in Wales during the years leading up to this study. There are several areas of contention in relation to the impact of national policy. On a positive note, in relation to education for sustainability, Jackson (2007) found that support from authority was seen to be important as teachers may not all understand the issues in full because,

behaviours and approaches seen to support sustainability ... may not fit with a narrow understanding of current educational norms. (p. 50)

However, Symons (2008), Global Action Plan (2007) and Anderson (2008), also on ESD, note some negative effects of top-down policies such as a restriction on schools' flexibility and creativity. Karsten et al. (2000) also noted that where the amount of policy-oriented change is significant teachers may suffer exhaustion and stress and find it hard to maintain willingness for change. Harris (2009) suggests several other reasons for the failure of policies introduced by government: inadequate support to implement them; borrowing of policies from other countries without conserving 'the cultural fit'; and giving inadequate time and unrealistic goals for implementation. She notes that 'governments are time limited, unlike schools, and therefore want immediate results' (p. 64). She suggests having fewer external initiatives imposed on schools and, instead, supporting greater networking and collaboration between schools. The need for a localised approach has also been put forward by Fullan (2001). Fullan (1991) points to the danger of educational institutions adopting external innovations with only symbolic benefit, perhaps only to achieve political success and less to achieve reform.

However, despite these negative points Cheadle et al. (2004) on ESD, and Levin (2009) on general educational change, still consider national guidance to be important. Cheadle et al. (2004) suggest that,

local solutions will require overarching guidance and stimulus, for teachers on the ground cannot always see the possibilities for curriculum development, nor have the theoretical resources to hand that will guide sound development.’ (p. 5)

Levin (2009) further suggests that many worthwhile changes, which are now accepted as normal, have been brought about by political debate,

We actually need political debate and disagreement as a way of pushing ourselves to think about new possibilities and to raise questions about current practice. (p. 70).

2.3.2 Formalisation within schools

National policy is one aspect of formalisation, but this can also occur within schools. Symons (2008) discusses evidence for this. She notes that it was found to be useful when sustainability is embedded in formal school structures such as curriculum, budgets and staffing and in school development plans with associated targets, resources and training (Cheadle et al., 2004; Murphy and Fawcett, 2006; Ofsted, 2008; Jackson, 2007). Cheadle et al. (2004) and Gayford (2009) note the value of making ESD explicit in curriculum units. Appointing a designated member(s) of staff with responsibility is suggested by the research findings from Hren et al. (2004), Cheadle et al. (2004), Murphy and Fawcett (2006), Jackson (2007), EES-SW (2007) and Ofsted (2008).

2.4 INTEGRATED APPROACHES

Symons (2008), Jackson (2007), Shallcross and Robinson (2007) and Gayford (2009) noted one enabler of education for sustainability in schools to be a joined-up approach, where there is clear linking of initiatives, supported by senior management, subject associations, and national policy. This was supported by Ofsted (2008) which found that even when the teaching in individual lessons on sustainability-related issues was good or outstanding, ‘the lack of a coordinated whole-school approach and insufficient opportunities for pupils to reinforce and develop what they had learned reduced the impact’ (p. 4). Shallcross and Robinson (2007) present a model of a whole school

approach, adapted from Shallcross (2003) and Henderson and Tilbury (2004). It contains interconnected elements of ‘institutional practice’, ‘the formal curriculum’, ‘social and organisational aspects’, ‘research and evaluation’ with ‘community links’ at the centre, connected to all other aspects.

2.4.1 Systems thinking

Sterling (2003) argued passionately in his thesis for systems thinking in education, especially for thinking about the role of school and education for the future. This approach is clearly highlighted within education for sustainability - the resource *Linking Thinking* (WWF Scotland, 2005), to which Sterling was a major contributor, has been available to teachers for some time. However, although systems thinking is now an established way of working for many business organisations it has only recently been paid much attention in the development of effective and innovative schools. As will be discussed in Chapter 3, systems thinking is noted as feature in some the Wales ESDGC and documents (e.g. Welsh Assembly Government, 2008b). It also occurs in the School Effectiveness Framework in Wales (Welsh Assembly Government, 2008g) which, like Shallcross and Robinson (2007), promotes integrated tri-level working between schools, LEA and government.

2.5 SUPPORT FOR SCHOOLS

Support to schools has been highlighted by several authors in the field of ESD/GC and in general education for implementing innovations. It can come in the form of nationally available guidance, web-based resources, or in local support from a variety of organisations, including nationally supported initiatives. On ESD/GC, Symons (2008) found that most of the research reports analysed suggested that local education authority (LEA) support was crucial, although it was still said to be quite variable (Cheadle et al., 2004; Jackson, 2007; Estyn, 2006a; Anderson, 2008). This came in the form of funding, guidance and the provision of individual support and professional development opportunities. Symons found that schools also received further support from a very wide range of organisations including environment and development NGOs, development

education centres, international linking schemes and national schemes such as Eco-Schools and Healthy Schools (the latter is often coordinated through the LEA) (Ofsted, 2008; DEA, 2008). These support groups were found to be useful to schools (Hren, 2004; Cheadle et al., 2004; Ofsted, 2008) with Cheadle et al. suggesting that certain schools actively seek them out. This could be an important aspect of why certain schools develop ESDGC more quickly than others. However, Jackson (2007) noted that NESPSS (2006) suggests that the potential for unlocking [NGO] resources in this field is generally under emphasised.

In Wales, Estyn (2006a) noted the usefulness of the same kind of support. However, this report, together with several others (Environmental Audit Committee, 2003; Global Action Plan, 2007; Ofsted, 2008), found that there was such a vast array of support opportunities that it was confusing for schools. NESPSS (2006) suggested that one reason for this may be that NGOs are rarely linked into school or LEA development priorities. To this end Ofsted (2003) highlighted the importance of a well-developed support network involving *both* local authorities and NGOs. This was the aim of the Enabling Effective Support Initiative for the global dimension in schools (DFID, 2003).

It has also been suggested that too much reliance on individual schemes for support can lead to a fragmented coverage of ESD/GC (Ofsted, 2003; Morgan, 2009; Scott, 2010). Scott (2010) criticises the Sustainable Schools programme in England and the Eco-School Green Flag programme for this type of approach and the latter for promoting a ‘fragmented view of sustainability’ (p.5). He questions if learning may sometimes be divorced from sustainability instead of the two being totally integrated. There can be a similar situation where schools rely heavily on school international partnerships. These have been criticised for their capacity to reinforce neo-colonialist attitudes, rather than opening minds when teachers receive insufficient professional development support (Oxfam, 2007; Martin, 2008; DGSP, 2008; Burr, 2008; Martin and Griffiths, 2012). The role of professional development in teachers’ learning is discussed later in the chapter.

2.6 CREATING A SHARED VISION

2.6.1 Influences on schools' views of the purpose of education

Many of the discussions relating to effective ESDGC schools in particular and to effective schools and innovation in schools in general, are centred on views of the *purpose* of education. Many researchers have found that a strong sense of purpose is important in effective schools, regardless of the type of effectiveness desired (e.g. Reynolds and Teddlie et al., 2000; Sterling, 2001; James et al., 2006). Sterling (2001), discussing sustainable education, suggests that a clear view of purpose is key to all organisations. The nature of national education policy, school inspection guidelines, and local education authority policy must exert some influence on purpose (Fullan, 1992; Scott and Gough, 2003; Sterling, 2001), and especially so where ESD/GC is a prominent feature of that policy. Interestingly, though, Reynolds and Teddlie et al. (2002) found that even in schools with similar national policies there was a variety of views on the purpose of education, and, as discussed in Chapter 1, the nature of the purpose can differ considerably, even within the field of ESD/GC. In schools this may be a result of differing values of school leaders, and of other members of staff, if the school is acting in an inclusive manner. Should a shared purpose be an aim, and if so, how can this be attained?

2.6.2 Achieving shared purpose, values and vision

Symons (2008) notes that shared vision is one aspect perceived to be a key enabler in the development of ESD/GC schools. Jackson (2007) notes that 'the core need for developing sustainability in schools is to build the expertise of staff by providing time for coming together to create shared visions and practice (p. 34). However, this is not always easy to achieve. The key issue centres around the notion of stability versus change. Gough and Scott (2001) note that there is an overwhelming tendency for cultural institutions to dominate even within so-called learning societies. In addition, Reynolds and Teddlie et al. (2000) and Blenkin et al. (1997) found that schools with strong systems and agreed views on purpose and values were seen to give less variation in practice and a degree of stability, certainty and predictability. These situations might make it difficult for change to happen. Rudduck et al. (1996) agree that schools may preferentially adopt change which fits best

with the existing school culture and dispel other forms of change. These issues could be a problem for ESD/GC where existing systems may need to be *substantially* challenged (Scott and Gough, 2001; Sterling, 2001; Cheadle et al., 2004).

Blenkin et al. (1997), however, actually challenge this uniformity in systems. They point out that, as noted by Feiman-Nemser and Floden (1986, p. 50) ‘the assumption of cultural uniformity is untenable’ as ‘teachers in terms of age, experience, sociocultural background, ethnicity, gender and personal characteristics, display diverse characteristics.’ (p. 219). This suggests that change *is* possible. In Blenkin et al.’s (1997) cultural perspective, the concern focuses more on the importance of sharing the meaning of an innovation in order for change to happen (Marris, 1974; Rudduck, 1986; Feiman-Nemser and Floden, 1986) rather than imposing change from the top down as in their technical perspective. This description of school culture is closely aligned with Habermas’s practical and emancipatory interests as described by Smyth (2004). Sterling (2003) also suggests that society is more likely to,

move towards sustainability by participative engagement than by planning from the top because it is an emergent property rather than a fixed goal’ (p. 335).

Levin (2008) stresses that ‘improvements are a matter of “will” - people’s motivation - and of “skill” - their capacity’ (p.8). He suggests that improvement can therefore only occur, and continue, where school staff are engaged and committed. Coburn (2003) and Jackson (2007) both discuss how a transfer of ownership is important in order for a change to become embedded within practice.

Teacher collaboration has been proposed as an answer to both the sharing of values and the engagement of staff. This and other issues relating to collaborative approaches are discussed below.

2.7 COLLABORATIVE APPROACHES

Many of the findings on ESD/GC e.g. Estyn (2006a), Jackson (2007), EES-SW (2007) and Gayford (2009), suggest that communication and sharing experiences both between members of staff, and working with others outside of the school, is important. For

example Estyn (2006a) noted that ‘schools [in Wales] with a firmer understanding of ESDGC have usually spent a lot of time discussing the topic and training staff’ (p. 7) and Jackson (2007) noted,

Good school leaders encourage staff and students to contribute ideas and they foster a climate of participation and teamwork. This gives a sense of empowerment and enthusiasm at all levels within the school. (p. 28)

In addition to being a way of sharing meanings and creating a shared vision, collaborative approaches have also received much attention in the general literature on school change. They have been proposed as helping new members of a group learn (Lave and Wenger, 1991), for teachers’ professional development e.g. Darling-Hammond and McLaughlin (1995), for sparking new ideas and for enabling change to happen in an integrated way (Harris, 2008a). All these approaches build on constructivist approaches (Vygotsky, 1962) where individuals are believed to construct new knowledge from their experiences. They tend to build on two different streams of research, namely, those stemming from the idea of communities of practice as initially described by Lave and Wenger (1991) and those based on the idea of the release of tacit knowledge and on the creation of energy in organizations Polanyi (1983), Nonaka & Takeuchi (1995) and Von Krogh, Ichijo & Nonaka (2000).

There are many kinds of collaboration. For example, there can be situations where teachers talk informally and perhaps incidentally about their work, others where they come together to share ideas and practice, and yet others where they form deliberate groups to work together towards a pre-defined purpose. The initial results of this research study indicated that teachers working together, working with partners and learning from others were important elements in the case study schools. Therefore, the next section describes some different kinds of collaborative working that can occur in schools. These will then be explored further in the analysis of findings in Chapters 6-10. Key terms include teacher collegiality, communities of practice, professional learning communities, communities of learning, learning communities and critical friends’ groups (Vescio et al., 2008). However their descriptions are not always consistent and can be confusing. In fact DuFour (2004) cautions that the term ‘professional learning communities’ has been used in so many ways that it is in danger of losing all meaning.

2.7.1 Communities of practice and situated learning

Lave and Wenger (1991) initially used the concept of communities of practice and situated learning to describe the situation where a newcomer or ‘apprentice’ is gradually introduced into full practice by participating in real and relevant activities within a community of practice comprising more experienced workers i.e. they are effectively ‘learning on the job’. They called the initial stages ‘legitimate peripheral participation’ (p. 37). They extended the idea to the general context of learning where they proposed that ‘learning is an integral and inseparable aspect of social practice’ (Lave and Wenger, 1991, p. 57). They suggested that teachers, on joining schools, become members of communities with others in their profession. Through peripheral participation, learning from more experienced others, they then develop along a trajectory of increasing expertise to more central participation and belonging. The emphasis is on learning and talking about issues within a real context rather than just engaging in experiential learning (Tennant, 1997). Lave (1993) further argued that this kind of learning happens in all situations i.e. ‘learning is ubiquitous in ongoing activity, though often unrecognized as such’ (p. 5).

The theory of communities of practice was further developed by Thorpe (2002) to describe ‘groups that interact to achieve a shared purpose or enterprise’ (p.132). However, he suggests that communities of practice are not structured teams. Instead, they are usually thought of as informal groups or networks of professionals who share common problems, common interests or common knowledge, and who communicate with each other about this. This agrees with Wenger’s own later definition (Wenger, 2006),

Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly.
(Available at: www.ewenger.com/theory/ accessed 06/09/11)

He lists three crucial characteristics: domain, community and practice, stressing that the members are practitioners, not just acquaintances. Thorpe (2002) further suggested that the group must exist long enough to ‘generate patterns of interaction and significant learning among participants’ (p.132). ‘Communities of practice’, therefore, tends to be a term used to describe interactive situations which help individuals, perhaps from different organisations, to achieve a commonly perceived purpose. However, the term is also often used more loosely than this.

2.7.2 Professional learning communities in schools

There have been several recent and comprehensive reviews of this field by Stoll (2004), Stoll et al. (2006), Feger and Arruda (2008) and Vescio et al. (2008) with the latter concentrating on evidence of successful outcomes. McCormick et al. (2011) also review the state of research on professional learning communities and teachers' networks.

Definitions

Within more recent school education literature preferred terms include communities of learning, learning communities, critical friends groups and professional learning communities (Vescio et al., 2008). These tend to describe slightly more purposeful, collaborative situations than communities of practice. Stoll (2004) uses Mitchell and Sackney's (2000) description of a learning community,

A group of people who take an active, reflective, collaborative, learning-oriented, and growth-promoting approach toward the mysteries, problems and perplexities of teaching and learning (p.9)

Stoll draws attention to Little (1993) who makes an important distinction between professional communities and professional *learning* communities, noting that professional communities occur in all schools, however it takes a dedicated effort to develop a learning community. A similar point is made by Grossman, Wineburg and Woolworth (2000), Grossman et al. (2001) and Darling-Hammond et al. (2005) who all note that teachers' interactions should be focused on improving certain areas of learning.

Stoll (2004) describes five characteristics of professional learning communities. These are:

- shared values and visions with a focus on student learning (p.5);
- collective responsibility (p.5);
- reflective professional enquiry (p. 5):
- collaboration and group (p. 5):
- collective learning as well as individual learning (p.6).

Stoll et al. (2006) add mutual trust, inclusive school-wide membership and networks and partnerships that look beyond the school for sources of learning are important. Some

writers suggest that discussion and conflict over strategies is also important (McLaughlin and Talbert, 2001; Scott and Gough, 2001; Achinstein, 2002; Little, 2002; Shallcross and Robinson, 2007). Hargreaves (2003) notes,

Professional learning communities demand that teachers develop grown-up norms in a grown-up profession – where difference, debate and disagreement are viewed as the foundation stones of improvement. (p. 163)

Gronn (2003) emphasises the importance of leadership, and particularly distributed leadership, in professional learning communities. This was not a new idea: Fullan (1991) envisaged a future where collaborative groups of teachers organize and conduct learning, perhaps approved by, but without the presence of, a principal.

Evidence for successful outcomes

Although there is much literature on this area Stoll (2004) noted that there was relatively little strong evidence for links between enhanced student learning and professional learning communities. In an extensive review of literature, Vescio et al. (2008) found that ten studies cited empirical data that suggested a change in the professional culture of the school. The studies dealt with a mix of primary, middle and secondary schools and some were evaluative studies of interventions. Six of these drew upon quotes from participants to document this finding (Englert & Tarrant, 1995; Andrews and Lewis, 2002; Phillips, 2003; Strahan, 2003, Hollins et al. 2004; Berry, Johnson, & Montgomery, 2005;); three used survey data that compared participants to non-participants (Supovitz, 2002; Supovitz & Christman, 2003) and one used survey data generated from teachers' participation in critical friends group (Whitford & Fisher, 2003). Vescio et al. (2008) noted that a key weakness in many of the studies was that there was little comparison to the situation at the start of the study and that often the fine details of the methodology were not presented. Types of collaborative working included sharing lessons, peer observation, using protocols for decision making, systematic note-taking to inform colleagues about their work and collectively generating new ideas for practice. All ten studies indicated a change in teaching culture such as emphasis on collaboration, a focus on student learning, teacher authority and continuous teacher learning. However, in only four studies was there reliable evidence for change in teachers' practice as a result of being in a professional learning community. Supovitz (2002) and Supovitz and Christman (2003) demonstrated the importance of focus in teachers' collaborative actions; where there was little focus on

meeting at specific times there was no change in teachers' practice. In six studies evidence was found of student learning being improved i.e. those by Supovitz (2002), Phillips (2003), Strahan (2003), and Supovitz and Christman (2003), Hollins et al. (2004), and Berry et al. (2005). A study of six high schools (Wells and Feun, 2007) noted, however, that progress was slow.

Bell et al. (2006) conducted a systematic review of literature for the UK National College for School leadership (NCSL). Of the 133 studies in their systematic map, fifty-three were naturally occurring evaluations, with a further twenty relating to research-manipulated evaluations of interventions. Nineteen of these studies were selected for in-depth review. Although the studies related to a wide range of topics and purposes they conclude that,

All the studies reported evidence of impact on teachers (although indirectly and sometimes negatively in one case) and all except three reported evidence of impact on students, although this was modest in two cases

Further evidence for the benefits of collaboration come from Penuel and Riel et al. (2009) who studied two high schools which were similar in all but one criterion, namely having different levels of success in implementing reforms at the time of the study. They used an explanatory case study methodology that relied on survey, interview and social network methods. They found that in the school where strong inter-staff relationships, or collegiality, were a key factor the school worked more efficiently with innovation.

Issues working against collaboration in schools

There are several issues which may work against collaboration. In a technocentric situation, as described by Blenkin et al. (1997) forced collaboration could occur where a head teacher issues a dictate to staff to work together to achieve the predetermined targets. This is unlikely to be well received by teachers. Indeed, Hargreaves and Dawe (1989) found that when teachers are used to working in isolation a sudden encouragement to work collaboratively towards a certain goal can sometimes be seen as a means to ensure uncritical adoption of someone else's agenda. They termed this contrived collegiality. There is a great difference between sharing meaning and expecting everyone to take it on, and coming to a shared agreement on meaning.

Also, collaborative learning does not always appear to be easy to achieve. Nias et al. (1989) found that teachers had great difficulty collaborating even when they wanted to work together. Hargreaves (1989) and Little (1990) found that collaborative cultures are often achieved mainly through the extraordinary efforts of individuals and that they become vulnerable if those individuals leave. Also working in opposition to collaboration is what Lortie (1975) describes as the occupational culture of teachers, described as individualistic, present-oriented and conservative. This also agrees with Lundgren (1991) who notes, ‘the closer we come to the teaching situation, the more stable are the processes of education’ (p. 45) and with Hargreaves (1989), Little (1990), and Lieberman (2000) who found that teachers often prefer to work alone rather than collaboratively. However, Stoll (2004) notes that one of the key reasons for promoting professional learning communities is to overcome this very issue. In an attempt to find out more about how teachers communicate about their practice, Little (2002) documented teacher conversations about specific learning topics. She found that the situation was not straightforward, with conflicting pressures working against each other,

within these groups that would reasonably be considered collaborative, innovative, and committed to improving practice, teacher learning seems both enabled and constrained by the ways that the teachers go about their work. Habitual ways of thinking or acting coincide closely with moments of surprise “aha”; the impulse to question practice resonates against the press simply to get on with it, (p. 939).

She suggested that more work needs to be done to understand these conflicting urges. Hollins et al. (2004) also noted lack of time and lack of funding as working against collaborative structures.

2.7.3 Widening horizons through collaboration and networking

Fullan (1992) proposes that for institutional innovations to work there need to be changes, not only in behaviour, but in beliefs at individual level. Furthermore, Sterling (2001) and Scott and Gough (2003) suggest that in order for change to happen teachers need to be exposed to new ideas, ideologies, complexities and multiple rationalities and have the chance to discuss and debate them. Scott and Gough (2003, p. 36) note a point made by Schwab (1978) that ‘it is impossible to persuade people of the merits of new ways of

thinking when they are only equipped with old ways of understanding'. Stoll (2004) further suggests that learning communities within schools can often become limited if confined only to members of one school and she further notes that even collaboration between two schools can become stale. She questions how it can be ensured that mediocre work is not exchanged.

Both Cochran-Smith and Lytle (1999) and Young (1998) suggest the input of knowledgeable researchers and those from higher education institutions in order to introduce key current research findings. Another solution is to widen the input by extending networks to include other schools and members of the wider community. Widening the input is the principle behind learning networks.

Learning networks

Stoll et al. (2006) and Vescio et al. (2008) suggest that the most effective and innovative learning communities involve a much wider community. Hargreaves (2003) agrees and suggests that 'a network increases the pool of ideas on which any member can draw' and that 'networks extend and enlarge the communities of practice with enormous potential benefits' (p. 9). This kind of action was noted in school research by Englert and Tarrant (1995) and Berry et al. (2005). Bell et al. (2006) also noted that,

eight studies reported evidence of impact on schools or other organisations and nine studies reported impact on other participants, such as parents, HEI staff, leaders and community workers. (p. 49)

They also note that that 'collaborative CPD and learning are the principal vehicles for knowledge transfer' (p. 65).

Learning networks, or professional learning communities (PLCs), are now being strongly encouraged in the UK (Bell et al., 2006, Harris, 2008a). In Wales, the formation of PLCs is a key area of action in the School Effectiveness Framework (WAG, 2008g); this is discussed further in Chapter 3.

External partnerships and networks in ESD/GC

Scott (2010) recognises the value of social learning for ESD and it is a prominent feature in the higher levels of his framework based on capital. Also, Symons' (2008) review of research found that most schools involved in ESD/GC had a wide range of partners, both local and international, and they made full use of opportunities in the community. Gayford (2009) noted also that events organised by external partners were very much enjoyed by pupils. This does not necessarily mean, of course, that these schools were members of formal learning communities but it does indicate that a variety of ideas may have been reaching both teachers and pupils. Shallcross and Robinson (2007), in stressing the importance of *action* for change, prefer to call these multi-faceted communities 'communities of action' rather than communities of practice. In their model of school development for ESD they place the community, rather than the school, at the centre. The complex nature of ESD and the need for transformational learning would point to this kind of approach being preferable.

In terms of learning within international partnerships, Gayford (2009) notes that these were most useful when meaningful curriculum work took place between the schools. However, as noted earlier, international partnerships have received a fair amount of criticism recently for the *poor quality* of teacher learning within them. Perhaps being a member of a local collaborative network which includes knowledgeable, experienced teachers could be of help those who are less experienced in this field.

2.7.4 Exploring networks in detail

Social network analysis

Although many of the studies mentioned above have shown benefits resulting from networking and collaborative work, McCormick et al. (2011) note that until recently there has been little detailed examination of the mechanisms of how these networks work to enhance the school development. To explore this several studies have used social network analysis, for example, Carmichael et al. (2006), Fox et al. (2007), Fox and Wilson (2008), McCormick et al. (2011) and Daly and Finnigan (2010). They used methods which build on theories from the business world (e.g. Hakkarainen et al., 2004; Palonen et al., 2004)

and from education (Hargreaves, 2003). These theories propose that learning may also happen through much wider social interactions than just collaborative networks. Fox et al. (2007) worked with forty-eight school leaders and co-ordinators to explore teachers' networks within schools. They used a combination of a mapping tool and associated interviews to capture practitioners' views of the networks associated with their schools and local authorities in relation to assessment for learning. They found that the mapping tool provided an opportunity for dialogue with individuals and networks were clearly identified. Fox and Wilson (2008) using a similar mapping task to plot teacher interactions, found that newly qualified teachers frequently used their informal new teacher networks to compare and discuss their work. This is another way of teachers' horizons being expanded. From these theories they have developed models of social networking related to schools, arguing that membership of such communities is a subset of the professional inter-relationships that teachers utilise for their professional development. These models are useful in that they provide a visual picture of who networks with whom, the frequency of interaction and kind of topics discussed. McCormick et al. (2011), describing this work further, discuss networking in relation to other theories, such as social capital approaches.

Social capital approaches

Social capital approaches have been developed in sociology and political science by Coleman (1998), Lin (2001), Portes (1998), Putnam (2000) and Woolcock (1998). Lin (2001) describes social capital as the access that people have to resources. Hargreaves (2003) talks not only of social capital, but also of intellectual and organisational capital. He proposes that intellectual capital is the knowledge, understanding and ideas accessed through social capital. This is then used to develop the school (organisational capital). Burt (2000) and Lin (2001) suggest that social capital items are embedded in a network structure and are not freely available to anyone in a particular system. They refer to Portes and Sensenbrenner (1993) who suggest that the norms of helpfulness and obligation that arise among individuals who interact frequently with one another lead to access to expertise and resources which would otherwise be less easily available.

Penuel and Riel et al. (2009), in the study described above, used social network analysis to discover how teachers gain their knowledge and understanding from others. Teachers were asked to identify close professional colleagues using a numbered roster containing all

staff names and to indicate frequency of interaction. They found that analysing the internal structure of the school community in this way was necessary to account for the distribution of access to resources and expertise, i.e. social capital. They conclude by suggesting that social network analysis can provide a useful way to look at the efficacy of strategies for advancing reform goals. It can show, for example, which individuals play critical roles in transferring expertise from one subgroup to another, thus helping school leaders identify people who are critical to change efforts. They identify a key limitation to network data, namely the intensive level of effort required to collect data for an entire school. They also note that the gathering of data also requires ethical sensitivity and imagination.

2.7.5 Summary of collaborative working

In summary, collaboration of different kinds has been suggested as a solution for new and established teachers' learning, as a way of coming to agreement on school values and vision, as a way of achieving certain key tasks and as a way of accessing, introducing, and sharing new ideas and research findings. The degree of purpose involved appears to vary from looser structures such as social networking and communities of practice to more purposeful professional learning communities. All, however rely on multiple-way communication and imply that learning of some sort will occur as a result of this. The extent to which this happens still appears not to be well proven. Communities of practice, in particular, tend to be talked about but not easily visualised or quantified. However, the newer strategies of network analysis which map teacher's networks and social capital within networks do try to quantify interactions and these provide some promise for illustrating interactions in this current study. The different forms of collaborative working will be investigated in this study to find out whether any of the formal and less formal ways of collaborating and networking have any influence on schools' development of ESDGC.

2.8 PROFESSIONAL DEVELOPMENT AND TEACHERS' LEARNING

In the general field of educational change Leithwood et al. (1998) mention a need for training for teachers so that they can take part in, and contribute to, the learning

communities in a more meaningful way. This leads to a discussion of the role of more formal professional development which may also help inject new ideas and boost teacher confidence enabling them to contribute to learning communities within the school.

2.8.1 The role of external professional development

Huberman (1984), Fullan (1991; 2001), Borko (2004), Bolam and Weindling (2006) have all looked extensively at the role of professional development in relation to innovations in schools and it is generally recognised that it is a useful tool in implementing change.

Bolam and Weindling (2006) carried out a review of evidence from twenty studies in England. They found fairly strong, to strong evidence, that good continuing professional development is likely to improve teacher motivation and morale and that it can have an impact on teachers' attitudes, knowledge and skills.

Fullan (1991) suggests that staff development 'will never have its intended impact as long as it is grafted on to schools in the form of discrete, unconnected projects' (p. 111). He describes the teacher education continuum, where teacher education is the norm and viewed as a life-long development. This would include ensuring that all members of staff have access to appropriate professional development in the desired area of innovation. This suggestion is supported by Blenkin et al. (1997) for general educational change, by James et al. (2006) from evidence in primary schools in Wales, and in the field of education for education for sustainable development by Symons (2008). Many of the researchers in ESD note the need for specific kinds of training. For example, Anderson (2008) notes the need for training on specific Sustainable Schools doorways; Jackson (2007) found that leadership training that explored values, was holistic and of outwards orientation, and which included the intellectual, emotional, spiritual and practical aspects, was important; Symons refers to the Yorkshire and Humberside ESD Forum Management Group (2006) which notes the usefulness of input from independent experts; and Cheadle et al. (2004) highlight the need for hands-on training. Hren (2004) also notes that training for non-teaching staff and governors is beneficial.

There are several key issues which arise in relation to professional development courses. Firstly many head teachers can only afford to send a few teachers on courses and a

compromise must somehow be found on how to extend this training to others in the school. This is where the situated learning, communities of learning and learning networks described above could play a role. However, these mechanisms would have to be efficient or the spark of new ideas could be diluted and quickly dissipate. Hayes (2000) noted that this was a common result of cascade effect professional development. However, he suggests that development strategies which are collaborative and reflexive can help to avoid this effect. Another issue with professional development is the debate over the actual impact it has on teachers. This is discussed further in the next section.

2.8.2 Some issues in teachers' learning and change

Even when teachers attend professional development courses there is no guarantee that they will be influenced by them. In fact, Fullan (2001) notes that 'most professional development experiences for teachers fail to make any impact' (p. 255). Blenkin et al. (1997) point out that individual teachers' reactions to professional development are complex and not fully understood; this is also confirmed by Huberman (1998). Borko (2008) also notes that research by Fennema et al. (1996) and Knapp & Peterson (1995) shows that 'meaningful learning is a slow and uncertain process for teachers, just as it is for students.' (p.11-12) and that some teachers change more than others through participation in professional development programs. Hayes (2000) and Bolam and Weindling (2006) found that where teachers have control over their professional development they are more likely to judge it effective.

Some of the issues involved are described by Blenkin et al. (1997) in their biographical perspective. This looks at how practitioners' hopes, fears, aspirations, commitments, beliefs and values can affect how they respond to situations of change. They point out that teachers develop their own sense of strategies which work for them and help maintain their self-esteem. Teachers also have their own beliefs and views about how children learn and their preferred pedagogies (Gough et al., 2001); a challenge to these is not going to be simple. Scott and Gough (2003) note,

Such practices may possess considerable inertia; that is, practitioners may be resistant to changing the way they go about things even when under very considerable pressure from policy makers and others to do so. (p. 58)

To complicate matters, Argyris and Schön (1978) found that espoused beliefs of practitioners may diverge markedly from their 'theories in use'. Scott and Gough (2003) take this further in relation to education,

both the espoused theories of teachers and/or trainers, and their theories-in-action, may vary between different organisational levels. What a teacher thinks is important for a school as a whole, or for education in general, may vary markedly from what she or he considers suitable for the particular class he or she happens to be teaching. (p. 58)

They suggest that teachers do frequently shift between these rationalities and that how they think, and decisions they make, are affected by 'membership (or not) of bounded social groups' and 'freedom of action (or lack of it)' (p. 115). They note that membership of these groups may also differ from stage to stage of their career and of their lives in general. In addition, different kinds of training may suit different teachers.

2.8.3 Transformative learning

How people's beliefs can change is also discussed by Mezirow (2000) and O'Sullivan (2003) in the context of transformational learning. Mezirow describes a learning process of 'becoming critically aware of one's own tacit assumptions and expectations and those of others and assessing their relevance for making an interpretation' (p. 4). O'Sullivan (2003) in a definition more related to ESDGC, defines transformational learning as follows,

Transformative learning involves experiencing a deep, structural shift in the basic premises of thought, feelings, and actions. It is a shift of consciousness that dramatically and irreversibly alters our way of being in the world. Such a shift involves our understanding of ourselves and our self-locations; our relationships with other humans and with the natural world; our understanding of relations of power in interlocking structures of class, race and gender; our body awarenesses, our visions of alternative approaches to living; and our sense of possibilities for social justice and peace and personal joy. (p. 327)

Clark (1991) identifies three dimensions to a perspective transformation: psychological (changes in understanding of the self), convictional (revision of belief systems), and behavioural (changes in lifestyle). Only when the latter occurs can change happen. Transformative learning has been attributed to several causes. Mezirow (2000) suggests

that transformational learning usually results from a disorienting dilemma, which is triggered by a life crisis or major life transition, although it may also result from an accumulation of transformations in meaning schemes over a period of time (Mezirow 1995, p. 50). This is where Cochran and Lytle's (1999), Scott and Gough's (2003) and Young's (1998) suggestions that teachers need exposure to new ideas could be relevant. The challenge may be to offer teachers varied professional opportunities throughout their careers to increase the chance of change happening. Rudduck (1988), although not discussing transformation theory in name, but educational change in general, reflects the same type of sentiment,

If we are interested in substantial change, we may need to find structures and resources to help teachers to re-examine their purposes, slough off the sediment of socialization, and feel more in control of their professional purposes and direction. (p. 210).

2.8.4 ESD/GC as transformative education

An exploration of Mezirow's (2000) transformational events may well be of interest in this study to illuminate why certain teachers have developed a strong interest in, or passion for, ESDGC. Also, when transformative learning happens within whole organisations rather than in individuals then very major changes can occur. Sterling (2001; 2004) notes the need for transformative learning in relation to sustainability. When discussing transformative change in organisations (Sterling, 2004), he describes different types of learning levels. At the first level people learn *about* sustainability, and policies remain unchallenged. The second level is concerned more about learning *for* change with an emphasis on values and concepts; attempts are made to reorient policy and practice, but he suggests that 'change is likely to be piecemeal and there are tensions with dominant norms' (p.70). He compares this to Argyris and Schön's (1996) double loop learning. Sterling (2004) proposes a further, third-level transformative response that could bring about a change in worldview and ethos. He suggests that,

learning can either reinforce the existing world view or precipitate the 'movement of mind' (Senge, 1990, p. 13), the *metanoia* or re-perception of meaning. (p.70)

Scott (2010) also hints at transformative learning in the *Towards Restorative* stage of his capital-based ESD framework for schools.

2.9 PUPIL PARTICIPATION AND ACTIVE CITIZENSHIP

Pupil participation emerged as a key characteristic of democratic schools in the studies by Inman and Burke (2002) on school councils, EES-SW (2007) on the global dimension in schools, Symons (2008), Jackson (2007), Ofsted (2003), Hren (2004) on education for sustainability and Gayford (2009) on learning for sustainability. Jackson (2007) found that,

the development of student participation through formal structures such as school councils, or less formally, fosters a sense of collaboration and shared vision. It also builds skills for active citizenship and a greater enthusiasm for learning. (p. 47)

Symons (2007) quotes Cheadle et al. (2004) and Ofsted (2003; 2008) as saying that student involvement not only enables, but also can drive, the sustainability agenda. Gayford (2009) found participation was something very much appreciated by the pupils and that it promoted good learning outcomes. He found that they particularly enjoyed participating in school councils and in special events where they could work with their friends, and they enjoyed monitoring sustainability measures. Indeed, in this study pupils suggested that student participation was something that schools *should* be promoting in order to become more sustainable. Pupil outcomes are also cited as the key indicator of an effective school in school inspections (Estyn, 2006b, 2010; Ofsted, 2008) and have been given an increased profile in Wales in recent years with a move to pupil-centred education (Welsh Assembly Government, 2008a). This is discussed further in the next chapter.

Breiting et al. (2005) note how effective such approaches are in helping students to confront challenges and clarify their own values and also in the way they give students a justification for going beyond theory and involving themselves in action and participation. This is supported by the Birney and Reed (2009) in a study for the National Council for School Leadership. They found that,

Evidence shows that their [pupil] participation and enthusiasm are part of what equips pupils with the capacity to learn and become leaders. Sustainability

creates direct benefits for students, including opportunities of involvement and participation which in turn leads to better behaviour. (p. 5)

Although what is meant by ‘better behaviour’ here is not defined, it would be difficult to imagine a school that would not continue with its development of ESDGC if these kinds of outcomes were predicted.

2.10 DESCRIBING THE NATURE AND PROCESSES OF CHANGE

2.10.1 Change over time

Fullan (2001) suggests the need to allow time for change to happen. Jackson (2007), Estyn (2006a) and EES-SW (2007) for ESD, ESDGC and the global dimension, respectively, all note the need to allow time for development. EES-SW (2007) in case studies of fourteen schools with a strong global dimension concluded,

The typical timescale from starting work on a school’s global dimension to achieving the level of success identified here is 5-7 years. During this time, the school requires continued and coherent support from a wide range of external services to acquire knowledge, develop skills and maintain interest and, therefore, momentum (p. 7)

A continuum of system change

To help with the understanding of the *process* of change, Anderson (1993) developed a useful continuum of system change, describing a process with several reflective stages. These stages include: maintenance of old system, awareness, exploration, transition, emergence of new infrastructure and predominance of new system. Additionally, she describes how several elements of change e.g. vision, public and political support, teaching and learning changes, are affected as they move through this continuum. She notes that the continuum can help to establish a common language or conceptual picture of the process of change and the shared goals. She suggests that this can help multiple stakeholders understand and participate in the reform process and help to outline and develop a strategic plan.

2.10.2 Dealing with the complexity of change

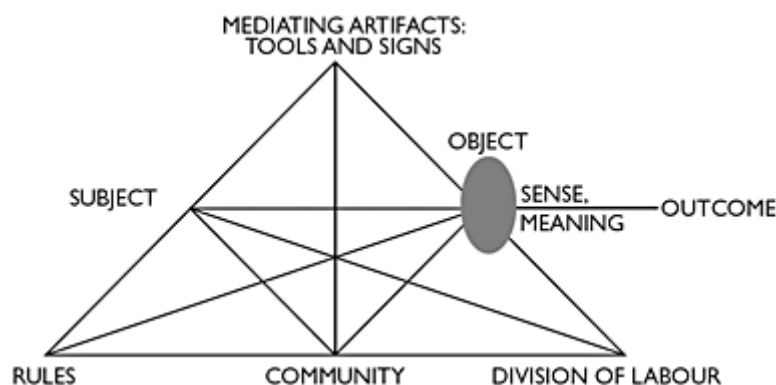
The discussion above has highlighted many different factors which may impact on change in schools in general and on ESD/GC in particular. However, the process of change is complex. Fullan and Miles (1992) propose that one must look at reform in the light of the many interrelationships within a complex system (curriculum, teachers, students, community, etc.) and that it must not just focus on ‘structure, policy, and regulations, but on deeper issues of the culture of the system’ (p. 11). Engeström (2008) also suggests that ‘sustainable and expansive school change probably needs to utilize multiple change mechanisms’ (p. 2). Levin (2008), however, takes a more pragmatic viewpoint. Although agreeing with the degree of complexity, he stresses that one must be realistic about expecting all parts of a system to change at once. Instead schools should be shown ways in which to become more effective at change. This is what guidance documents usually aim to do. Several different models have been proposed to summarise this complexity. Harris (2008) presents a model of capacity building in schools which incorporates distributed forms of leadership, collaboration, learning and teacher focus, and use of evidence. Scott and Gough (2001; 2003) for ESD, encourage reflection on the interactions between Cultural institutions, Organizational institutions which include the school and national government, Literacies, which include traditional and political ideologies, and Practices, including teaching, stressing that they are all interconnected. Sterling (2003) also provides several models for a systems’ view of education in change within society in change. However the most these models can do is encourage reflection as they are so general. Socio-historic activity theory provides some promise of a useful framework to demonstrate some more of the complexity in systems.

2.10.3 Socio-historical activity theory

Socio-historic activity theory is another theory based around constructivist, collaborative principles. It was first developed by Engeström (1987) based on Vygotsky’s (1978) basic mediational triangle and further work by Leont’ev (1981). Engeström uses this to explain systems which are aiming for a product but in which all elements are constantly interacting and changing. In his second generation activity system (Figure 2.1) a ‘community’ for example, a group of teachers, works together with ‘tools’, e.g. teacher meetings, guidance

documents, 'rules' e.g. a new policy, and 'division of labour' on the 'the subject' i.e. the topic under consideration. They aim for 'an objective', often called 'the object', e.g. better pupil experiences. All of these items interact and collaborate.

Figure 2.1 The structure of a second generation human activity system (Engeström, 1987, p. 78)



This is said to lead to 'expansive learning' (Engeström, 1987) where even the object can change. This expansive change can be compared to Sterling's level 3 learning.

Second generation activity theory does not, however, clearly illustrate the importance of interactions between different organisations. Engeström (1999a) takes a step towards doing this with his description of 'third generation activity theory'. He notes that the most common kind of situation is where more than one activity system interacts and learning beyond what was possible in a single activity system occurs. This could conceivably be used to describe individual school activity systems interacting with each other and with wider professional activity systems such as NGOs and local authority support groups. All of these could still have their own objectives or they could have a common objective related to ESDGC.

Engeström (2009) explains that there are five key principles to activity theory. These are:

- a) a collective, artifact-mediated and object-oriented activity system is taken as the prime unit of analysis, even although it exists within in a network of other activity systems;
- b) an activity system is always a community of multiple points of view, traditions, and interests. The division of labour in an activity creates different positions for the participants;

- c) historicity: activity systems take shape over lengthy periods of time and their problems and potentials can only be understood against their own history;
 - d) contradictions, i.e. structural tensions have a central role;
 - e) the possibility of expansive transformations. Because of the time involved some individual participants begin to question and deviate from its established norms. In some cases, this escalates into collaborative envisioning and a deliberate collective change effort. ‘An expansive transformation is accomplished when the object and motive of the activity are reconceptualized to embrace a radically wider horizon of possibilities than in the previous mode of the activity.’ (p. 57)
- (Adapted from Engeström, 2009, pp. 56-57)

Activity theory is particularly interesting as it addresses many of the issues described earlier in both general change and change for ESDGC. For example, it has a time element as described above by Anderson (1993); it incorporates multiple points of view, traditions, and interests described in schools by Feiman-Nemser and Floden (1986); it provides an explanation of how existing cultural institutions can be overcome (Scott and Gough, 2001); it embraces multiple elements of change described by Fullan (1991); it incorporates the element of contradictions which these introduce and which are described as necessary for change by Achinstein (2002); and it has the transformative learning elements described by Mezirow (2000), Argyris and Schön (1978), Sterling (2004) and Scott and Gough (2003). It is also useful in that it does neatly summarise the components of interactions.

Case study research with its combination of interviews and document research should be a viable mechanism for discovering most of the elements of activity systems. However, in order to address the issue of interactions between these network systems and the internal school networks, it may well be that a combination of network analysis and activity theory is needed.

2.10.4 Diffusion theory

This is often also called innovation theory and has some links to the approaches taken in social network and social capital studies. It has been investigated here as it could provide a useful way of describing some of the stimuli for change. It has its roots in sociology and

particularly in the work of Tarde (1903) and Ryan and Gross (1943). The theory was developed as innovation theory by Rogers and Shoemaker (1971), and later by Rogers (1995) as Diffusion of Innovations. Rogers (1995) defines diffusion as ‘the process by which an innovation is communicated through certain channels over time among members of a social system’ (p. 5), i.e. it is another communications-based model. Rogers and Shoemaker (1971) argue that all innovations follow a similar pattern of adoption, with one group of people, the ‘innovators’, taking it up immediately. Then there are ‘early adopters’, the ‘early majority’, the ‘late majority’ and finally the ‘laggards’, including some who never adopt the innovation. While the diffusion process permeates through society and groups, the adoption process is most relevant to the individual.

Diffusion theory has become popular in business and marketing literature but also has relevance to education. Malcolm Gladwell has been credited for popularizing the phrase “tipping point”, in his book titled *The Tipping Point: How Little Things Can Make a Big Difference* (Gladwell, 2000). The concept of the tipping point is described as the ‘culmination of a build-up of small changes that effects a big change’ (Gladwell, 2000, p. 17). Gladwell suggests three trends, The Law of the Few, The Stickiness Factor and the Power of Context. The Law of the Few describes the formation of self organising networks which foster the spread of ideas through the work of key individuals. The similarity to communities of practice and network theory is noted but Gladwell further tries to describe key roles within the networks. Such roles include: the Connectors, the Mavens and the Salesmen. The Connectors are defined as those individuals who are typically very social and outgoing, have access to diverse social networks and possess a significant ability to spread information. Mavens, who also possess a great number of social contacts, are more significant in their early acceptance of new ideas or trends and through their willingness to spread such ideas through working with others who may be less likely to adopt without persuasion. Salesmen work within the network to explain to potential adopters why they must/should participate. These ideas may be relevant in the research study in relation to the role of key players in ESDGC and their role in aiding its development in and between schools.

2.11 SUMMARY OF FINDINGS

A large number of possible factors in ESDGC development have been identified. However, the evidence from studies on ESD/GC is limited to a few studies which use a variety of methods and there are many theoretical arguments which are not backed by empirical research. For some factors, e.g. leadership there seems to be fairly strong evidence of their effect. However, for many factors there appears to be only limited evidence, even when the evidence from the wider field of research on school innovation and change is considered. Many of the studies describe evidence of outcomes but do not look in detail at how those outcomes came about. Also, many of the research findings have come from studies in the USA and may not be so relevant for schools in the UK. This is not to say that the factors discussed are not important, simply that further evidence still needs to be gathered.

In their development of ESDGC schools are influenced by a complexity of personal, ideological, social and organisational factors, all of which may interact with each other. This complexity makes it difficult to point to particular factors having an effect on change. Schools are unique institutions with different learning intakes, and members of staff with different interests and values. What works in one school may be very different to what works in another. Indeed, Scott and Gough (2003) quote Levin and Kelley (1997) as saying ‘it is not, in fact, at all clear how any sort of learning leads to change or whether it does so at all in any predictable or manageable way’. (p.111). Engeström (2009) suggests that this is a natural and normal way of working. Certainly, in the type of society described by Sterling (2003), in which future outcomes are believed to be unpredictable, this may actually be a desirable situation.

2.12 CHAPTER SUMMARY

This chapter has explored possible factors in the implementation and integration of ESDGC in schools. It has shown how change is a complex process. Key factors suggested are: leadership and distributed leadership, the role of key individuals, critical, reflective and open thinking, formalisation of ESD/GC in the curriculum, support for schools; collaboration, sharing of views and discussing of conflicting points of view, the ‘spark’ of

new ideas and ideologies from outside of schools, and importantly, the role of pupil participation. Some factors which may work against change have also been discussed. These include the existing priorities and culture of the school, teachers' conservatism and lack of time and the time needed for change to become embedded. Some frameworks and theories which attempt to explain the process of change have also been described. The next chapter now moves on to discuss these issues within the context of ESDGC and the education system in Wales.

CHAPTER 3

A CRITIQUE OF THE WELSH NATIONAL CONTEXT

A brief introduction to Education for Sustainable Development and Global Citizenship (ESDGC) in Wales was presented in the Introduction. In this chapter more of the background to, and influences on, the nature of ESDGC in Wales are described. This is followed by a critical discussion on whether any of the key characteristics of ESDGC-related educations described on Chapter 1 are to found in the Wales ESDGC guidance and in the current school curriculum for Wales. It is also debated whether, together, these two documents incorporate any of the suggested facilitators for change to a more sustainable, equality-based global society and whether they have the potential to transform society.

3.1 INFLUENCES ON ESDGC DEVELOPMENT IN WALES

Compared with other countries in the UK and Europe, Wales is interesting in that it has incorporated both education for sustainable development and global citizenship in one policy for some time. David Norcliffe and I (Norcliffe and Bennell, 2010) carried out interviews with key players in ESDGC development from its earliest days onwards. We traced the influences on ESDGC starting from the Government of Wales Act (HMSO, 1998) which placed a requirement in the Welsh Assembly Government's constitution to consider sustainable development in all its actions. We describe how in the year 2000, a group of like-minded people who were members of organisations with different aims and objectives came together to form an initiative called 'Education for the Future'. This group included members of organisations such as Oxfam, the network of Welsh Development Education Centres, the Royal Society for the Protection of Birds (RSPB), the Environmental Education Council for Wales and Cyfanfyd, the Development Education Association for Wales. While some were primarily concerned with global injustice others were focused on nurturing understanding, respect and care for the environment. A third influence came from educationalists concerned with providing effective educational opportunities for pupils. What all of these individuals and groups had in common was a

desire to help children understand the interconnections between places and issues in the world today. One education adviser's comment was a typical response,

Back in 1989, 1990 the National Curriculum was drowning out all the good things about education. It was drowning out a holistic approach to education. When I understood that ESDGC was being brought forward in Wales I saw that as an opportunity to reclaim some of that ground, and the kind of things that I think are important in education. (Norcliffe and Bennell, 2010, p. 44).

This group lobbied the Welsh Assembly Government (WAG) for even greater inclusion of themes related to ESDGC in the curriculum. This resulted in the WAG setting up an Education for Sustainable Development Panel as a sub-panel within its Sustainable Development Panel. It also set up a Global Citizenship Working Group, convened jointly with the Department for International Development (DfID). There were joint members of these groups and this encouraged exchange of ideas and co-working. We (Norcliffe and Bennell (2010) point to the stimulating effect of the meeting of a combination of viewpoints and characters, where individuals from an initially disparate range of organisations, or communities of practice, and often with different values, came together and where views were shared, challenged, reflected upon and sometimes modified. We compare this to double loop learning (Argyris and Schön, 1996) and to third level activity theory (Engeström, 1999).

The publication of the first ESDGC document (ACCAC, 2002) was a result of this collaboration and the first sign that sustainable development education and global citizenship education would be considered together in Wales. The document described sustainable development and global citizenship separately but also gave a joint definition (see page 2). It has been suggested that using the terms 'sustainable development' and 'global citizenship' together in one title, and giving separate definitions, could encourage teachers to think of these issues as separate from one another. This was a possible issue. However, the aim of bringing the terms together was to highlight the commonalities of these issues and to satisfy those coming from the global citizenship side who feared that that dimension would not receive sufficient attention unless highlighted directly.

In 2004 the two advisory groups were merged to form the ESDGC Panel and an ESDGC Champion was appointed to develop a new strategy, the ESDGC Strategy for Wales

(Welsh Assembly Government, 2006; updated in 2008h). This was followed by a position statement from Estyn (2006a) on levels of understanding and development of ESDGC in schools and further education colleges. As described in the Introduction to the thesis, despite the combined title of ESDGC, this statement found that the global dimension was still not receiving a great deal of attention in schools and that schools were still unclear about what ESDGC entailed. This prompted the need for more detailed guidance from Estyn (2006b) and later from the Welsh Assembly Government with the development of the ESDGC common understanding for schools (Welsh Assembly Government, 2008b). Members of many of the organisations involved in the early days of ESDGC were also heavily involved in this development through a tender process and a public consultation. (It should be noted though, that we found (Norcliffe and Bennell, 2010) that some organisations felt their voices had not been heard.)

The Welsh Assembly Government (WAG) also continued to provide financial support to enhance development of ESDGC across the education sectors. This included several years of funding to organisations to carry out pilot support projects, one of which was an all-Wales collaboration on embedding ESDGC in initial teacher education and training (Norcliffe, unpublished, 2006) and another on the development of master's level ESDGC materials (Bennell, 2005, unpublished). I was involved in both of these projects. The WAG also matched DFID's support for the Enabling Effective Support Initiative (EES) which funded a central coordinator, regional ESDGC networks and small-scale funding for school support projects. This enabled teachers in different schools to meet together with practitioners from a wide range of organisations. Fricke (2010) describes the development of learning communities as a key aim of the ESDGC School Networks in Wales.

In summary, this complex history of ESDGC development with its multiple and varied input suggests that it will not be surprising to find similarities between ESDGC and the other similar forms of education discussed in Chapter 1. Also, the willingness of the government to listen to ideas from a range of sources, and also to fund pilot projects, puts into practice much of what has been said earlier about distributed leadership and collaboration. The characteristics of ESDGC in Wales are now discussed and compared with the characteristics suggested in the literature.

3.2 A CRITIQUE OF THE CHARACTERISTICS OF ESDGC AS DEFINED IN WALES

This section draws heavily on *ESDGC: A Common Understanding for Schools* (Welsh Assembly Government, 2008b) which contains definitions of ESDGC, guidance on content, levels of development and a self evaluation tool; from here on it will be referred to as ‘the common understanding’. It also draws on its sister publication *ESDGC: Guidance for teacher trainees and new teachers* (Welsh Assembly Government 2008c). The common understanding is a much more substantial document than the original ACCAC (2002) ESDGC guidance described in Chapter 1. Although it uses the same definition of ESDGC as in the earlier document it does not repeat the separate definitions of Education for Sustainable Development and Global Citizenship, instead the emphasis is on holistic thinking and connectivity between local and global issues. Key changes were the move from learning through concepts to learning through themes and the emphasis placed on the five Common areas: Commitment and leadership, Learning and teaching, School management, Partnerships and community and Research and monitoring. It also contains more detail on ways of implementing ESDGC. The learning and teaching characteristics of ESDGC are first discussed below, followed by institutional practice.

3.2.1 Learning and teaching characteristics of ESDGC

There are some aspects of ESDGC which are clearly very similar to characteristics of the related educations described in Chapter 1. First, it takes a holistic view as reflected in the five common areas noted above. On the key issues of interdependence and systems thinking, in its introduction, the ESDGC common understanding emphasises ‘developing learners’ worldview to recognise the complex and interrelated nature of their world’, and ‘building the skills that will enable learners to think critically, think laterally, link ideas and concepts, and make informed decisions’ (Welsh Assembly Government, 2008b, p. 7). Critical thinking skills are promoted throughout, as is linking ideas, however, it should be noted that, after the initial pages, *only* the skills promoted in the Skills Framework (Welsh Assembly Government, 2008e) are promoted; there is no further mention of systems thinking which is said to be crucial to ESDGC (Sterling, 2003; 2004). For example, the highest level under ‘Thinking about cause and effect and making inferences’ only mentions

‘use some prior knowledge to explain links between cause and effect and justify inferences/predictions’ (p. 22). This ‘cause and effect’ phrase has been criticised by Scott and Gough (2003) for failing to recognize the complexities of systems. So, although teachers who read the whole common understanding document will be likely to understand the message about systems thinking, others, who only read their key stage page, may not.

The approach to values also differs from place to place in the guidance documents. For example, the common understanding states that ‘It [ESDGC] is an ethos that can be embedded throughout schools, an attitude to be adopted, a value system and a way of life’ (p. 4). However, in contrast, it also notes that one of the challenges for schools is to provide opportunities for teachers and learners to ‘critically evaluate their own values and attitudes’ (p. 4). The companion document for trainee teachers and new teachers (Welsh Assembly Government, 2008c) similarly states that ‘learners need opportunities to develop their own values through investigating and assessing evidence, discussing and reasoning, and becoming aware of their own values in relation to those of others’ (p. 14) and notes, ‘we should be facilitators of learning and not be expecting pupils to accept our own values or a particular set of values’ (p. 14). This document also suggests an examination of the influences on one’s own values. This latter view on values is much more aligned to the critical thinking ethos of ESD/GC promoted by Scott and Gough (2003) whilst the former is perhaps more aligned with those promoting certain values. This variation of emphasis must surely be confusing for teachers.

The futures dimension is also present. The common understanding states that ESDGC is ‘education that will prepare young people for life in the 21st century’ (p. 4), noting that it should allow time for discussing the future and their options. Topics covered under the seven themes are also similar to those identified in the literature in Chapter 1. These themes are: wealth and poverty, identity and culture, choices and decisions, climate change, issues of consumption and waste, local and global health issues, the natural environment (Welsh Assembly Government, 2008b, p. 14). Choices and decisions is a key theme as it encourages pupil discussion and debate. Use of resources outside of the school and in the community is also promoted. David Norcliffe and I (Norcliffe and Bennell, 2010) note that the move from concepts to themes caused conflict during the development of the guidance. Some argued that it was a positive move because some teachers were struggling with the understanding and communication of such complex

concepts whilst others felt the concepts should be kept as schools and LEAs were already successfully using them. Yet others felt that the separation of issues under themes could be detrimental to holistic thinking. The move to using themes was finally justified by Estyn's comment (Estyn, 2006a) about schools finding the concepts difficult,

Those teachers who are familiar with the concepts do not feel that they are helpful in getting to grips with ESDGC. They find it difficult to establish either the connection between the definition of ESDGC and the concepts or how to use the concepts to organise ESDGC work and activities. (Estyn, 2006a, p. 7)

I would suggest that this was a predictable response reflecting teachers' lack of training in the area and a response to the earlier guidance document (ACCAC, 2002) that included few details on how the concepts could be approached. However, as noted earlier, Huckle (2010) puts a conceptual model at the top end of his scale, i.e. towards restorative. Since the original brief for the ESDGC common understanding stated that it was intended for teachers who were beginning their ESDGC journey perhaps the themes do really reflect the necessary level for teachers beginning their ESDGC journey. However, they are unlikely to stretch their understanding of ESDGC unless considerable professional development opportunities are made available.

3.2.2 Whole school issues

At the whole school level of ESDGC there certainly seems to be a joined up approach. By emphasising the five common areas: Commitment and leadership, School management, Partners and community and Research and monitoring, many of the characteristics and factors suggested as important for embedding ESDGC are also promoted. These include developing a shared vision, strong and distributed leadership, management actions, formalisation and pupil participation. These are discussed below.

A shared vision

The ESDGC common understanding notes 'ESDGC should form part of the institutional philosophy and practice (Welsh Assembly Government, 2008b, p. 45) and 'All school staff, parents and governors should be committed to ESDGC within the school and in the local community' (p. 46). However, there appears to be an element of a top-down

approach in the following statement, ‘The vision need[s] to be communicated to all who are involved in the school’ (p.11).

Leadership

On leadership, it notes that the head teacher will be fully supportive. Recognising the importance of distributed leadership it suggests that the school will have a designated ESDGC co-ordinator and ESDGC-aware leadership teams; ‘ leaders exist at all levels within education and they all have a vital role to play’ (p.10). It also suggests there may be a proactive link governor for ESDGC (2008, p. 48).

Formalisation

On formalisation within schools, as well as suggesting that there should be a coordinator for ESDGC, the ESDGC common understanding suggests that schools should have an ESDGC policy which should be ‘holistic and realistic’ (Welsh Assembly Government, 2008b, p. 11) and an adequate budget and resources for ESDGC. Under research and monitoring, it recommends that an audit of provision is carried out and a portfolio of development is kept and regularly reviewed to reflect current thinking (p. 47). It states that ESDGC training should be included in performance management structures with appropriate opportunities at Early Professional (for newly qualified teachers) and Continuing Professional Development levels (Welsh Assembly Government, 2008b, p. 48). ESDGC is also an area of learning that receives attention in school inspections (Estyn, 2006b; 2010).

Management and ethos

On management and ethos it asks if the school promotes healthy lifestyles, if there is use of local foods and if they have considered ESDGC issues when purchasing (p. 48). The highest ‘embedded’ level of ESDGC suggests that there will be an ethical purchasing and banking policy in place, safe and sustainable transport to and from school and that any new buildings will be built to BREEAM standards (Welsh Assembly Government, 2008b, p. 46). Also, it recommends that resource and school displays are regularly reviewed in order to celebrate diversity and reflect different cultures, genders and abilities. It notes that many systems and awards currently exist that can help schools work towards excellence in

ESDGC and that, whichever one is chosen, learners should be fully involved in the process.

Pupil participation

Continuing on the theme of pupil participation, the common understanding also stresses that ‘it is vital that learners are involved in the process through participation in decision-making, delivery and evaluation (p. 17). The self evaluation criteria’s highest level notes, ‘Learners make regular suggestions for, and take initiatives in sustainable development and global citizenship practices in school (p. 46).

Partnerships and networking

The common understanding also actively promotes partnerships and networking. It suggests that staff should work in partnership with the local authority, governors, parents and that the school should be a focal point for ESDGC in the local community. At the ‘embedded’ level of the self evaluation framework it suggests that the school may have developed a *mutually beneficial and equitable* school link [emphasis added] with a school elsewhere (p, 47). It suggests *active involvement* [emphasis added] in ESDGC networks and with outside agencies involved in ESDGC (Welsh Assembly Government, 2008b, p. 47). The school’s ESDGC should be shared in newsletters and websites and good practice shared with other schools and teachers (Welsh Assembly Government, 2008b, p. 48).

3.3 FORMALISATION OF ESDGC WITHIN THE REVISED CURRICULUM FOR WALES

The inclusion of relevant issues within the formal curriculum has been suggested as one of the key enablers for ESD in schools (Jackson, 2007; Symons, 2008). This has happened substantially within the revised curriculum for Wales. The overview document for the revised national curriculum *Making the most of learning* (Welsh Assembly Government, 2008a) notes ESDGC as one of the curriculum key aims together with other national priorities. (These other priorities are discussed below).

The ESDGC common understanding document itself only provides guidance for schools but it gains statutory status through its inclusion in the Personal and Social Education (PSE) framework; this aspect is therefore likely to be key to how some schools regard the importance of ESDGC. The 2008 statutory framework for PSE (Welsh Assembly Government, 2008f) takes a broader, more balanced and holistic approach to PSE than the previous version (ACCAC, 2000). ‘Sustainable Development and Global Citizenship’ is one of the five themes of PSE. However the theme of ‘Active Citizenship’ is also very relevant to ESDGC as it encourages students to develop successful relationships and to participate in their local and global community. It also gives them a practical understanding of their rights and of the links between political decisions and their own lives. It was never clear to me why these two items were treated separately as there is so much overlap between them.

All the revised curriculum subject orders also contain opportunities for ESDGC; it is particularly noted within each subject’s contribution to PSE but is also overtly highlighted in Science, Design and Technology, and Geography. Examples of ESDGC in all subjects are given in the trainee teacher and new teacher publication (Welsh Assembly Government, 2008c, pp. 17-24).

As noted earlier ESDGC is also an aspect that can be inspected (Estyn, 2005; 2006b; 2010). However the emphasis has changed. Although all school inspections are still required to look at ESDGC, in the 2010 guidance inspectors are now advised that they can only ‘direct a line of enquiry’ i.e. give detailed attention to ESDGC, if a school has identified ESDGC in its self-evaluation report. This may be a sign of the beginning of a downward shift in the priority given to ESDGC. Guidance questions address developments in the areas of policy and practice, the involvement of leaders, planning, learner awareness, understanding skills and values of sustainable development and global citizenship, application of learning, staff understanding, training and resources, projects, awards and extra-curricular activities that enable and promote ESDGC.

ESDGC also features in the standards for newly qualified teachers (Welsh Assembly Government, 2009)

3.4 THE ETHOS OF ESDGC WITHIN THE REVISED CURRICULUM FOR WALES

The ESDGC guidance in Wales clearly promotes most of the characteristics discussed earlier in Chapter 1. However, if the ethos promoted by ESDGC is to change society it needs to be more than an aspect of education: it needs to be part of the ethos promoted by the whole education system. Remarkably, this appears to have been happening in Wales. The first signs came in the document *School of the Future* (National Assembly for Wales, 2003) which emphasised that the following aspects would gradually be increased within school education: Community focus, Inclusion and participation, Curriculum and parity of esteem, and Enjoyable learning. Now, many of the methodologies and approaches advocated and championed by World Studies, Global Education and Development Education movements for many years are not only embodied within ESDGC, they are also at the heart of the revised curriculum for Wales (Welsh Assembly Government, 2008a). This encompasses not only the revised National Curriculum subject orders, but also the frameworks for the Foundation Phase, Personal and Social Education (PSE), careers and the world of work, the non-statutory skills framework and the national exemplar framework for Religious Education.

The revised curriculum aims to:

- *focus on the learner;*
- ensure that *appropriate skills development* is woven throughout the curriculum;
- focus on continuity and progression 3–19;
- *offer reduced subject content with an increased focus on skills;*
- *be flexible;*
- *be relevant to the twenty-first century;*
- support Government policy including: bilingualism; *Curriculum Cymreig; Wales, Europe and the World; equal opportunities; food and fitness; education for sustainable development and global citizenship;* and the world of work and entrepreneurship (WAG, 2008a, p.3) [emphasis added].

All of these points, and particularly those emphasised in italics, are consonant with recommended characteristics of ESDGC curricula discussed in Chapter 1, although not

exclusive to it; some are also characteristics of a curriculum aimed at developing skills for economic development. They are discussed in more detail below.

3.4.1 A learner centred curriculum

Learner centred education is a natural development from an earlier National Assembly for Wales document (National Assembly for Wales, 2000) *Children and Young People* which was founded on the United Nations Convention on the Rights of the Child 1989 and the Human Rights Act 1998. These changes in emphases in the curriculum are reflected in the requirement for all schools to have a school council and for associate pupil governors to be appointed in secondary schools. *The School Effectiveness Framework* (Welsh Assembly Government, 2008g) also strongly promotes this kind of learning and it is now a statutory requirement and included within Estyn's school inspection framework. Websites for children supported by the Welsh Assembly Government, notably *Funky Dragon* (www.funkydragon.org/, accessed 13/09/2010) and *Pupil Voice Wales* (*Pupil Voice Wales* website at www.pupilvoicewales.org.uk/, accessed 13/09/2010) also reflect this changing emphasis. The encouragement of pupils to express their own views may of course produce conflicts with establishment views, but this is exactly the kind of debate that promotes the critical thinking that is central to transformative change (Mezirow, 2000).

3.4.2 A skills-based curriculum

Reference was made earlier to the fact that there has been a shift to a skills-based curriculum with emphasis placed on the development of critical thinking skills, also an essential element of ESDGC. The full Skills Framework can be found in the document of that name (Welsh Assembly Government, 2008e). In 2009, a short guidance document *Effective practice in Learning and Teaching - A Focus on Pedagogy* was published (Welsh Assembly Government, 2009c). This emphasised the intertwined relationship of 'Teaching strategies', the 'Learning process', 'Relationships and environment' with 'Enhanced learner outcomes and wellbeing' at the centre. It included a poster for display in staffrooms. It suggested that all practitioners should engage in reflective practice and have an understanding of various teaching theories and models and a range of skills. These

changes in emphasis may have come at an opportune time for ESDGC which offers a natural and motivating medium for this kind of learning.

3.4.3 A flexible curriculum

The revised curriculum also stresses flexibility i.e. schools are encouraged to organise and deliver the curriculum in the way that best suits their circumstances and needs. It suggests that one way of doing this could be to adopt a thematic or topic approach. This type of approach can be particularly beneficial for ESDGC where the linking of ideas, topics and subjects, as encapsulated within the seven themes, can help pupils gain a holistic understanding of the complexity of interconnections in their lives. There is, of course, also the possibility that when a curriculum is made more flexible there may also be more scope for schools to pursue other purposes and simply play lip-service to ESDGC.

3.4.4 A curriculum with less testing

In 2004 Wales announced it would discontinue statutory testing at the ends of key stages 2 and 3. It replaced these with diagnostic skills-based test in year 5. This was yet another sign of a move away from a certain norm of formalisation.

3.4.5 Systems thinking, collaboration and professional development

The School Effectiveness Framework (SEF) (WAG, 2008g) received substantial input from Professors Alma Harris, Louise Stoll, Mark Hadfield and later from Michael Fullan, all key international figures in collaborative school learning and distributed leadership research (Welsh Assembly Government, 2011, available at: <http://wales.gov.uk/publications/accessinfo/drnewhomepage/educationdrs2/educationdrs2009/sefmf/?lang=en>, accessed 22/10/2011). It is therefore unsurprising that the SEF is based on a tri-level systems approach to education encompassing collaboration between all elements of the education system. It emphasises many of the key aspects promoted in the literature for ESD/GC, for example, the importance of teacher pedagogy, professional

development, high quality leadership, systems thinking, working with others, and networks of professional practice (p.12).

3.4.6 Other areas of consonance with ESDGC

The stress in the revised curriculum on the government's key policy areas of bilingualism, Wales, Europe and the World, equal opportunities; food and fitness and education for sustainable development and global citizenship also appears to also indicate an integrated approach. However, this is contradicted by the fact that there is little mention in the curriculum documents about the links between these areas. There is also the potential for tension between the amount of priority given to core topics such as literacy and numeracy which are emphasised in the SEF, and these other topics.

An ethos consonant with that of ESDGC also occurs in *The Foundation Phase Framework for Children's Learning for 3 to 7-year-olds in Wales* (Welsh Assembly Government, 2008d). This encourages experiential learning and co-operative play and places emphasis on the holistic development of children and their skills across the curriculum. The document also emphasises that children's views and opinions should be valued, and that they are to be given opportunities to discuss their own experiences and ideas about their lives and their futures. It urges the promotion of equality of opportunity and values, and celebrates diversity. The emphasis on outdoor play offers the opportunity for children to develop an appreciation of the natural world, to learn to play co-operatively and to make decisions. The aspects of 'Personal Social Development, Well-being and Cultural Diversity', 'Knowledge and Understanding of the World' and 'Creative development' are particularly relevant starting points for ESDGC.

At secondary level, the Welsh Baccalaureate also includes very many opportunities for ESDGC within its module on *Wales, Europe and the World*, in PSE (which specifically includes sustainable development), and in *Work-related Education* (WJEC, 2010).

The extent to which the parallel development of ESDGC and the revised curriculum have influenced each other cannot be fully quantified. However, the minister in place at the time was clearly supportive of both initiatives. In addition, interview data (Norcliffe and Bennell, 2010) suggest that certain other individuals within the Welsh Assembly

Government's Department for Children, Education, Lifelong learning and Skills (DCELLS) (formerly ACCAC), had long shared a vision of the importance of both ESDGC and pupil-centred and skills-based learning. These players were in a position to influence the development of both ESDGC and the whole revised curriculum and it is likely that they did so.

3.5 POLICY IN WALES – TRANSFORMATIVE OR NOT?

The section above has shown that ESDGC guidance shares many of the characteristics of ESD/GC discussed earlier and embodies a number of potentially strong change factors. Certainly it promotes critical thinking and debates of values amongst staff as well as pupils, a joined-up holistic approach, strong and distributed leadership, a common sense of purpose, pupil participation, community links, networks and collaboration with other practitioners, inclusion in the school ethos, management and policy, and research and monitoring procedures. The Welsh Assembly Government has also provided support to further the implementation of ESDGC. Overall government policy also supports these aspects by the inclusion of sustainable development in its constitution and through its skills-based, pupil-centred and flexible curriculum which includes ESDGC as a key aim.

It has been suggested above that the involvement of government bodies in mainstreaming educational initiatives such as ESDGC can have its dangers. The Development Education Commission (DEC, 1999), for example, suggests that, although institutionalisation is vital, 'established systems have a tendency to absorb change rather than take on its challenges' (DEC, p. 38). However, the evidence above has shown that there is little doubt that the Welsh Assembly Government *intends* to be transformative rather than 'transmissive' as described by Sterling (2001, p. 38), certainly in terms of sustainable development and global citizenship and pupil learning. However, is the system sufficiently radical to be transformative, enabling future generations to re-examine their values and shape the needs of education and society appropriately for a changing world? Or are the measures hampered by being within a system that is also, albeit unwittingly, trying to maintain dominant norms? The outcry about the results of the 2009 Programme for International Student Assessment (PISA) (OECD, 2010) which records results for tests on reading, maths and science, and where Wales was ranked only halfway in the tables, showed that

there is still a strong element of society which places emphasis on these kinds of results. There must be a tension within the Welsh Assembly Government between giving the revised curriculum and the School Effectiveness Framework time to fulfil their potential and trying to find a quick fix for results to pacify this outcry. Harris (2010), writing in response to this criticism in the Times Educational Supplement on the 9th of July, 2010, urged patience and praised Wales' recent initiatives for long term change.

I would also suggest that ESDGC in Wales, although some way along the continuum towards being transformative, is not yet quite there. While interconnections and interdependence are heavily stressed, the presentation of the separate themes does not guarantee a systemic viewpoint. Also, there is little mention of issues relating to living within the carrying capacity of the natural environment; emphasis is on modification of our behaviour, rather than radical change. The approach to values also appears to have a dichotomy at its heart, at once promoting certain values and, at the same time, emphasising the importance of young people having opportunities to develop their own values. In order to be truly transformative, WAG may have to take even more risks with the curriculum, increasing flexibility, trusting learners to develop their own values and encouraging a wholly systemic view in which the interactions between society, the economy and the environment are always considered together as in Type 3 theories described by Scott and Gough (2003).

3.6 CHAPTER SUMMARY

The characteristics of ESDGC, as described in guidance documents for schools in Wales, have been discussed and compared to characteristics of ESD/GC described in Chapter 1; it has been shown that there are many similarities. The relationship between ESDGC and the revised curriculum for Wales have also been examined. It has been suggested that there is potential for education in Wales to transform society to a more sustainable, interconnected world discussed. However, how this develops will depend on where the Welsh Assembly Government balances its priorities over the next few years.

The research study is now described in full, beginning with a description of the research rationale and design in the next chapter.

CHAPTER 4 RESEARCH METHODOLOGY

In this chapter the research issue and the key research questions posed at the start of the research are first re-examined in the light of issues raised in the literature review. Several new questions are then listed. Secondly, the rationale of the overall research approach is discussed. This is followed by a discussion of the choice of study area and its characteristics, a description of the methodology, the research procedures and methods of analysis. Limitations of the research methodology, ethical issues, issues of subjectivity and reactivity are also given attention.

Many choices were made, and decisions taken during the planning and execution of this research study. These were influenced by the research literature, for example, by approaches taken by other researchers to studying similar issues, and by theories which have been proposed to explain phenomena. The impact of my background in ESDGC and my knowledge of the study area were also influential, as were ethical considerations and practicalities such as availability of the participants and the suitability and limitations of analytical techniques. These are all explained and discussed. Ultimately the aim was to use a methodology and procedures which would shed as much light as possible on the complex mechanisms through which ESDGC is integrated into primary schools.

4.1 CLARIFYING THE RESEARCH ISSUE IN RESPONSE TO THE LITERATURE REVIEW

This research study aimed to find out about ESDGC practice and factors affecting this in schools at a detailed 'micro' level. The review of literature in Chapters 1 and 2, and the review of ESDGC implementation in Wales in Chapter 3 indicated that the number of factors that could influence ESDGC development at both a whole school level and individual teacher level is potentially very high. Schools are complex organisations even at primary level; the smallest school will have at least two or three teachers and the largest may have more than fifteen teachers. From studies on educational change in general, and

on education for sustainable development in particular, it has been suggested that some of the following factors may be influential:

- i. the existing culture and vision of the school (e.g. Blenkin et al., 1998; Reynolds and Teddlie et al.; 2000; Sterling, 2001; Scott and Gough, 2003) and the amount of conflict within the system (Little, 1993; Achinstein, 2002; Scott and Gough, 2003);
- ii. the extent to which a shared vision is developed (Sterling, 2001; Estyn, 2006; Jackson 2007; EES-SW, 2007; Gayford, 2009; Symons, 2008);
- iii. the type of leadership e.g. top down or distributed e.g. the devolvement of leadership to other teachers (Spillane et al., 2001; Inman and Burke, 2002; Hren, 2004; Jackson, 2007; EES-SW, 2007; Harris, 2008a; Scott, 2010);
- iv. the ways in which teaching and funding is prioritised across initiatives in the school (Cheadle, 2004);
- v. the way in which a school approaches ESDGC, for example, in a joined-up manner, interconnected to other topics and award schemes (Henderson and Tilbury, 2004; Symons, 2008; Shallcross and Robinson, 2008), in a fragmented (Scott, 2010) or in a superficial manner Morgan (2009);
- vi. the impact of national policy, the local education authority strategies and support from other organisations (e.g. Karsten et al., 2000; Scott and Gough 2003; Jackson, 2007; Harris, 2008; Levin, 2009);
- vii. the amount of support given to schools (e.g. Hren et al., 2004; Cheadle, 2004, Estyn, 2006; Ofsted, 2003, 2008; DEA, 2008);
- viii. the length of time schools have been exposed to ESDGC (Rogers and Shoemaker, 1971; Rogers, 1995; Anderson, 1993; Eisenhardt, 2000; Jackson, 2007; Estyn, 2006; EES-SW, 2007), and the impact of the particular timing of support (Fullan, 1991; 2001);
- ix. the values, attitudes and dispositions, interests, enthusiasm and life stage of teachers and how these their impact on their views of innovation and change (Argyris a Schön, 1978; Huberman, 1989; Blenkin et al., 1998; Gough et al., 2001; Scott and Gough 2003);
- x. the factors or events that inspire teachers, and organisations, to change their ideas and visions (Clarke, 1991; Mezirow, 1994; O'Sullivan, 2003; Young, 2004; Engeström, 1999, 2009);
- xi. the way in which knowledge and understanding of ESDGC is transferred from enthusiasts and/or leaders to other teachers (Gladwell, 2002);

- xii. the frequency and quality of opportunities given to teachers to work with, and learn to trust, each other i.e. teacher collegiality and collaboration (e.g. Leiberman and Miller, 1990; Fullan, 1991; Hargreaves, 1991; 1994; Little, 1993; Mitchell and Sackney, 2000; McLaughlin and Talbert, 2001; Du Four, 2004; Stoll et al., 2006 ; Stoll, 2008; Penuel and Riel, 2009);
- xiii. issues of conflict within collaboration (Little 1993; Scott and Gough, 2001) and issues working against collaboration (e.g. Nias et al., 1989; Hargreaves, 1989; Little, 1990);
- xiv. opportunities for professional development (Blenkin et al., 1997; Fullan, 1991; 2001; Borko, 2004; James et al., 2006; Bolam and Weindling, 2006);
- xv. the degree to which the school and its teachers interact with other teachers, schools, organisations, community and partners (Young, 1998; BMRB, 2000; Carmichael et al., 2006; Fox et al., 2007; NESPSS, 2006; Y&H ESD Forum Management Group, 2006; Stoll et al., 2006; Reed & Morgan, 2007; Shallcross and Robinson, 2007; Frank and Krause, 2007; Jackson, 2007; Vescio et al., 2008; Fox and Wilson, 2008);
- xvi. the degree of pupil participation in the school (Ofsted, 2003; Hren et al., 2004; Inman and Burke, 2004; EES-SW, 2007; Jackson, 2007; Symons, 2008; Gayford, 2009).

Further to this, some of these influences may have a longer term impact than others. Also, these factors are not necessarily independent of each other. As noted by Fullan and Miles (1992) and Engeström (2008) change is a complex process.

4.2 THE RESEARCH QUESTIONS

All of the issues above require investigation within the context of ESDGC development in primary schools in Wales. The aim of this research study was to try and untangle some of those complexities and to shed some light on which factors, or combinations of factors, influence the development of competence at a whole school level and in individual teachers. First though, it was believed to be important to take a look at the actual practice of primary schools that had been recognised for their ESDGC development in order to

discover the quality of their provision and whether their practice did truly reflect recognized good practice in ESDGC as described in the literature.

The following research questions and sub-questions were formulated and extended through the findings of the literature review.

The main research question is:

How does ESDGC competence develop in primary schools?

Supplementary key questions then arise from this question. These are:

Key question 1: What are the characteristics of schools recognised for their ESDGC practice?

- i. What kinds of learning and teaching activities do they carry out?
- ii. What kinds of learning and teaching methodologies are used?
- iii. Does this practice meet criteria for quality ESDGC?
- iv. Are pupils given opportunities to participate meaningfully in the life of the school?
- v. Is the school's ESDGC practice appreciated by pupils and reflected in their knowledge, skills, values, attitudes and dispositions?
- vi. Do teachers see any wider educational benefits for pupils from ESDGC practice?

Key question 2: What factors influence the development of a comprehensive approach to ESDGC in primary schools?

- i. Why did schools begin to develop ESDGC and what encourages them to carry on?

Impact of policy and guidance

- ii. How have schools reacted to ESDGC policy and guidance?
- iii. What influence has the revised curriculum guidance had on ESDGC development?

Attention to ESDGC

- iv. What level of attention is given to ESDGC by teachers and schools?

Leadership and management

- v. What is the role of school leadership and school ethos in promoting ESDGC?
- vi. Is there distributed leadership for ESDGC? Are there key players?
- vii. What kinds of management practice are in place for ESDGC, for example, policies, planning and training?

Levels of staff engagement

- viii. How interested, informed, engaged and competent are the teachers about ESDGC?
- ix. What impacts on teachers gaining ESDGC interest, understanding and teaching experience, for example,
 - a) What impact do their existing values, upbringing and education have on their ways of thinking about ESDGC
 - b) How do teachers react to change?
 - c) How well do teachers in the study fit the characteristics of competent ESDGC teachers?

Professional development

- x. How and where do teachers gain experience?
 - a) What kinds of support have been available to schools in north-west Wales?
 - b) Who receives professional development in ESDGC?
 - c) Do school leaders encourage teachers to develop their ESDGC skills?
 - d) Do teachers attend external CPD events, if so which teachers? Do certain teachers seek out training? How useful has external professional development been?
 - e) Are there support mechanisms in place for teachers' professional development in school? If so, how useful have these been?
 - f) How effective a role has Initial Teacher Education and Training (ITET) played in developing experienced ESDGC teachers?

Staff collaboration

- xi. Are teachers encouraged to collaborate for ESDGC and what is the purpose of this? Is it to: enhance general teaching and learning; for specific events and activities, or for their own learning?
- xii. To what extent do teachers collaborate on, and talk about, ESDGC?

Partnerships, support and wider networks links

- xiii. To what extent do schools and their teachers have links and partnerships with the community, support organisations, the schools' advisory service and other schools and teachers, including those in other countries?
- xiv. What kinds of support or partnerships are perceived to be most useful?
- xv. How does information flow between schools?

Other factors and questions were expected to arise naturally from the research findings.

4.3 THE RESEARCH APPROACH, RATIONALE AND ASSUMPTIONS

4.3.1 Influences affecting choice of research approach and methodology

Even during my early scientific career, my experiences of research in the field of marine ecology had persuaded me that in complex systems firm answers were unlikely. My subsequent long experience of working in the field of education in general, and ESDGC in particular, persuaded me further that, when researching complex human relationships such as those within schools, the most appropriate research approach would be predominantly qualitative. Interpretivist approaches (Cohen et al., 2007), relativistic and constructivist approaches (Robson 2002, pp. 25 and 27), had always appealed to me, with unique insights and trends anticipated rather than firm outcomes.

Methods used for this kind of study have included mostly qualitative methodologies, but often with some quantitative elements. Cohen et al. (2007), Gillham (2000) and Robson (2002) discuss how the boundaries between the earlier positivist and interpretive approaches have become blurred. Case studies including interviews, questionnaires, collection of supporting document data have become a popular choice of researchers. These enable them to explore complexities, to ‘get under the skin’ of a group or organization ‘to find out what really happens’ and ‘to see it from the perspective of those inside’ (Gillham, 2000, p. 11). Yin (2003) also suggests that a case study approach is most appropriate when the topic of interest has a level of complexity that requires multiple data sources and methods to gain an in-depth understanding. The complexity of the situation in schools certainly suggests that any survey responses would require strong support from teachers’ own explanations (Yin, 1994; 2009, Gillham, 2003). More recently some researchers have also been using forms of network analysis, based on work by, for example, Hakkarainen et al. (2004), to study interactions in educational situations (McCormick et al., 2011). This was also of interest to my choice of procedures.

I was particularly influenced in my research design by the studies of James et al. (2006) on primary schools in Wales, and Jackson (2007) and Gayford (2009) on research into sustainability in schools. These all used a case study approach with mixed methods for

collecting and triangulating the data. A study by Ireson et al. (1997) on ways of monitoring a new approach in schools catering for pupils with special needs, was of particular interest as they compared the findings from teacher interviews with those from case study data. Their case study reports were compiled using methods which drew on the work of Miles and Huberman (1984), who advocate the use of systematic methods of qualitative data analysis. Their interview questions were semi-structured and open-ended to allow respondents to express their own views of developments. The data were coded after Miles and Huberman (1984), with scope for additional categories where necessary. They compared different views on the worth of interviews, for example, that of Yin (1989) who recommends that interviews should be treated as verbal reports subject to bias, poor recall and poor or inaccurate articulation with the views of discourse analysts such as Potter and Weatherall (1987) who treat verbal protocols as individual accounts that do not require corroboration. They propose a third position of combining interview data from a number of correspondents to give a fuller picture. They compared interview data with case study reports compiled from such data as project teachers' diaries, researchers' field notes, minutes of meetings, curriculum documents and records of pupils' work. They found that 'there were no instances of contradictions; the main differences lay in the emphasis and detail of the accounts' (p.59). There were, however instances of omissions or differences in emphasis; the amalgamation of interview data helped avoid this. They conclude that open-ended interview data, when analysed in a systematic way, can make a valuable contribution to the account of developments in schools. The interviews provided an account that was 'largely consistent with the case studies' (p. 61) and beneficially allowed for the views of members of staff to be heard. These findings gave me considerable guidance on the structure of my research methodology.

I was also influenced by the network analysis methods used by Fox et al. (2007) and Penuel and Riel et al. (2009) described in Chapter 2. These had the potential to provide evidence of collaboration on ESDGC within schools and also between schools and others in the wider community. They would also complement information given in teacher interviews and provide a visual way of portraying networks and communities of practice.

4.3.2 The chosen research approach

Following the review of the literature and methods used by other researchers it was decided that the most appropriate approach would be five case studies of primary schools supplemented by LEA interviews, a survey of ESDGC support providers and document research (Gillham, 2000, p.1). The research approach was broadly interpretivist and qualitative (Cohen et al., 2007), or relativistic and constructivist (Robson 2002, pp. 25 and 27) although it did have some quantitative elements. It was believed that this approach would give an overall view of issues relating to ESDGC in schools in the area but would also give a rich insight into the workings of individual schools which were perceived to have been successful in integrating ESDGC. Researching the *detail* of ESDGC development within schools, for example, by interviewing as many teachers as possible, aimed to explore the complexity of interactions within schools and the views of ESDGC development from the point of view of individual teachers. As Blenkin et al. (1997) suggest, when discussing the ‘biographical’ perspective of change,

appropriate research involves no less than getting inside the heads of practitioners to gain access to their thought processes in order to interpret the world from their perspective. (p. 223)

4.3.3 Underlying assumptions

This has been an exploratory study which has sought to identify trends and relationships in the data. It was recognised that schools would have different dynamics and staff composition and be subject to varying circumstances (Blenkin et al., 1998; Feiman-Nemser and Floden, 1986; Levin, 2008). It also presumed that individual teachers and whole schools may react in different ways to the same stimuli, and also that how they reacted to an experience may also depend on, for example, their priorities, duties and commitments at the time of exposure (Huberman, 1989; Blenkin et al., 1997; Borko (2008); Gough et al., 2001; Scott and Gough(2003).

The research approach also recognised that change within schools may be dependent on a *combination* of individual behaviours and that one experienced ESDGC teacher or passionate head teacher does not necessarily make an experienced, effective ESDGC school. It did assume though, that people and schools *can* change their behaviour. This is

indicated by the large number of researchers, illustrated above, who are involved in school change and ESD/GC research; it was also suggested from my own personal observations. The approach also recognised that change may take time to be visible e.g. Eisenhardt (2000), Fullan (2001), Estyn (2006), Jackson (2007); EES-SW (2007), Harris (2008a) and that it may be the result of cumulative experiences (Fullan and Miles, 1992; GAP, 2007; Engeström, 2008; Anderson, 2008). Although a teacher may have attended an excellent ESDGC course they may not have changed their behaviour for some time, if at all, if circumstances were not suitable. They may also have required repeated, exposure and support before they changed.

The research study aimed to tease out these issues in order to identify any common factors or trends which may be of use to other schools wishing to develop ESDGC. I also explored whether the findings could be explained by any of the theories discussed earlier. It might be that a combination of theories is needed to explain the various mechanisms of ESDGC development or even that a more appropriate new theory might need to be proposed.

4.4 THE STUDY AREA

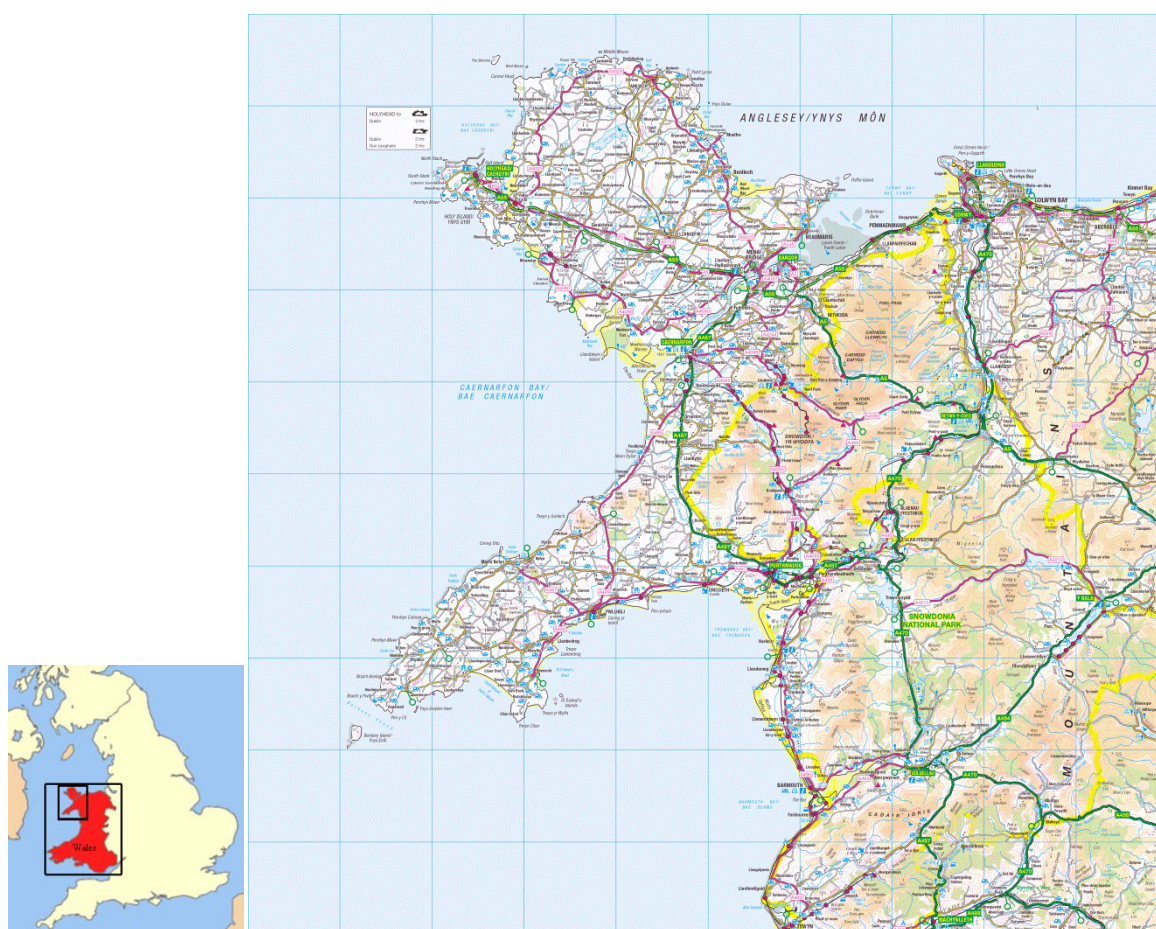
4.4.1 Description

The main study area comprises the counties of Anglesey (population just under 70,000), and Gwynedd (population around 116,838) in north-west Wales (Figure 4.1). The study area was chosen because I was familiar with the set-up within schools, local authority support systems and the types of ESDGC support which had been available to schools. Both counties are served by one education advisory service and are in the area covered by the north-west Wales forum for ESDGC. They thus have had access to the same support events.

Apart from the coastal strip this is a relatively sparsely populated area with many rural villages and schools. None of the towns has a population over 15,000. The number and type of schools in each county is shown in Table 4.1. Parts of the area are classified as European Union Objective 1 areas. The region has the highest proportion of native Welsh

speakers in Wales although there are distinct differences between areas within the counties, with coastal towns having a higher proportion of first language English-speakers. All five case study schools are primarily Welsh medium schools but even they varied in the pupils' linguistic composition. For example, all the teacher interviews in these schools were carried out in Welsh but in one school the pupil interviews were conducted bilingually at the pupils' request, rather than in Welsh as in the other four.

Figure 4.1 Map of the study area



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Table 4.1 Statistics for schools in Gwynedd and Anglesey

County	Population	Number of schools			Schools' advisory provider	Entitlement to free school meals
		Primary	Secondary	Additional learning needs		
Gwynedd	116,838	102	14	3	Cynnal	13.7%
Anglesey	70,000	50	5	1	Cynnal	16.8%

In the study area generally there is a very low percentage of pupils of cultural origins other than Welsh and English and who have English as an additional language (2% in Anglesey and 3.1% in Gwynedd). These pupils are mostly concentrated in a few specific schools. One such school is included as a case study.

4.4.2 Some unique characteristics of the study area relating to ESDGC

In addition to the more general characteristics of the study area described above, there are several issues which deserve discussion in relation to the ESDGC. As described in the previous chapter this area has been at the centre of ESDGC developments in Wales for many years partly due to the presence of a Development Education Centre since 1983 i.e. the Bangor University World Education Centre where I worked, and also to supportive Local Education Authority advisers. Many schools had received some form of ESDGC-related support over an extended period. This does not necessarily mean that ESDGC is well-embedded in its broadest sense, but it does mean that most schools were likely to already be doing something towards ESDGC.

Also, because of the Welsh speaking nature of the area – all primary teachers in the study area are required to speak Welsh – the majority of primary teachers tend to have trained in Bangor University. As will be described in Chapter 5, the School of Education in Bangor University (and myself) took part in a three year project to embed ESDGC in Initial Teacher Education and Training courses from 2001-2004; this had the potential to influence a large cohort of new teachers.

These distinctive characteristics i.e. the cultural-linguistic nature of the region, the extended exposure of schools to ESDGC-related training, and the ITET exposure for new teachers, make this area unique in Wales. There is no guarantee that these particular factors will have played a key part in schools' and teachers' development of ESDGC - there are many other possible factors common to Wales as a whole which may have influenced them - however they are points to bear in mind when conclusions are being drawn.

In addition there is my background in the area. I was familiar with the ESDGC coordinators and LEA staff and with some of the head teachers, having provided them with support and training over a period of fourteen years. This may have perhaps been expected to affect the way some teachers responded, for example, wanting to make a good impression. However, although I was familiar with the overall ESDGC scenario in some schools I did not know much about their internal mechanisms and interactions, nor did I know many of the classroom teachers. On balance, it was not felt that this familiarity would be detrimental to the research; in fact it was believed that their previous positive contacts may have made head teachers more receptive to taking part. They were indeed very willing to take part in the research, with some believing that the interviews would further raise awareness in their schools; in some ways this reflected their awareness that there was still work to be done on ESDGC. Elements of reactivity are discussed further in the final chapter.

4.4.3 Obtaining Local Education Authority permission for the study

The local schools' advisory service, Cynnal, was first contacted in March 2009 to ask for permission to carry out the study. They agreed to endorse the research, gave a named member of staff, the Humanities and ESDGC co-ordinator, to liaise with and suggested that letters be sent to heads of Education Services in the two counties stating that Cynnal supported the research. These contacts were made, positive replies were received and a named person in each authority designated for liaison.

4.5 RESEARCH METHODS

4.5.1 List of procedures

The research methods comprised of the procedures described below. For each procedure the key question addressed is noted in brackets. Procedures a to c were carried out at the beginning of the study to set a context for the case studies and to stimulate further research questions:

- a) Semi-structured interviews with local authority officers in Anglesey and Gwynedd who have responsibility for aspects of ESDGC (key questions 1 and 2) (Appendix 2.1.2);
- b) A short survey, by questionnaire, of organisations providing an ESDGC service to find out the kind of service they provided and the number of schools using it (key question 2) (Appendix 2.2);
- c) Document searches of regional ESDGC fora reports and other relevant reports were carried out to find out further about ESDGC support initiatives in the region (key question 2) (Appendix 2.3);
- d) Case studies of five primary schools in Anglesey and Gwynedd recommended by Local Authority advisers and/or Estyn inspection reports as doing ESDGC, or elements of it, well (key questions 1 and 2). These case studies form the main part of the study and include multiple methods of research. The research procedures are listed in Table 4.2. Examples are included in Appendix 2.4.

Table 4.2 List of research procedures used in the school case studies

Research method	Aimed at:
Questionnaire (Appendix 2.4.1)	all teachers
Semi-structured interviews (Appendices 2.4.2a and b; 2.4.3a and b; 2.4.4a and b)	versions for head teachers, teachers and some support staff
A set of questions on teachers' professional networks (Appendix 2.4.5)	all teachers
An examination of examples of pupils' work and school displays relating to ESDGC	documents
Small focus-group interviews with pupils (Appendix 2.4.6a)	pupils in years 5 and 6
An examination of school documentation relating to ESDGC including inspection reports (Appendix 2.4.8)	documents

4.5.2 Elements of emergent design

Although the main research questions were posed at the start of the study there was continual reflection on these and it was shown earlier that new questions arose as a result of insights from the literature review and early procedures. There was therefore an

element of emergent design within the study with findings from earlier procedures informing the design of later ones (Gillham, 2000). For example, procedure (a), the semi-structured interviews with local authority officers, which addressed key questions 1 and 2, was carried out early in the study before the school case studies. These gave views, from a knowledgeable source outside of schools, about general levels of ESDGC development in schools in the region and about factors affecting this. Their responses, together with information from the literature, also helped inform the design of the school case procedures.

4.5.3 Method and data triangulation

Gathering information using a range of procedures and sources and moving from a wider perspective down to a more detailed qualitative perspective aimed to provide both methodological and data triangulation (Robson, 2002; Gorard and Taylor, 2004; Cohen et al., 2007). For example, the LEA officers comments were about schools in the study area in general and they were expected to provide some valuable triangulation for the information about factors emerging in the individual school case studies. The ESDGC providers' survey (b), examination of reports (c), and the LEA interviews (a) all provided complementary information about the types of ESDGC initiatives and support which had been offered to schools and also views about how useful this had been.

There was triangulation within the school case studies (d) also. These, which comprised the largest part of the study, aimed to provide in-depth pictures of schools which were perceived to be dealing successfully with ESDGC. Within these, the teacher survey was designed to address key question 2, giving introductory information about individual teachers and their views on school development; this information would be complemented by information from their interviews. The teacher interviews addressed both key questions giving rich, qualitative information about both how the whole school works and how individual teachers are included and develop. The social network analysis also addressed key question 2 and aimed to find out how often, and with whom, teachers discussed ESDGC, both within the school and outside of the school. Together with some of the survey and interview questions, this network analysis was designed to examine the extent and characteristics of professional learning communities and communities of practice as

described by Stoll (2004), Feger and Arruda (2008) and Vescio, Ross and Adams et al., (2008) and by Lave and Wenger (1991), Lave (1993) and Wenger (2006), respectively. This aimed to add to the picture of how knowledge, understanding and practice of ESDGC was gained and disseminated both within individual schools and between schools, LEA and other ESDGC support organisations. Examples of school documentation relating to ESDGC and examples of pupils' work were also examined to corroborate the findings from the interviews.

Table 4.3 shows how the various research procedures addressed the key questions and how they aimed to provide data triangulation. Key question 1 was primarily addressed by the case study interviews, document research in schools, school inspection reports and pupil focus group interviews. Information was obtained about the school practice, levels of ESDGC development and benefits of ESDGC development to pupils. The LEA interviews also contributed to this. Key question 2 was addressed by the case study teacher surveys, interviews, network analysis and by LEA interviews and research on relevant reports.

Table 4.3 Case study methods and data triangulation. (The question numbers refer to the numbered questions in the interview frameworks in Appendices 2.4.2b and 2.4.3b)

Key question 1. What are the characteristics of schools recognized as competent in ESDGC?	
Area of interest	Source of information
Key achievements	School case studies <ul style="list-style-type: none"> • Teacher interviews Q8 • Head teacher interview Q11,12 • Pupil responses
Perceived level of ESDGC development	School case studies <ul style="list-style-type: none"> • Teacher interviews Q18 • Head teacher interview Q2 LEA interviews
Most significant change	School case studies <ul style="list-style-type: none"> • Teacher interviews Q21 • Head teacher interview Q14
What else could be done/ future plans	School case studies <ul style="list-style-type: none"> • Teacher interviews Q22 • Head teacher interview Q38, 39 LEA interviews
Evidence of teaching and learning	School case studies

practice	<ul style="list-style-type: none"> • Teacher interviews Q8, 9, 10, 11 • Head teacher interview Q9, 12 • All pupil responses • Wall displays, examples of pupils' work, school websites, policy and planning documents
Specific actions e.g. policies, planning.	School case studies <ul style="list-style-type: none"> • Teacher survey Q22 • Teacher interviews Q13, 14, 15 • Head teacher interview Q16,17, 18, 19, 20, 21, 22,23, 24 • All pupil responses
Making curriculum connections e.g.to skills, learner centred curriculum	School case studies <ul style="list-style-type: none"> • Teacher survey Q23 • Teacher interviews Q11, 12 • Head teacher interview Q25, 26, 27, 28
Further support needs	School case studies <ul style="list-style-type: none"> • Teacher interviews Q10, 27 • Head teacher interview Q38,39 LEA interviews
Key question 2. What factors influence the development of a comprehensive approach to ESDGC in primary schools?	
Area of interest	Source
Priority to ESDGC	School case studies <ul style="list-style-type: none"> • Teacher survey Q12 • Teacher interviews Q7 • Head teacher interview Q4, 5 • Non-teaching staff interviews LEA interviews
Engaged staff	School case studies <ul style="list-style-type: none"> • Teacher interviews Q20 • Head teacher interview Q6 LEA interviews
Key players	School case studies <ul style="list-style-type: none"> • Teacher survey Q8 • Teacher interviews Q1, 2, 20 • Head teacher interview Q 6 LEA interviews
Teachers' views on factors in their school's development	School case studies <ul style="list-style-type: none"> • Teacher interviews Q19
Auditing and Planning	School case studies <ul style="list-style-type: none"> • Teacher interviews Q13, 14,15 • ESDGC coordinator interview Q41, 42, 43 • Head teacher interview Q3,16,17, 18, 20, 21, 22,

	23, 24, 38
Obstacles	School case studies <ul style="list-style-type: none"> • Teacher survey Q30,32 • Teacher interviews Q16 • Head teacher interview Q37
Perceived usefulness of WAG guidance documents	School case studies <ul style="list-style-type: none"> • Teacher survey Q14, 27 • Teacher interviews Q6, 13 • Head teacher interview Q19, 33
Teachers' levels of interest in ESDGC Factors affecting interest	School case studies <ul style="list-style-type: none"> • Teacher survey Q11, 26 • Teacher interview Q5, 22 • Head teacher interview Q7 LEA interviews
Beliefs in the importance attributed to ESDGC	School case studies <ul style="list-style-type: none"> • Teacher survey Q18. • Teacher interviews Q4
Levels of staff knowledge and understanding of ESDGC	School case studies <ul style="list-style-type: none"> • Teacher survey Q13, 14, 15, • Teacher interviews Q3, 4, 6 • Head teacher interview Q6 LEA interviews
Factors affecting teachers' knowledge and understanding of ESDGC	School case studies <ul style="list-style-type: none"> • Teacher survey Q32 • Teacher interviews Q6, 11, 12 • Head teacher interview Q5, 34, 35 LEA interviews
Levels of staff confidence and competence in introducing ESDGC	School case studies <ul style="list-style-type: none"> • Teacher survey Q 12, 14, 15, 16, 17, 19, 20, 21 • Teacher interviews Q6, 15
Factors affecting individual teachers' development of competence	School case studies <ul style="list-style-type: none"> • Teacher survey Q27, 28 • Teacher interviews Q6, 11, 12 • Networking questions • Head teacher interview Q8, Q33, 34, 35, 36 LEA interviews ESDGC providers' survey Document search on relevant reports
Personal obstacles and challenges, what would have made it easier?	School case studies <ul style="list-style-type: none"> • Teacher survey Q30, 32. • Teacher interviews Q16, 17 LEA interviews
Staff training	School case studies <ul style="list-style-type: none"> • Teacher survey Q27,28 • Teacher interviews Q6 • Head teacher interview Q35, 36, 37

	<ul style="list-style-type: none"> • Networking questions • Support staff interviews LEA interviews ESDGC support organisations' survey Document research on relevant reports
Networking and collaboration	School case studies <ul style="list-style-type: none"> • Teacher survey Q24, 25 • Head teacher interview Q35, 36 • Networking questions LEA interviews
Partnerships and community	School case studies <ul style="list-style-type: none"> • Head teacher interview Q31, 32 • Networking questions

4.6 RESEARCH PROCEDURES

4.6.1 Interviews with Local Authority officers (Appendices 2.1.1 and 2.1.2)

Semi-structured interviews, lasting about an hour each, were carried out with seven LEA support officers in the counties of Anglesey and Gwynedd; each had some responsibility for delivering training on, and supporting schools with, some aspects of ESDGC (Table 4.4). The first aim was to find out about the types and quantity of support they gave to teachers and schools, their perceptions of how effective their own support and other available support had been, and their views on further support needs of schools. Secondly, their views were sought on how well they felt schools in their LEAs were delivering ESDGC. Thirdly, they were asked their views about factors contributing to schools' successful and less successful development of ESDGC. Letters of request and the interview schedule can be found in Appendices 2.1.1 and 2.1.2.

Three interviews were conducted face to face and four by telephone (Table 4.4). Four were conducted through the medium of Welsh, three through the medium of English. Attempts were made to interview the Green Schools co-coordinator for Anglesey but she was unavailable due to being on maternity leave. However, from earlier contacts with her it was noted that she is a very active coordinator who includes ESDGC resources in her courses and support. The interviews were recorded on a digital recording device, transferred to a PC and transcribed by the researcher. Welsh medium interviews were

translated by the researcher after transcription. One interviewee, the primary schools adviser, also completed the questionnaire for support organisations described above and data from this relating to numbers of schools supported have been incorporated into the analysis.

Table 4.4 List of LEA officers interviewed

LEA officer interviewed	ESDGC-related responsibility	Interview medium	Interview language medium
Cynnal Humanities and ESDGC adviser	supporting schools and updating all advisers on ESDGC matters; member of Wales LEA officers' ESDGC group	face-face	Welsh
Cynnal Primary Schools and PSE adviser	Personal and Social Education	phone	Welsh
Cynnal Adviser for Modern Foreign Languages and International Dimension	International Dimension in schools; member of all-Wales ID group	face-face	English
Advisory teacher for the Foundation Phase	Courses for ESDGC in the Foundation Phase	face-face	English
Gwynedd Green Schools co-coordinator	Green Schools' coordination and support	phone	Welsh
Healthy Schools co-coordinator for Anglesey	Healthy Schools development and support	phone	English
Healthy Schools co-coordinator for Gwynedd	Healthy Schools development and support	phone	Welsh

4.6.2 A survey of ESDGC support organisations (Appendices 2.2.1 and 2.2.2)

A survey questionnaire was prepared for all known ESDGC support organisations and distributed to them as an email attachment. This list of recipients was extended by asking

respondee to note any other support organisations which they knew about. The survey was designed to suit two purposes. Firstly the National Grid for Learning Cymru which maintains the ESDGC schools' website requested that all regional ESDGC fora compile a database of organisations supporting ESDGC. Information gathered for this purpose included the type of service provided, age groups supported, the main areas of ESDGC covered and the number of schools supported each year. In addition, four extra questions were included solely for this research study. These asked about the kinds of support initiatives which had taken place over the past few years, which was felt to be most effective, the numbers of schools and teachers supported, and the sources of funding of the organization. Replies were requested by email by a set date. A total of 17 organizations responded of which 15 were relevant to schools' provision. The data obtained from this survey was of very variable quality and, although it gave a good indication of the types of support provided and number of schools supported it did not warrant a detailed form of analysis. A summary table was compiled to display the data. It does not, however, give information about which schools had taken part in which activities, whether they had taken part in more than one, and whether more than one teacher in each school had taken part in activities.

4.6.3 Document searches

The reports of the ESDGC north-west Wales forum and the World Education Centre were examined, to provide supplementary information on support that had been offered to primary schools over the past eight years. The list of reports studied can be found in Appendix 2.3.

4.6.4 Identification of case study schools

Schools which fitted the following criteria were chosen:

- all should be attaining a good standard of education;
- all should be recognised for their ESDGC practice either by LEA officers or school inspectors;
- they should be of varying size;

- they should be in different types of location, some rural, some in or close to towns.

Five schools were studied. These are described in Table 4.5 below. To aid anonymity they have been given pseudonyms based on a group of small mountains in Gwynedd.

Table 4.5 Description of the case study schools

	Schools				
	Faban	Llefn	Gyrn	Bera	Drosgl
Number of pupils	233	244	100	26	96
Number of teachers	11	10	6	2	7
Situation	town	village adjoining small town	village, rural	rural	village, rural
Proximity to key ESDGC training sites	close	close	far	far	far
General education standards (from recent inspection report)	good (2010)	good (2010)	good with outstanding features (2008)	good with outstanding features (2008)	good with outstanding features (2008)
ESDGC mention in recent inspection report	global citizenship plays important part	global citizenship outstanding; good attention to environmental learning	outstanding	sustainable development 'good with outstanding features'; global citizenship - 'outstanding feature'	outstanding attention to awareness of ESDGC
% free school meals (Combined county average 15%)	well below average 4%	higher than average 21%	below average 10%	well below average 4%	about average 13%
Pupils of ethnic origins other than English/Welsh	high	very low	none	very low	very low

4.6.5 Obtaining schools' permission and data collected

Head teachers were sent a letter asking if they would consent to taking part in the study (Appendix 2.4.7). The case studies were carried out during the period March 2010 to January 2011. Teacher interviews had to be fitted in with their timetables and several visits had to be made to each school to interview all teachers. Pupil focus group interviews were held about a month later. The intention was to ask teachers to first fill in the questionnaire as a group and then to conduct individual interviews; this was planned in order to make it easier to explain the rationale of the whole study to teachers. This occurred as planned in the first school, Faban, where the head teacher took a particularly organised approach to the study. In the other schools the teachers filled in the questionnaires individually and the head teacher promised to explain the study to them. In two of the schools this did not appear to have happened and the role of the interview had to be explained just before it commenced. This did not cause any major problems and all interviews were perceived to flow well and the teachers seemed relaxed and content to talk. A summary of the data collected is given in Table 4.6. This is described in detail below.

Table 4.6 The data collected from case study schools

School	Number of responses					Types of documentation
	survey	teacher interviews	network questions	pupil focus groups	support staff	
Faban	11/11	11/11	10/11	1	0	Displays, website, children's work, development plan, GC vision / job description, school council report, newsletters
Llefyn	9/10	8/10	6/11	2	1	ESDGC policy, children's work; ISA audit and plans, website
Gyrn	6/6	6/6	5/6	2	1	ESDGC policy, children's work, displays, audit
Bera	2/2	2/2	2/2	2	1	ESDGC policy, children's work, displays
Drosgl	5/6	6/6	4/6	2	0	Displays, children's work
Total	34/35	33/35	27/35	9	3	

4.6.6 Initial questionnaire for teachers

All teachers in each school were asked to fill in a questionnaire (Appendix 2.4.1). This aimed to gather their personal information and to acquaint them with the topics which would be raised in their interviews, however as described this did not always occur in the desired way. Four teachers in Llefni completed it after their interviews; this was due to pressure of an impending inspection.

Questionnaire design

The sub-questions of key question 2 on levels of staff engagement, professional development and staff collaboration formed the basis of an initial questionnaire for teachers within the five case study schools. The survey mostly used a four point scale for answers with options, of, for example, 'a great deal', 'quite a lot', 'a little' and 'not at all'. The first few questions elicited personal information such as gender, age group, when qualified, where they trained as a teacher and on which kind of course, any subject specialism, and the age of pupils they taught. The questions then moved on to find out about:

- teachers' levels of interest in ESDGC and the level of priority they gave to it in their teaching;
- how well they felt they understood what it is about;
- if they were aware of ESDGC guidance;
- how well they felt they understood issues addressed by the ESDGC themes;
- how ESDGC fits in with the curriculum and ethos of their school;
- how confident they felt about introducing ESDGC and if there were any areas or themes they were less confident about.

Several 'test' questions were included to indicate how well teachers' perceived levels married with their actual levels of understanding and competence. For example, these addressed their use of types of practice relevant to ESDGC e.g. did they include thinking skills activities with ESDGC, how often did they make connections between ESDGC themes and how often did they work with other teachers in the school? Teachers were then asked about influences:

- on their interest in ESDGC;

- on their development of ESDGC competence;
- on their development of knowledge and understanding;
- and obstacles they had encountered.

They were given a choice of eleven, twenty-six and thirteen options respectively, each with a four point response scale. For some options they were given the choice of adding further information and they were also given the option to explain about any further influences. Finally they were asked whether they actively sought ESDGC training opportunities, whether their school encouraged them to do so, if they had met any obstacles when implementing it and if anything would have made this easier.

The questionnaire was first piloted with four part-time master's students who were all teachers. After making minor modifications to wording it was piloted again with twenty final year BA Education students who were about to become teachers. This version was deemed suitable for use with the case study schools' teachers.

4.6.7 Semi-structured interviews with head teacher, school governors, teachers and support staff

Interview frameworks were designed for head teachers, other teachers including the ESDGC coordinator, support staff and the chair of governors (Appendices 2.4.2a to 2.4.4a). It was not possible to interview any of the governors, therefore this procedure is not pursued further. However, all head teachers said their governors were supportive; none, however, appeared to have initiated the decision to develop ESDGC.

The interviews were designed to be impartial but friendly. The head teacher's interview framework was piloted with a friend who is a head teacher. It was not felt necessary to pilot the teachers' interviews as they were designed to build on the questionnaire questions.

Teacher interviews

The teacher interviews were devised to find out more in-depth information about the teachers' answers in the survey questionnaire; they were open-ended to allow the views of

the interviewees to be heard freely. It was originally planned to interview key ESDGC teachers only, i.e. those who either coordinated ESDGC or one of its associated areas. However, it was decided that interviewing all teachers would give a better picture of whole school dynamics. These interviews lasted for between twenty-five and thirty-five minutes. In all schools except Llefyn, every teacher was interviewed. In Llefyn only eight of the ten teachers were available for interview; however the remaining two did complete the questionnaire, therefore giving some useful information.

Head teachers' interviews

Head teachers' interviews aimed to find out more about how ESDGC is approached at a whole school level; these lasted for around 40-60 minutes. All interviews were carried out through the medium of Welsh.

Support staff interviews

Support staff interviews aimed to find out about the extent to which support staff were included in ESDGC activities in the school and if it impacted on their work; these were planned to take between ten and fifteen minutes. These were not easy to obtain and only three such interviews were conducted. There was a feeling the head teachers felt their support staff were either too busy or not very relevant; this was in itself a useful observation.

Recording the interviews

All interviews were recorded in the Welsh language by an audio device and downloaded to the researcher's laptop immediately afterwards. They were then simultaneously translated to English and transcribed. Of the thirty-six interviews, I translated and transcribed thirty; six were done by a professional transcriber/translator. The latter were all head teacher and ESDGC coordinator interviews. Each interview transcript was labelled by a letter for the school and a number allocated to each of the teachers. I am fluent second language Welsh speaker. However, to ensure that translation was accurate, a first language Welsh speaker listened to a small sample of the interviews which I had transcribed and translated. They were found to be accurate. In addition I listened to, and read the transcription carried out by the professional translator to ensure that she had caught the essence of the interview. The same procedure was used for the pupil focus group interviews described below.

4.6.8 School documentation on ESDGC

Head teachers were asked if they would be willing to share documentation such as planning sheets, school development plans, ESDGC policies and other strategies which contribute to ESDGC. A variety of documents was obtained from each school. In addition, school websites, where available, were scanned for reference to ESDGC and related activities. The information gathered is listed in Table 4.5 above.

4.6.9 Mapping of teachers' professional networks

Carmichael et al. (2006) asked teachers to illustrate their professional networks in a drawing; this was an open-ended task with no existing structures suggested to the teachers. They found that the mapping tool provided an opportunity for dialogue with individuals and that networks were clearly identified. A quarter of teachers noted that the prompting and interviewing were the most useful aspects but a third wanted the mapping task to be a two-stage process with initial brainstorming and compilation of a list of nodes and links before drawing the map. Therefore a modified approach to studying networking was taken in this study; it did not include drawing. Three tables were devised (Appendix 2.4.5) which asked teachers about with whom, and how frequently, they discussed ESDGC within the school, outside of the school and also if they discussed it with any LEA officers. They were also asked about the topics of their conversations. Teachers were asked to talk through their thoughts as they completed the form and prompted where necessary. They were asked to note the method of discussion, for example face-to-face or email, and also the general topic of discussion. The results were very revealing. The inclusion of questions about how frequently they worked with other teachers in the school in the initial questionnaire for teachers aimed to introduce teachers to idea of networking before being asked to complete the network task.

This exercise could be criticised for perhaps not allowing teachers enough time to consider their answers in depth. It was usually conducted straight after the teacher's interviews and they were often keen to return to their class. Inevitably, some six teachers who had to return to their class early decided to fill in the tables in their own time. Three returned them but two key players in Drosogl, and one in Llefn did not, despite many pleas and

reminders. Ideally this exercise would be conducted at a different time to the interviews. However, time in schools for such a study is very limited; teachers, although very supportive, have different priorities to a researcher.

4.6.10 Focus group interviews with pupils

A focus-group interview framework was developed for groups of pupils from years 5 and 6 in each school (Appendix 2.4.6a). This age group was chosen as they had been in the school for some time and would have been taught by a number of teachers. It was also thought that they would also be better able to answer questions at this age. The questions addressed pupils' knowledge and understanding of ESDGC-related topics, their values, attitudes and dispositions and their views of the future. It aimed to confirm whether pupils had been affected by ESDGC practice in their schools and also to what extent they, themselves, played an active part and felt responsible for ESDGC actions.

Letters explaining the reason for the interviews and asking for permission were prepared for head teachers, parents and the pupils themselves (Appendices 2.4.6b-d). It was suggested that two groups of around four pupils would be ideal. In practice two focus groups were held in four schools; in Faban only one group was available. Pupils were selected in a variety of ways but there was a good mixture of boys and girls in each group. In Gyrn the head teacher was keen to be inclusive and there were six and seven pupils in the groups, a little too many. Pupils were asked to ideally begin their answers with their first name. This worked in all schools apart from Llefyn where pupils were so keen to answer they did not do so; instead I noted which pupil spoke. It was emphasised that they need not answer a question if they preferred not to; this was rarely the case however, with most pupils extremely keen to contribute their views. The interviews were an enjoyable experience for me and it appeared that the pupils also enjoyed them. Care was taken to allow everyone's voice to be heard.

Pupils were first asked what they like about the school and then about what they knew about current global and local issues, what they had learned about people in any other countries, and, where appropriate, what they had learned from their school partnership. They were asked for their views on wealth and poverty, keeping healthy,

looking after their environment and climate change. They were also asked what they thought the future might be like and whether they felt they could change what happened in the future. It would have been interesting to also interview younger groups of pupils to see how those taught by other teachers' responded. For example in Llefyn years 5 and 6 were taught by the ESDGC coordinator and they may well have had more opportunities to discuss related issues than in another teacher's class. In other schools the ESDGC leaders taught other year groups. These were points to be kept in mind in the analysis.

4.7 PROCESSING AND ANALYSIS METHODS

4.7.1 Analysis of the surveys

The survey data were entered into a prepared table in the qualitative statistical data analysis programme computer, SPSS 15 (IBM, 2009). Frequency analyses were run for each question. Because the small numbers of responses in each school would render any statistical analysis unreliable, the data was exported to Microsoft Excel 2007 where frequency graphs were plotted. Tables of teachers' personal data for each school were also compiled so they could easily be referred to during analysis.

4.7.2 Analysis of the LEA interviews

Each response in the individual transcribed interviews was labelled with the initials of the interviewee. The responses were first compiled under the headings of each question. The questions were changed into topics and their order rearranged slightly into a more logical order. These topics were:

1. About the respondents;
2. County and LEA support for ESDGC:
 - Type and quantity of support
 - Amount spent on support
 - Reasons why support is given
 - Methods of evaluation
 - Perceptions of effectiveness

- Evidence of collaboration and joined-up thinking;
- 3. Other regional initiatives:
 - Knowledge of, and opinions of other regional initiatives
 - Perceptions of their effectiveness
 - Involvement in Enabling Effective Support initiatives and views on its effectiveness;
- 4. Impact of national policy;
- 5. Further school support needs;
- 6. Perceptions of how well schools are developing ESDGC:
 - Level of ESDGC development in the region's school
 - Good practice examples
 - Equality of coverage of ESDGC themes and areas;
- 7. Factors in schools' ESDGC development:
 - in successful schools
 - in less successful schools.

Each mention of a particular topic in the interview data was then highlighted in a different colour and the data subsequently rearranged so that all mentions of issues relating to a particular topic from all the officers were collated together.

The category 'Factors in schools' ESDGC development' was further divided into common subtopics identified in the responses. These were:

- Leadership and commitment;
- Understanding of what ESDGC entails;
- Planning;
- Motivating factors;
- Training and time for development;
- Sharing practice;
- Resources availability;
- Funding;
- Teaching and learning methodologies;
- Community partnership and involvement.

The analyses of responses are discussed in Chapter 5 and later compared with case study teachers' views in chapters 6 to 10.

4.7.3 Analysis of teacher interviews

In total there were thirty-three teacher interview transcripts and nine pupil focus group transcripts. Several techniques were used to analyse these interviews. First, for the teacher interviews, for each school several files were compiled to enable a rapid overview of staffing, teachers' backgrounds, roles and responsibilities and also to record the researcher's on-going observations. These were:

- field notes of the researcher's observations. These were added to after each school visit. They recorded impressions of the school, of the teachers and of the impact for the interviews;
- a list of teachers which included a short profile of their age, date and type of teaching qualification, number of years teaching, level of interest in ESDGC, year class taught and responsibilities within the school. This enabled a quick 'picture' of the school to be viewed;
- a more detailed list of teachers with a summary of answers to all personal questions relating to their teaching. This included information from both the questionnaires and the interviews and enabled a detailed profile of each teacher and their role in the school to be viewed. It also showed some information from the interviews e.g. on who they worked with on ESDGC – this was later used to complement the information from the network analysis;
- a short list of school activities relating to ESDGC. This gave a quick picture of what the school and teachers were doing.

The full data for the first school studied i.e. Faban, was first analysed manually to obtain a 'feel' for the data. Each interview was re-read and manually coded under a list of topics compiled from issues arising from the research literature, the LEA interviews and the research questions. Other key topics were also highlighted and then gathered into related codes. A brief analysis was written of developments in this school. This provided a useful check on the main analysis described below. Appendix 2.5 gives an example of this manual treatment of Faban's data.

NVivo analysis

The qualitative data from all five case study schools was then analysed using NVivo-8 (QSR 2008). NVivo is a specialist software tool developed as a computer aided qualitative data analysis system over the past 20 years. It allows for the direct importation of data in a variety of media. The decision to use NVivo was taken in order to allow efficient and transparent analysis of the large quantity of data collected; it also facilitates the production of a clear audit trail. All processes and stages of coding were tracked by saving each version and by writing memos in order to show the stages and logic of the analysis. The programme allows data to be gathered in nodes; these provide the storage areas in NVivo for accessing coded text (Bazeley, 2007). The raw imported data is stored in 'free' nodes. 'Tree' nodes are then constructed to hold categories of data with similar characteristics. These 'tree' nodes can be constructed in a hierarchical manner to show relationships between them. Each tree node, or 'parent node' can have sub nodes; these are termed 'children' (Bazeley, 2007). Information can be held in several nodes at the same time and easily moved to other nodes without losing data. A memo facility allows notes to be made on, for example, analytic points or coding changes. There is also a modelling facility which can help develop ideas pictorially.

The data imported into NVivo 8 included comments from open-ended questions in the questionnaires, teacher interviews and pupil focus group interviews. Demographic details from the questionnaire (participant type, school type) were also imported. It was therefore possible to investigate, for example, if teachers with different roles made particular types of comments.

The data analysis occurred in several stages, guided by advice in the handbooks by Bazeley (2007) and Saldaña (2009). These stages were:

- a) **Autocoding:** The data from the teacher interviews was first autocoded by question. This was later found to be less useful than expected and most autocodes were moved to other nodes;
- b) **Broad coding:** Secondly, broad parent codes were set up, i.e. for those codes derived from the literature, LEA interviews and the research questions. These were:
 - Teaching and learning;
 - Leadership and management;

- Partnerships and community;
- Factors in schools;
- Factors for teachers;
- Impact of the researcher.

Within these, some child nodes on topics of particular interest were set up in advance of analysis. These included the answers to particular questions;

- c) **Coding by perspective:** Thirdly, the qualitative data was read through chronologically and coded into participant-driven categories. These were created as child nodes within the main framework. Some categories were coded to more than one theme;
- d) **Noting trends:** Analytical memos with particular insights were created at each stage to aid later analysis. These helped to keep track of the reasons for coding, or moving, particular pieces of text;
- e) **Reviewing and re-coding:** There was then a further re-reading of the texts and several stages of re-sorting, creating, merging and splitting of nodes until a satisfactory framework relating the key research questions and the sub-questions was created for further analysis. The result was a very detailed breakdown of school actions and factors deemed to be affecting them. The earlier manual coding and analysis, and the use of memos within NVivo, helped greatly with keeping a broad overview of the analysis. This avoided the danger of getting lost in the data;
- f) **Seeking relationships:** Relationships between particular groups of teachers, for example newly qualified teachers, were examined manually by referring to the teacher tables described above rather than by using NVivo's relationship tools.

4.7.4 Pupil focus group interviews

There were nine pupil focus group transcripts. These were translated and pupils were given pseudonyms. The data was first coded manually and then imported into NVivo-8. Here it was treated in a similar manner to that described for teacher interview data, but it was kept in separate NVivo nodes from the teacher data. This allowed for easier comparison between schools. Parent nodes were set up which reflected the interview topics and further nodes were identified during the manual coding and during re-reading in NVivo. These nodes are listed below:

- global events and issues*;
- wealth and poverty*;
- identity and culture*;
- climate change*;
- health*
 - own health
 - global health;
- natural world*;
- consumption and waste*;
- choices and decisions;
- actions;
- connections;
- conflict;
- other countries;
- what they like about their school;
- passionate, interested, inspired;
- sources of information;
- questions about the world;
- the future.

For each of the topics marked with an asterix, of which six were based on ESDGC themes in the ESDGC Common Understanding (Welsh Assembly Government, 2008b), child nodes were then set up which paid particular attention to comments which demonstrated the pupils' knowledge and understanding, skills and values, attitudes and dispositions.

These were:

- attitudes and values;
- actions;
- knowledge and awareness;
- understanding;
- opinions;
- skills;
- interdependence.

4.7.5 Social network analysis

The data from the questions on networking were plotted in sociograms using the modelling facility of NVivo-8. The methods were broadly those were used in the studies by Fox and Wilson (2008) and Penuel and Riel et al. (2009) but no further analysis was undertaken to identify cohesive subgroups in the sociograms. Teachers and organisations are termed ‘nodes’. Connections between them are termed ‘links’. Frequency of discussion was denoted by links of different thickness and density of lines. It was intended to use different colour lines for different kinds of discussion, for example, day to day chat, planning and support, but teachers’ comments were too general to make this meaningful. Because of the complexity and number of relationships, and to ensure clarity of presentation, separate sociograms were plotted for teachers’ discussions with colleagues in school, and with people outside of the school. The latter nodes were colour coded by the type of person, for example, friends and family, other teachers, LEA advisers.

4.8 ETHICAL CONSIDERATIONS

Permission to conduct the study was sought from the Ethics Committee of the College of Education and Lifelong Learning, Bangor University. The approval letter is in Appendix 2.6. Considerations included keeping the anonymity of the schools and the subjects and being sensitive in the questioning of both teachers and pupils. The latter point is particularly relevant in a topic such as ESDGC which deals with many controversial topics. The Welsh-speaking nature of the area means that the general geographical location if the study cannot be concealed, however, this is a large area with 152 primary schools. Additionally, anonymity of schools in a small close-knit region such as north-west Wales is a very relevant issue. Most teachers have studied in the same institutions, many know each other; some, even within the study, were found to be related.

To avoid recognition schools and pupils were given pseudonyms, teachers were identified by a number and letter only, and great care was taken not to mention my studies when visiting other local schools. Fox et al. (2007) pointed out the ethical considerations of asking teachers to reveal their network contacts. Therefore when teachers mentioned their contacts in other schools these were not named in the analysis except by these pseudonyms; also their individual external networks were not revealed to others in their

schools. Some transcription and translation was carried out by a local transcriber but the real school names were not on the data files. The identities of local authority advisers were not, however, easy to conceal, but all advisers are named in their role only and they consented to be interviewed knowing that their general area of study would be revealed. All interview sound files will be destroyed at the conclusion of the study.

4.9 ISSUES OF VALIDITY AND LIMITATIONS OF THE WHOLE STUDY

As described in the introduction to the thesis I had worked in the field of ESDGC in the study region for some years. Therefore, I very definitely did not start this research from a neutral position. Because of this, I endeavoured to conduct the research in as non-biased way as possible and to use methodologies and procedures which would minimize the impact of my existing viewpoints. Extreme care was taken to keep to the common framework of interview questions and not to make assumptions or suggest answers. However, there are inevitably occasions when my own background colours the way in which I present the evidence for, as Wrigley (2003) aptly states,

Such ‘objectivity’ is difficult to sustain in discussions of educational change; the personal histories, narratives of lived events, emotional and political beliefs push up like wild flowers between the flagstones. (p.6)

Although I had previously given support to some teachers from some of the schools, these were few in number and most of the teachers interviewed were new to me. However, it was expected that there might be an element of reactivity from the teachers (Robson, 2002, p. 112); teachers were being given opportunities to discuss ESDGC with a known ESDGC deliverer and may have decided on changes to their practice as a result of this. The issues discussed in this section will be revisited in the final chapter.

4.10 CHAPTER SUMMARY

The research issue has been revisited and clarified in the light of the reviewed literature. The expanded research questions which arose from the literature review were then listed.

Influences on the rationale of the research design and on the research methods have been discussed. The methodology of ensuring triangulation of both methods and data findings has been described, followed by a description of each of the research procedures and their respective methods of analysis. Ethical considerations, some limitations to the procedures and analysis and considerations relating to the impact of the researcher on the research have been discussed. The following chapters now move on to describe and analyse the outcomes of the research.

CHAPTER 5

INTRODUCTION TO THE RESEARCH ANALYSIS AND OUTCOMES FROM EARLY RESEARCH

Chapter 5 first describes how the research outcomes are organised over the following chapters. It then presents a summary of findings from two studies conducted in the first year of the research, namely interviews with local education authority (LEA) support officers and a survey of ESDGC support organisations. These studies provided useful information about the area of research and helped hone the key questions for the study of the case study schools.

5.1 ORGANISATION OF THE CHAPTERS ON RESEARCH OUTCOMES

The analysis of the outcomes of the research is spread across five chapters, Chapters 5 to 10. This chapter, Chapter 5, describes the outcomes of two early studies described above; it addresses key questions 1 and 2. Chapters 6 to 10 provide an analysis of the data from the five case study schools and also address both key questions. Chapter 11 brings together the findings and conclusions from the research. Table 5.1 below summarises the topics discussed in each chapter.

The two key questions are:

1. What are the characteristics of schools recognised for their ESDGC practice?
2. What factors influence the development of a comprehensive approach to ESDGC in primary schools?

Table 5.1 Summary of the layout of the chapters on research outcomes

Chapter 5	Outcomes of two early studies: 1. Interviews with Local Education Authority support officers and advisers; 2. Survey of ESDGC providers	Key questions 1 and 2
Chapter 6	Case study schools 1. Profiles of the schools Description of school profiles and learning activities; Teaching activities and methods;	Key question 1
Chapter 7	Case study schools 2. Views of schools' ESDGC progress Teachers' views of their school's level of ESDGC development and benefits of ESDGC for pupils; Views of ESDGC from pupils in years 5 and 6.	Key question 1
Chapter 8	Case study schools 3. Factors influencing ESDGC development - Eliciting the factors Teachers' views of factors affecting ESDGC progress; Why schools began to develop ESDGC.	Key question 2
Chapter 9	Case study schools 4. Leadership and management factors Discussion of factors relating to leadership and management; Comparison of key factors in each school.	Key question 2
Chapter 10	Case study schools 5. Developing a knowledgeable learning community Factors continued: Teachers' interest in ESDGC and their levels of knowledge and competence; Teachers' views on factors deemed to have affected their own personal development; Teachers' internal and external networking and collaboration.	Key question 2
Chapter 11	Discussion, conclusions, implications and recommendations	Both key questions

5.2 OVERVIEW OF THE LOCAL EDUCATION AUTHORITY INTERVIEWS

Officers supporting schools with ESDGC in Gwynedd and Anglesey were interviewed. These comprised local education authority advisers and local authority support officers. The former were employed by the local schools advisory company, which is supported by both Gwynedd and Anglesey LEAs. The latter were officers in local authority departments who had a brief to support schools. For brevity they will be referred to, from here on, as LEA officers. Those interviewed are listed below. (Their abbreviations in brackets are used to identify their quotations in the discussion below):

- the Humanities and ESDGC adviser, who as well as supporting schools is also responsible for updating all advisers on ESDGC matters (ESDGC adviser);
- the Primary Schools adviser who also has responsibility for Personal and Social Education (PSE adviser);
- the Adviser for Modern Foreign Languages and International Dimension (ID adviser);
- an advisory teacher for the Foundation Phase who also runs courses for ESDGC in that phase (FP adviser). She was employed by Cynnal on Welsh Assembly Government funds;
- the Green Schools coordinator for Gwynedd (Gwynedd Green Schools). (Attempts were also made to interview the Green Schools coordinator for Anglesey but she was unavailable due to maternity leave);
- the Healthy School coordinator for Anglesey (Anglesey Healthy School);
- the Healthy School coordinators for Gwynedd (Gwynedd Healthy School)

This chapter presents their views on the following topics:

- the level of ESDGC development in the region's schools; and the level of coverage of ESDGC themes and areas;
- factors in schools' ESDGC development.
- the level of LEA and advisory team support for ESDGC;
- the effectiveness of the various types of ESDGC support.

5.3 LEA OFFICERS' VIEWS OF LEVELS OF ESDGC SCHOOL DEVELOPMENT IN GWYNEDD AND ANGLESEY

All of the advisers and coordinators thought that most schools knew about ESDGC and were doing something towards it. The ESDGC adviser had read through school inspection reports and said,

"I feel quite satisfied, especially in the primary sector that everyone is having some paragraph [in their inspection report] that praises the effort they are making... Most schools are getting something like a grade 2 in the question that is relevant to the ESDGC work." (ESDGC adviser)

However, all interviewees felt that the number of schools doing it very well was quite low. One adviser felt that 10% of schools were doing it very well, covering all ESDGC aspects. Another felt that the percentage doing it was well could be as high as 20-25% with 60% *"doing it fine"* (ESDGC adviser). Some were seen as "just ticking boxes". These varied responses may reflect their levels of expectation for schools and may also convey a sense of realism that not all schools will achieve highly in this area.

There was a sense that they felt schools were doing a lot of separate things but not making connections between them. This kind of understanding was noted by Sterling (2001, 2003) as crucial for ESD/GC and it was noted in Jackson's (2007) study as a key feature in successful ESD schools. The PSE adviser felt that levels of development were *"middling, some good aspects, some schools especially good on some aspects"* and,

"Schools need to invest time in staff in the school and take time to look at all aspects properly. I think there is an element of peripherality, or tokenism about it."

As an adviser he felt obliged to point out to schools if they were not covering some aspects but he raised the question *"what's better, to tick all boxes or do something really well?"* No-one interviewed perceived coverage of ESDGC as equal across all themes and areas,

"There is a lot of work in some areas and not in others" (Gwynedd Healthy School);

"on equal coverage no, therefore, is the answer" (Gwynedd Green Schools).

Reasons for schools doing one particular aspect well included *"I believe that it depends also on things that schools choose to do, what energy is in the schools, and capacity to do*

something” (ESDGC adviser). The lure of award schemes also influenced schools, “*some schools were pulled towards the International award and others towards Green Schools*” (PSE adviser). Gardens, and using the outdoors were mentioned as particular areas of development by the Foundation Phase advisory teacher, along with art, role play, attention to multicultural aspects, and work focusing on other countries, although was not clear how well this was being done.

The Gwynedd Green Schools coordinator stressed the enjoyment factor for the pupils,

“They do enjoy it” and “The portfolios are fantastic e.g. children measuring electricity use in summer and winter and recycling with the impact moving into the community and parents, tree planting, wildlife gardens”.

He did say, not unexpectedly for schools in a Green Schools scheme, that the strongest element in portfolios is the environmental side with not much global inclusion yet, although the global aspect was expected to grow through addressing the scheme’s revised criteria.

“I think environment definitely because of the outdoor element and a lot of schools are developing the garden... and I think identity and culture where they go more towards the exotic type of thing”. (Gwynedd Green Schools)

This concentration on the environment was a common observation, with most of the interviewees saying that schools were doing more on the environment than on global issues. This was also noted by Estyn (2006) and Morgan (2009) for schools in Wales; it is likely to be result of earlier emphasis on environmental schemes for schools. A similar observation was also made for English schools by Jackson (2007) and Ofsted (2008). However, it was recognised by all interviewed that some particular schools were doing excellent work on the global dimension gaining national recognition for their work but that this was not a common feature in the majority of schools. The International Dimension adviser was a little more positive, saying that at primary level most schools are now aware of ESDGC and realise that linking with a school in another country would be a way to develop ESDGC. She felt, in contrast to the views of the other officers, that schools were beginning to see how the various aspects are linked and that it was becoming part of the school ethos.

Poverty was seen as another issue which was perhaps covered frequently, with many schools raising funds for charity and engaging in work on fair trade. This chimes with Morgan's (2009) observation in Welsh schools that there may be an over-concentration on this aspect to a detriment of understanding the issues involved. Climate change was mentioned by two interviewees as an area which was not receiving so much attention. A recurrent theme was that schools often were not aware that what they are doing was part of ESDGC,

“I think maybe more work needs to be done raising awareness, trying to make sure it's not something separate, they are actually doing ESDGC work but some schools just don't realise they are doing it .”(ESDGC adviser)

It could be argued that it is unnecessary for a school to know it is doing ESDGC, but the emphasis here was on helping schools to be aware of what ESDGC encompasses so that they could recognise how to make connections between its various aspects.

The Healthy School coordinators seemed very satisfied with the level of schools' work towards the Healthy School award

(<http://wales.gov.uk/topics/health/improvement/schools/schemes>, accessed 1/04/12), especially as all schools were involved. Healthy schools were working on food themes, gardening, wildlife gardens, using the outdoors and some combined this work with global perspectives. The Anglesey co-ordinator pointed out that *“there are lots of activities going on – on food, the environment, fair trade etc”* She then gave an example of a school's international week when the catering service had supported them. However, she added, in line with others' comments, *“but I'm not sure how many schools could actually say ‘this is ESDGC’*. She continued to say that schools tend to notice links when an inspection is coming and that it would be good if they realised that a lot of their work was counting towards it.

In summary the advisers and co-ordinators felt that schools were doing ESDGC but they would like to see work that was more connected, with coordinated planning and teamwork, and a coordinator in school to aid these developments. Certain areas were seen to perhaps need more attention. These included the global dimension and work on climate change.

5.4 LEA OFFICERS VIEWS ON FACTORS INFLUENCING SCHOOLS' ESDGC DEVELOPMENT

The LEA officers were asked two questions about influences on schools' ESDGC development. These were:

In schools which you believe are delivering ESDGC effectively, what would you say have been the factors which have contributed to this?

In schools where you believe ESDGC is not being effectively delivered, what would you say have been the factors which have contributed to this?

5.4.1 Positive factors in ESDGC development

Topics which arose frequently are listed in Table 5.2 and discussed below.

Table 5.2 Summary of LEA officers' views of factors in schools' successful ESDGC development

Factor	No. of mentions in 7 interviewees
Commitment of head teacher/ Senior management team's involvement	4
Enthusiastic staff / Key individuals "who go the extra mile"	3
Attendance at training events/ Attendance at conferences/ Having had grants to have "a little time out of the classroom"	3
An appointed, knowledgeable coordinator	2
Actively looking for opportunities or "exploiting the curriculum"	2
Giving priority and status to ESDGC	2
Gaining a "taste of success"	2
Team work	1
Planning and forward thinking	1
Seeing connections between topics and schemes	1
Being involved in lots of schemes such as Green School, Healthy School and International school awards	1
Taking part in international links	1
Using multiple methods and skills-based activities in learning and teaching	1
Having many partners – local and international	1

Commitment and leadership and understanding of ESGDC

All the interviewees thought the commitment of the Head teacher was vital. Comments included “*Everything has to come from the head to make it really work*” (ESDGC Adviser), “*a head teacher who thinks it’s important*” (ID Adviser), “*head teachers who are enthusiastic, give guidance and see it’s not something extra.*” (PSE Adviser). Head teachers who understood what ESGDC comprised were seen to be most helpful. This commitment, understanding and enthusiasm of head teachers reflects observations by Scott (2010), Jackson (2008) on ESD leaders and Inman and Burke (2002) on leaders in democratic schools.

In a similar vein the senior management team’s involvement was seen as a factor, with ESGDC given priority in the school’s development plan. An appointed, knowledgeable coordinator with responsibility for ESGDC was seen as key; this person usually helped by motivating others and with careful planning across the school. This was reflected by three interviewees’ comments on the key role of certain teachers e.g. “*ones who go the extra mile*” (Healthy School Gwynedd). The need for a coordinator was noted by Ofsted (2003); this is a key aspect of distributed leadership (Harris, 2008a, c; Jackson, 2007). Along with this, team work was seen to be important.

Tied to leadership was the priority given to ESGDC. Giving priority and status to ESGDC was seen as a factor in successful schools. It was acknowledged by the ESGDC adviser that sometimes schools wanted to “*get other areas sorted out first*” and “*some just think they’re not in the right place yet to be looking at the things*”, and that the priority given to ESGDC often came when schools were “*ready for it*”. These issues may be related to issues of time and funding which are discussed in section 5.4.2.

Planning and school awards schemes

Planning and forward thinking across the whole school to ensure that work was not taking place on an *ad hoc* basis was a common factor mentioned. The importance of joined up approaches was commonly mentioned in the literature review of both ESD/GC schools (Ofsted, 2003; Hren, 2004; Symons, 2008; Jackson, 2007; Shallcross and Robinson, 2008; Gayford, 2009). However, actively looking for opportunities or “*exploiting the curriculum*” (ID Adviser) rather than being tied to it was also seen as important, and two

advisers stressed that flexibility was useful where schools took time to study a topic when it arose in the news.

The Gwynedd Green Schools coordinator mentioned that being involved in lots of schemes such as Green Schools, Healthy Schools and International Schools is helpful. However, the ESDGC Adviser, reflecting Scott's (2010) views of fragmented approaches, felt that this was not sufficient in itself but that seeing the connections between topics and between school award schemes was the key. Examples were given of schools seeing connections between such things as the garden or fair trade and entrepreneurship, and realising "*it's quite easy to do*" (PSE Adviser). An example was given of pupils selling vegetables which they had grown; in another school pupils had set up a business selling fair trade products.

Training, time for development and sharing practice

It was recognized that many of the schools that are seen to be successful in ESDGC had staff who had attended training events. Training was also noted by Cheadle (2004), Jackson (2007) and Anderson (2008). Grants to have "*a little time out of the classroom*" were noted by the ESDGC Adviser. Those had allowed teachers to work together and network with others outside of the school. Attendance at conferences was also useful because schools could share their practice and gather new ideas. Having seen examples of other schools, they "*realise it's possible and go for it themselves*" (ESDGC Adviser). The influence of examples from other schools reflects the importance of networking to introduce new ideas, noted by Fullan (1992), Hargreaves (2003) for schools in general, and by Sterling (2001) and Scott and Gough (2003) for ESD.

Teaching and learning methodologies, resources, partnerships and funding

Using multiple methods was seen as effective where "*teachers bring the topic alive by using artists, artefacts, role play, and all the senses*" (FP adviser). Engaging the pupils through skills-based activities and entrepreneurship activities was also seen to be a common factor in schools developing ESDGC. The Skills Framework (Welsh Assembly Government, 2008e) was perceived to have had an influence. Successful schools were often seen to have international links and many community partners. The International Dimension adviser noted that taking part in international links and partnerships was a way for injecting motivation for ESDGC. In the Foundation Phase schools borrowed resources

such as special topic boxes and used local resources libraries. These successful schools were seen to have often taken advantage of available grants from, for example, the British Council and community ventures. This was also noted as a key feature for ESD/GC schools by Ofsted (2003), Hren (2004), Global Action Plan (2007), EES-SW (2007) and Jackson (2007).

Success breeds success

Motivating factors and gaining a “*taste of success*” were also thought to be important where “*schools have some sort of recognised success e.g. in a scheme or they receive praise, that breeds more interest and success and they move on to, for example compete on a national stage*” (ESDGC Adviser).

Interestingly, none of the interviewees mentioned pupil participation as a factor despite this being seen as a key factor in other ES/GC studies (Ofsted, 2003; Hren, 2004; Jackson, 2007; EES-SW, 2007 and Gayford, 2009).

5.4.2 Factors in schools believed to be less effective in developing ESDGC

In these schools it was perceived that: there was a lack of leadership; the management team was not active or involved; ESDGC was not a priority in the schools’ development plan; and it had little status. Often these schools were seen to be doing parts of ESDGC without recognising it. There was often no coordinator and frequently there was just one person with an interest working on their own with other staff uncommitted. These factors all reflect a lack of formalisation of ESDGC which was noted as a key factor in the literature review.

Training for ESDGC was not given as much priority as other subjects because, perhaps, of Estyn inspection priorities to key subjects such as mathematics; these aspects were dealt with first and schools were perceived as “*not yet ready*” or “*not in the right place yet*” (Anglesey Healthy School) to develop ESDGC.

There was little planning and ESDGC was not “*seen as an opportunity for the curriculum*” (ESDGC Adviser). The issues of time and initiative overload were raised. “*It just depends*

how much time is available with schools so busy these days” (Gwynedd Green Schools). This aspect of competing priorities is a common barrier noted by DFID (2003), Cheadle (2004), Jackson (2007), Anderson (2008) in research on ESD/GC. In fact Jackson noted that ‘The most important [barrier] is lack of time to develop the planning and staff development’ (p. 50).

Jackson (2007) also noted that successful school leaders see sustainability as a broad agenda. In this current study, the LEA officers saw teachers in less effective ESDGC schools as having a lack of understanding of ESDGC, not seeing links with other curriculum areas and school schemes and often having a lack of confidence in carrying it out. The ESDGC adviser put it succinctly,

“My worry is that they [don’t] have a grasp of the big picture and perhaps that schools are not necessarily making the connection between what is exciting this year with what was exciting last year.... It’s exciting and inspiring but the big picture is perhaps lacking.”

Because of this a self-perpetuating cycle occurred: there was a perceived initiative overload, resulting in ESDGC being given even lower priority by the school when choosing training courses. Lack of training in turn affected teachers’ understanding of, and skills in developing ESDGC and resulted in a lack of information about resources and potential agencies that could help them. This lack of understanding and piecemeal approach was noted by Ofsted (2008) for schools in England and also by Estyn (2006) for schools in Wales.

There appeared to be a need for guidance to *“point out that they can gradually build bits in, but don’t need to do it all at once”* (Primary Adviser). This may point to a gap in the existing guidance in Wales or simply to a failure to read it. Lack of continuity of training was also seen as important, for example, where a teacher may attend one course but be in need of further support. Less effective ESDGC schools were also seen to be less likely to share experiences with other schools, perhaps working in an ESDGC void.

Lack of funding for training was also seen as an important factor. If a school was unaware of, or did not take advantage of funding opportunities they would afford less time for

training or time out of the classroom for development. The impact of the level of deprivation in the community was highlighted as being possibly positive or negative. In areas designated as deprived areas there often appeared to more funding available for schools, however the impact of the nature of the area sometimes negatively outweighed this in a lack of community relations.

5.4.3 Summary of LEA officers' view on factors affecting ESDGC in schools

In summary, many of the factors mentioned by LEA officers were similar to those mentioned in the literature on ESD/GC schools and innovative schools. These were: leadership and commitment, formalisation of ESDGC in the school; key dedicated, enthusiastic players; and taking a joined-up approach. It was seen to be important to use training and guidance, first to increase awareness of what ESDGC involves and its interconnectedness with other topics, and secondly to improve the knowledge and skills base of how to address it and where to obtain resources to do so. Networking which enabled sharing and gaining ideas from other schools and involvement in international partnerships were also seen to be important.

5.5 ESDGC SUPPORT IN NORTH-WEST WALES

This section explores and documents the types of ESDGC support that had been available to schools since 2002 when the first ESDGC guidance was published (ACCAC, 2002).

This data was gathered from several sources. First, in their interviews, the seven Local Education support officers were asked about the type of support they offered schools; they were also asked their views on the effectiveness of their own support, the support of other organisations, and the degree to which they collaborated with each other and with other support organisations. Information from a survey of ESDGC support organisations provided information about other support from outside of the LEAs. In addition further information about ESDGC support, its evaluation by teachers and networking activities was gathered from relevant reports such as those of the North-west Wales ESDGC Forum

(ESDGC N-W Wales Forum, 2006; 2007; 2008; 2009) and the World Education Centre (WEC, 1996-2009)

5.5.1 Local Education Authority support for ESDGC

There was evidence of substantial amounts of support given to schools by LEA and Cynnal officers. As well as support from the Humanities Adviser who has a brief to promote ESDGC in these counties, there was support from other advisers, support from the Anglesey and Gwynedd Green Schools Scheme and from the Welsh Assembly Government Healthy School scheme which has a full-time officer in every county.

Support before 2000

Support on ESDGC topics predates the ACCAC (2002) guidance. The humanities adviser who was in role from the early 1990s provided, in my opinion, excellent courses for teachers which dealt with preconceptions of other countries, stereotyping and interconnectivity. He introduced these topics through termly themes on topics such as food, water and weather. Many of the teachers still in schools today remember these courses. His legacies include a teaching photo pack and video on Lesotho which have been used in almost all schools, and the Anglesey and Gwynedd Green Schools scheme which he founded in 2000.

ESDGC support from 2000 to 2010

The following information on recent local authority ESDGC provision has been sourced from the interviews with LEA officers. Cynnal, the advisory body for most of north-west Wales has provided, and still provides, courses specifically on ESDGC to regional primary school cluster groups. These are held on dedicated school training days to avoid the need for supply costs. Up to the time of the interviews in 2009 two courses were held in the autumn and summer terms with approximately twelve to fifteen teachers on each course, reaching between thirty and forty-five teachers each year. These courses were voluntary and primary schools had to choose whether or not they wished to attend these or other competing courses. This meant that there was no guarantee that every school would receive training and also that it was unlikely that many teachers from any one school

would have the opportunity to attend. Course content had included: information about the nature of ESDGC and how to introduce it in PSE; the potential for an international dimension; information on funding for school linking; and examples from teachers in schools which had been developing ESDGC. Non-LEA organisations such as the North Wales Wildlife Trust's wildlife garden officer, the fair trade schools officer and the World Education Centre often provided input to these courses. A voluntary session on the international dimension was planned for the Primary Head Teachers' Conference in 2009.

In addition to these courses, the Humanities adviser also included some aspects of ESDGC in her Humanities courses and she also visited some schools on a one-to-one basis and provided some after-school sessions to schools and cluster groups on ESDGC. Individual schools often requested this support on ESDGC when a school inspection was due.

International Dimension

The International Dimension adviser also answered occasional calls for help from schools and had visited one primary school. She kept examples of schools' work to show to other schools and had done so in one of the PSE ESDGC courses mentioned above. At the time of the interview she was also a member of WIDE (the Welsh International Dimension in Education advisers, a subgroup of the Welsh Directors of Education Group). As part of this role she had helped to organise one training course a year in north Wales on the international dimension. This was usually attended by around 30 teachers from across all six north Wales counties. Her involvement in WIDE finished in 2010 due to competing priorities in the advisory service.

Foundation Phase support

The Foundation Phase Officer interviewed had a special interest in ESDGC from her earlier teaching career, when she had been part of an international partnership, acted as an ESDGC mentor to other teachers and studied master's level modules in global education. She had been delivering several types of training. These included compulsory Welsh Assembly Government (WAG) Foundation Phase training where ESDGC was mentioned but not given prominence, and dedicated, but voluntary, ESDGC courses for Cynnal which looked at the relevance of ESDGC in all seven Foundation Phase areas. The latter courses were run over two academic years from 2008 to 2009 reaching around 150 teachers in

Gwynedd and Anglesey. She was also commissioned by the north-west Wales ESDGC Forum and the World Education Centre and to run four extra courses in Conwy and Gwynedd for around fifty teachers. Subsequent to these, four teachers were funded to support eleven other schools. She also visited some schools and had prepared boxes of resources for lending to schools; they were very popular and had a waiting list. This officer returned to work in a school in 2009 and at present these ESDGC courses are not being offered.

The Anglesey and Gwynedd Green Schools scheme

This scheme has been running since the year 2000 and supports a high proportion of schools. It has a dedicated officer in both counties. In Gwynedd eighty-two schools (78%) have either already achieved one of the awards at Bronze, Silver or Gold level or are working towards one of these. There is a similar percentage of schools taking part in Anglesey. Because this award was designed before ESDGC was officially promoted it has mostly dealt with environmental aspects of school life and learning; schools have only been expected to deal with the global dimension at the gold award level. However, the criteria were re-written in 2009 to include every aspect of ESDGC at all learning levels from Foundation Phase to secondary school. Schools received information on this in early 2010.

Wales Healthy School scheme

All schools in Gwynedd and Anglesey now take part in the Healthy School scheme which has the potential to deal with many aspects of ESDGC. This scheme is supported by the Welsh Assembly Government and provides a full-time officer in each county and supply cover to enable schools to attend training events. In Anglesey, the Healthy School Officer had drawn particular attention to ESDGC, mapping parallel activities in the two schemes. She had run an ESDGC training session for teachers from all the county's schools using resources borrowed from the World Education Centre (WEC), a development education centre in Bangor University. She purchased a copy of the resource *Let's Eat* (Oxfam, 2003) for all primary schools and drew teachers' attention to the WEC resource library. She also ran a workshop on ESDGC and Healthy School for thirty-five primary teachers at an ESDGC schools' conference in January 2008 where she again introduced examples of

resources and schools' portfolios. She stressed that ESDGC was just a part of her Healthy School remit.

In the Gwynedd School scheme ESDGC was flagged up, but to a lesser extent. The coordinator said that this was because the Gwynedd scheme is run through the local health service rather than through the LEA as in Anglesey. She did, however, know about the relevance of ESDGC to Healthy School and drew schools' attention to it although she could not guarantee that all other Healthy School deliverers in the county did so. She introduced aspects which are overtly relevant to PSE, but also to ESDGC, such as circle time, cooking and sex education.

Reasons for supporting schools with ESDGC

Several reasons were given by the advisers and coordinators for providing ESDGC support. Firstly, ESDGC now has a raised national profile and is an aspect inspected by Estyn for which schools request support. Secondly, it is a theme within the statutory Personal and Social Education, for which LEAs must provide courses. It was also seen as *“useful as it joins things up, makes connections.”* (PSE adviser)

Amount spent on LEA support

The advisers said that it is difficult to estimate the amount of funding which goes towards ESDGC in the two counties. This is because none of the advisers deals solely with ESDGC and none of the schemes at the time dealt with ESDGC in its entirety. Of course this depended on how widely the definition of ESDGC was interpreted. It could be argued that both the Healthy and Green School schemes are a major aspect of ESDGC. In this case the costs of the four full-time officers could be attributed to ESDGC support.

Certainly the Green Schools scheme would play this role from 2010.

A proportion of the Cynnal officers' roles is dedicated to ESDGC but they were unable to give concrete figures of this percentage of their time. The Primary adviser gave these figures for running training courses:

- Cost of 'Training in post' courses (i.e. courses paid for by the LEAs) and held outside of the LEA buildings: £85 - £99 per teacher per day.
- Cost of advisory personnel for these courses: £545 - £570 per day

- With a maximum of three courses held for around 45 teachers this would give an estimated cost of around £5,200.
- The cost of delivering day courses not included in the ‘Training in post’ programme is £626 - £750 a day. With a further five courses, including the Foundation Phase ESDGC courses this would contribute another £2800. Individual schools would pay the cost of attending these courses.

When visits to individual schools are counted, with an average of 30 half-day visits per year then a further maximum figure of £8,250 could be added. The additional time spent by the ESDGC adviser attending ESDGC Forum meetings and other associated meetings would add another four days i.e. £2,200. In total, and as a very wide and possibly inaccurate estimate, Cynnal and the Local Education Authorities may have been contributing around £20,000 per year on ESDGC support to primary schools. This, of course was in addition to the support given to Green and Healthy schools which could each add another £60,000 per year for salaries and courses.

Methods of evaluation of LEA and advisory staff support

All Cynnal-run courses are evaluated by an end of course evaluation form. After each school visit a report is sent to the school and the LEA. Both the Humanities and PSE advisers felt that they needed further follow-up evaluations some time after the courses. The PSE adviser had once tried sending out a questionnaire to 10% of the schools on his courses and although the response was generally positive some felt it was sent too soon after the event to show change. Healthy School courses are assessed by an evaluation form. Both the Healthy School and Green School schemes ask schools to provide a portfolio of their work. This is assessed by external assessors.

Officers’ perceptions of the effectiveness of their LEA support

All advisers and coordinators reported that course evaluations had been positive. The Humanities/ESDGC adviser felt that the courses were useful in helping people see the big picture but that they could also cause panic because the area was so big. The International Dimension adviser suggested that although things were moving in the right direction there was still a lot of work to be done to reach all schools, especially secondary schools.

The Foundation Phase advisory teacher felt that there were now “*lots of teachers knowing where to start and willing to explore ESDGC*”. She also said that the follow-up that she had seen in schools was very positive “*seeing what’s delivered actually being delivered on the floor*” and that schools needed the one-to-one support at times. She also had many follow-up phone calls for further help. Healthy School schemes were also felt to be appreciated by teachers. In Gwynedd, the Healthy School circle time and classroom healthy cooking were perceived to be very successful and in Anglesey the coordinator was pleased to note that that Healthy School work had been highlighted positively in every school inspection. She commented “*I feel that schools are happy to have new ideas*”. Again, this reflects the benefits noted in the literature review of introducing teachers to ideas from outside of school. It was interesting to note community links. The Gwynedd Green Schools coordinator mentioned, “*the children enjoy the work and it’s spreading to the community. I hear about it when I go into schools!*”

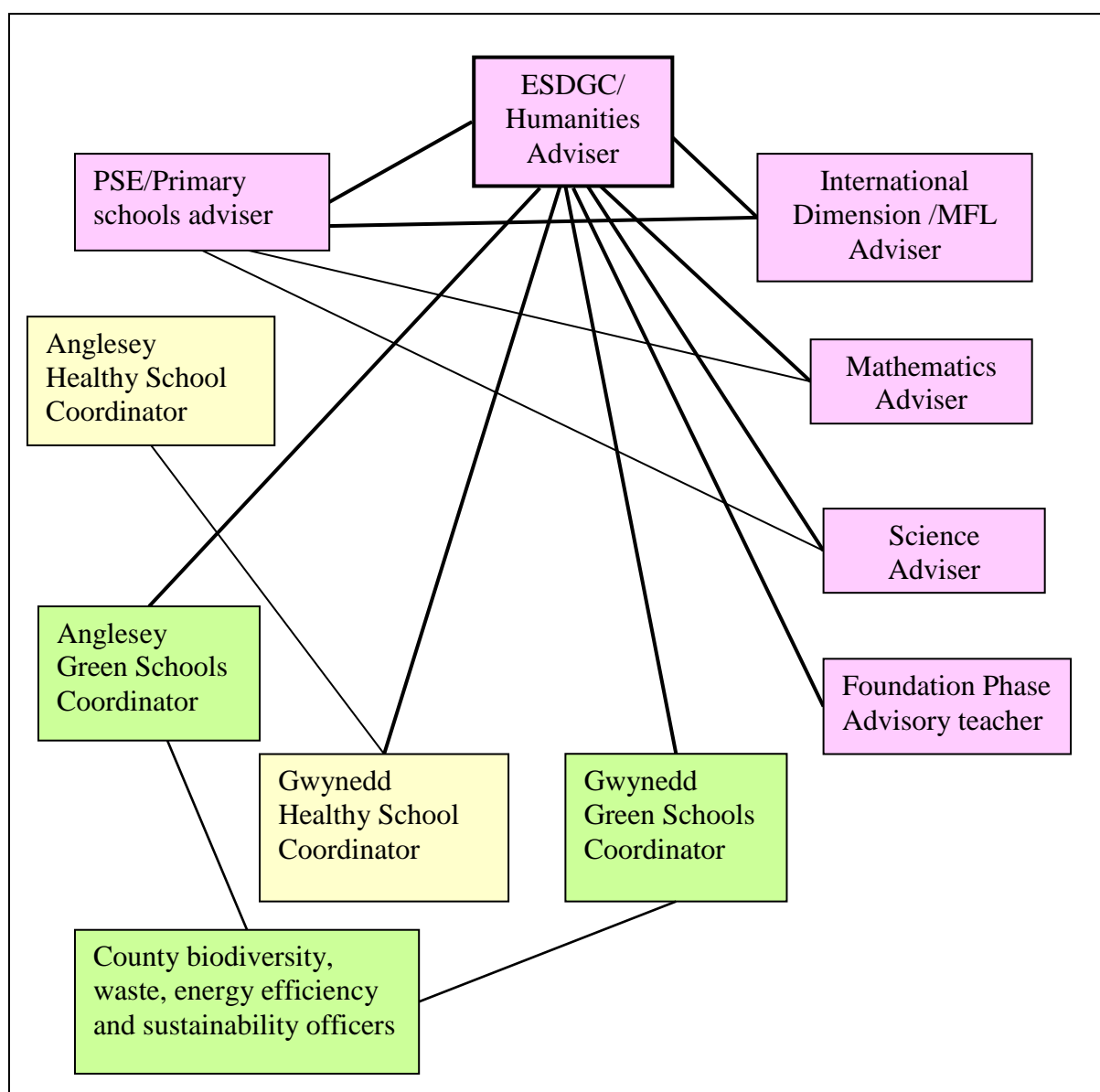
Evidence of collaboration and joined-up thinking within the Local Authorities

There was considerable evidence of collaboration and joined-up thinking both between the advisers themselves and between them and other organizations (Figure 5.1). The PSE, International Dimension and Humanities/ESDGC officers worked closely together, planning courses and support. Everyone interviewed, advisers and coordinators alike, mentioned how helpful the Humanities/ESDGC adviser had been. She had had meetings with each of them, and given guidance on ESDGC fitted how fitted into their area of work. She had also held meetings for all Cynnal subject advisers to keep them up to date with ESDGC developments. The Modern Foreign languages (MFL) and International dimension adviser felt that, because of this, all Cynnal advisers are aware of the importance of ESDGC and how to incorporate it in their subjects. It is known that ESDGC has also been introduced in primary mathematics courses and a training day on ESDGC in primary science was planned for February 2010. The Science adviser took part in an ESDGC conference in 2009. The Humanities/ESDGC adviser worked very closely with Green School schemes for which she had responsibility.

The Healthy School coordinators met regularly with each other and others in north Wales and the ESDGC planning document developed by the Anglesey coordinator had been shared with them. The Healthy School coordinator in Anglesey regularly worked with the

Gwynedd coordinator. They all also included a substantial amount of work on thinking skills, an area for which the Humanities/ESDGC officer also had responsibility.. Both the Green Schools and Healthy School coordinators worked closely with other providers in the LEA such as sustainability, biodiversity, waste and energy efficiency officers. As mentioned above the Green Schools award criteria were being re-written to include strong references to ESDGC and to Healthy School.

Figure 5.1 LEA officers' and school advisers' collaboration on ESDGC



5.5.2 LEA officers' views on the impact of national guidance documents

Only the Gwynedd Green School and the Gwynedd Healthy School coordinators were not very familiar with the Welsh Assembly Government ESDGC guidance documents (Welsh Assembly Government 2008b; 2008c). All of the others were familiar with them and felt them to be of use to themselves and to their schools. The PSE adviser noted,

“It’s been a help from the point of view of preparing courses, introducing it, to give the context for PSE and thematic work. Generally I welcome the whole thing, the link to skills and the self assessment forms”

These documents had been shared with schools on courses. The Humanities/ESDGC coordinator was pleased that Wales had put Education for Sustainable Development and Global Citizenship together and felt that the new, more flexible curriculum, along with attention to ESDGC in subjects, would enable schools to develop more interesting and exciting projects. She felt that,

“it raises the profile at a time when it is also upfront in the press – that is, there is a connection between that which is happening in schools and the world itself.”

The Healthy School coordinator had found the document of use when mapping parallel activities in the two schemes. The Foundation Phase officer felt that it would take some time to be embedded, as had been the case with the introduction of the Foundation Phase. She described the similarity between the two initiatives,

“we are going toward the same goals. We share the same values, the same principles and the themes are easily brought into the new curriculum, so definitely, it’s about child-centred learning, about skills and about different learning styles.”

Despite the Welsh Assembly Government documents being seen as useful, most felt that although most schools were probably aware of them, and some had used them in planning, there were still quite a few others had not yet spent much time looking at them. However, they could only really comment on the relatively small number of schools they had worked with. One of the Healthy School officers said that she had seen no evidence of schools finding the documents by themselves, suggesting that training sessions were important for their introduction.

5.5.3 ESDGC support from other organisations

As noted in the literature review there was a range of organisations working to support schools with ESDGC. A number of these were active in the study area. Table 5.3 lists those, supporting primary schools, which responded to a survey conducted in January 2008. Many of these organisations reached a substantial number of schools and teacher trainees, with some noting that uptake would have been even higher if schools did not have to pay. Some, such as the north-west Wales ESDGC Forum, the World Education Centre and the Bangor University master's level modules, provided comprehensive ESDGC support across its whole range, others supported particular areas of ESDGC, for example the fair trade support, Oxfam's right to education project, the Forestry Commission woodland learning and the Eryri National Park support. Some of the courses were validated to maintain a high standard. These included the master's modules described above and the DFID Global School Partnerships courses (www.dfid.gov.uk/get-involved/in-your-school/global-school-partnerships, accessed 16/03/12) which were validated by the Institute of Education in London. The latter addressed many of the controversial issues that arise within school partnerships.

Table 5.3 ESDGC support for primary schools in north-west Wales

Name	Brief description of major initiatives	Support per year (all approximate)		
		No of schools	Approx no. teachers	No ITET trainees
Cynnal Advisory service and Local authority support	Teacher courses – ESDGC Humanities, International schools Foundation Phase ESDGC Green Schools, Healthy School, Individual school support	35 30 30 50 130 150 Approx 20	ditto	
ESDGC north-west Wales Forum	Co-ordinating EES N-W Wales forum; organising 2 very successful ESDGC teachers' conferences and 4 CPD events for secondary teachers in different subjects; 6 small grants for schools' ESDGC development/ year. ESDGC newsletter for all N-W Wales schools	35 300	35	
World Education Centre, Bangor University (BU)	2001-04: ESDGC ITET support project; continuing school support in 2006-7; 2008-11: ESDGC mentor projects helping schools to develop ESDGC through the support of experienced mentor teachers (80 schools/year) plus eight CPD events for primary and secondary teachers. 2009: Fairtrade schools support 2010: Oxfam <i>Education for all</i> project supporting primary schools 2009-11: Global School Partnerships courses at levels 1 (2010), 2 (2009) and 3 (2011) with 30, 8 and 7 teachers respectively, (validated by the Institute of Education and run by validated trainers)	30 60 primary 22 primary 22 primary 45 over 3 years (42 primary)	130 (100 primary)	350
BU College of Education and Lifelong Learning	Part-time MA course in Global Education; 5 MA Global Education modules offered: Introduction, Methods, Interdependent World, Sustainable Change, Citizenship and Global Justice.	4 primary	4	

Careers Wales - NW	Gaining the support of workplaces to run workshops on health & environment for primary and secondary pupils. Supporting Professional Development Placements for Teachers in environmental and industrial education, music and craft, containing different ESDGC themes and elements, with the support of employers.	50 primary, 10 sec.	140	0
Fair Trade Wales - NW	School presentations and workshops; Individual & group support to teachers. Stands at events, literature & resources. FT conference (15 schools) teacher peer help and advice	80 primary	80	30
Dolen Lesotho Cymru	Programme to educate people with learning difficulties about the Millennium Notes of Development of the United Nations - developing training and an educational pack and educational resources. Teacher placement programme in Lesotho. Teacher and pupil exchange programme		30	70
Eryri National Park	Pupil activities on natural environment	3500 pupils/ 175 schools	10	5
Centre for Alternative Technology	Work with Design And Technology in schools, including the Sustainability Handbook. Development of activities on the Eco footprint, particularly <i>Where's the impact</i> project(Primary schools)	300 (primary/ secondary)	200	150
Forestry Commission Wales	Raising awareness of the use of woodlands as a learning resource with links to recreation and health. Expansion of Forest School as a method of woodland based learning delivery – 8 inset days on Anglesey	600 across North Wales	700	200
Moelyci Environmental Centre	Education project developed since 2008, starting school visits linked to the curriculum, delivered teacher training days, organised a range of courses for the public. Sustainable barn renovation for classroom space	8 mostly primary	35	
North Wales Wildlife Trust	Support to develop school gardens	20/year (many primary)		
Snowdonia Society	Rags2Riches project making bags from old material. Invasive species eradication, General Conservation actions.	10 (not specified)		
Christian Aid	Educational peer support work (secondary pupils), raising awareness and understanding of HIV/AIDS + support to Fair Trade Schools meetings	5, mostly secondary		

5.5.4 LEA knowledge of, and collaboration with, other ESDGC support organisations outside of the Local Authorities

All the advisers and coordinators were aware of many other ESDGC support initiatives; they worked closely with them and relied on some to complement their provision. Most of the organisations listed in Table 5.3 were members of the north-west Wales ESDGC forum, together with LEA advisers and some teachers; this provided useful three-monthly meetings where experiences could be shared. The ESDGC/Humanities Adviser chaired this forum from its inception until 2009, and in this role had helped promote several ESDGC training events, a regular newsletter for schools and two well-attended ESDGC schools conferences at which many support organisations gave presentations and workshops. These events were noted by all the advisors as being very useful for schools. Notably, the ESDGC 2009 conference was mentioned by three advisers with the International Schools adviser stressing that it was “*very good for raising awareness and sharing good practice*”. In her capacity as chair of this forum the ESDGC adviser noted the value of the events for teacher networking,

“I am pleased we have offered grants to schools, have organised training activities for teachers and offered two conferences. This has allowed teachers to work together and network and perhaps to have a little time out of the classroom to concentrate on ESDGC. This isn’t as likely to happen on a general subject training course.”

This was supported by evidence in the end of year ESDGC forum report (N-W.W. ESDGC Forum, 2009). This stated that teacher’ evaluations of the event had been extremely positive.

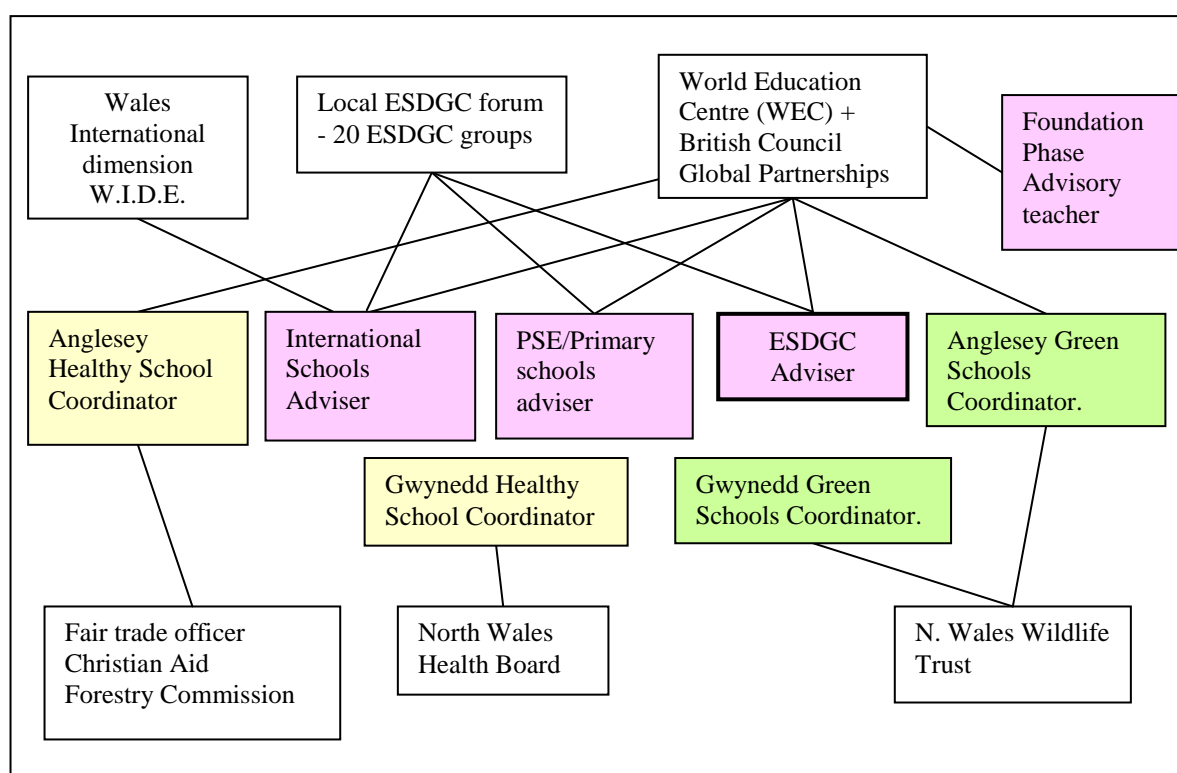
The ESDGC/Humanities Adviser had also been involved in Welsh Assembly Government panels for development of ESDGC resources and had been commissioned to produce a new resource for schools. She worked closely with the World Education Centre (WEC) in Bangor University on ESDGC Forum activities, where WEC organised the forum events, but she also promoted WEC as a resource to schools and supported the DFID-funded ESDGC support project which had been working with eighty local schools, using local teachers as peer mentors. She commented,

“WEC is an extremely useful link. It’s very easy for me and other advisers and also for schools to lift the phone and hope that someone from WEC can answer our question, help with plans or help with resources. We are very fortunate with this.”

The Anglesey Healthy School coordinator, the International Adviser and the Foundation Phase officer also worked closely with this organisation. The International adviser, PSE adviser and Healthy Schools officer had also all attended the north-west Wales ESDGC Forum meetings at least once a year and contributed to workshops and conferences.

Also, as mentioned above, the International Dimension (ID) Adviser was a member of Welsh International Dimension in Education group (WIDE) and through this liaised with other International Dimension advisers across Wales. She also attended locally organised DFID Global School Partnership training sessions for teachers run by the World Education for the British Council.

Figure 5.2 LEA Officers’ and Advisers’ links with ESDGC support organisations



The Anglesey Healthy School Officer had been involved in organising a Fair Trade schools conference with the north-west Wales Fair Trade officer, Christian Aid and other organisations; most advisers were aware of the Fair Trade schools award. She also worked with the Forestry Commission education officers. The Green Schools' Officers worked with the local recycling venture, energy efficiency officers and with North Wales Wildlife Trust Wildlife Gardens' officer who had helped many schools develop gardens. This latter organisation was particularly noted as being "*very worthwhile*" (ESDGC adviser). Most officers were aware of the Eco-Schools scheme but not closely involved with it; the Green Schools scheme has begun before the promotion of Eco-schools in the area and most schools had worked with the former, although some were now also becoming Eco-schools.

These wide-ranging links both between LEA support officers and with other support initiatives would have ensured that a flow of information on ESDGC would be constantly generated and reflected upon. This should have benefited schools by injecting new ideas and expanding their understanding of the breadth of ESDGC as suggested by Sterling (2001) and Scott and Gough (2003). However, the plethora of support initiatives was seen as both positive and negative. The PSE adviser commented:

"In some ways the variety on offer is good as it opens schools' eyes but it can also be negative in that it can give initiative overload. This leads to schools doing a bit of this, a bit of that but not joining it up to see the whole picture."

This was also noted by Estyn (2006a).

5.5.5 LEA advisers views on further support needs

One adviser said "*just continue*". Two advisers felt that there was not enough continuity of training, that there was a need for more follow-up visits but that these were limited by the time available. Most agreed that more people were needed for support and further funding was needed to release teachers for ESDGC development planning. Schools needed to have a dedicated coordinator who had time to help with planning and who could communicate ESDGC to all staff. It was felt that ESDGC needed to be mapped to all the other schemes. This had been expected nationally for some time. A contact point such as the World Education Centre was seen to be needed to provide information on different types of

support, to provide resources; and to critique new resources before they were offered to schools. The Healthy School coordinators were fairly satisfied with their schemes and the Green Schools coordinator said that although their new criteria give prominence to ESDGC they would not see the benefits for another year.

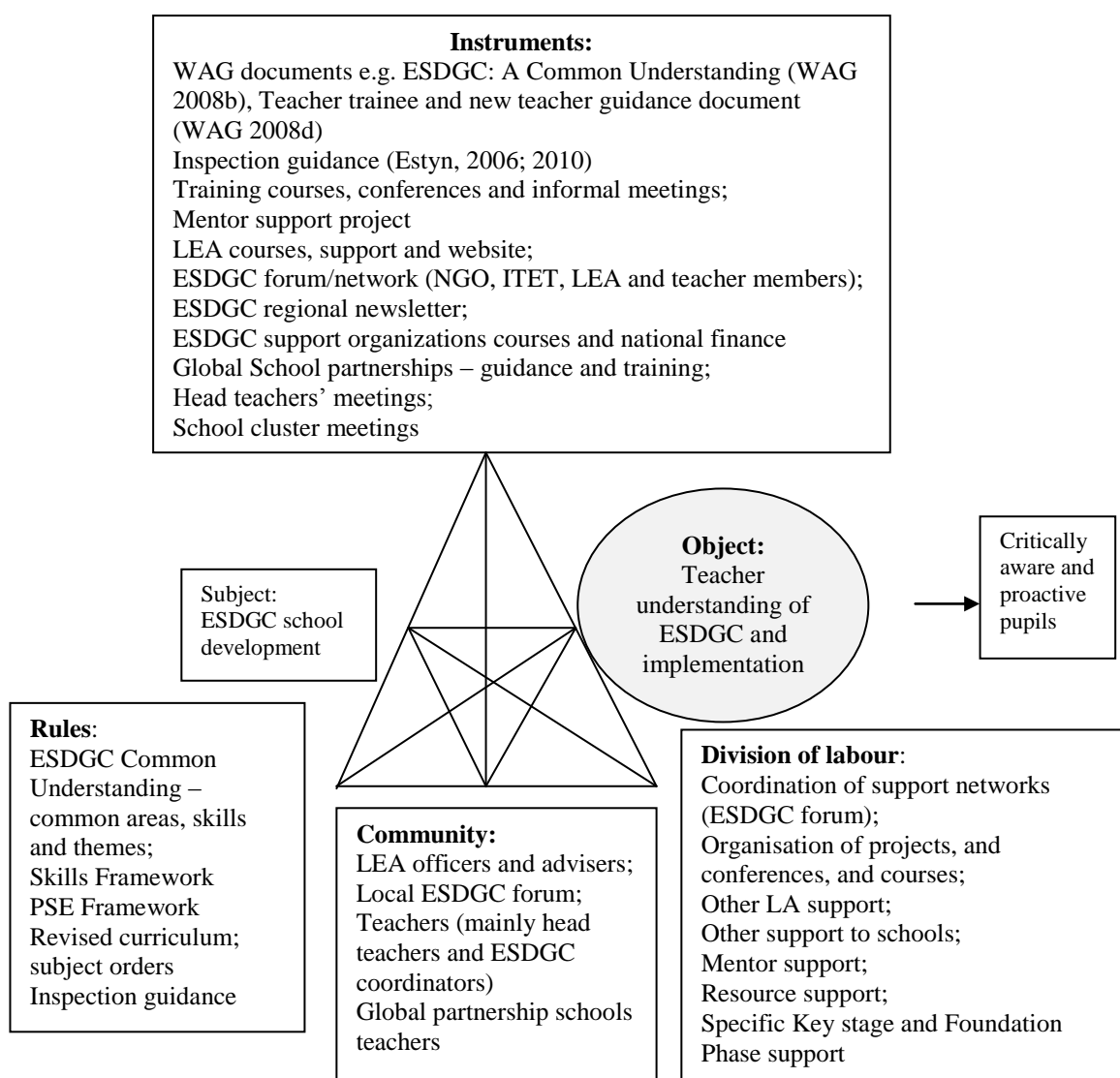
5.6 SUMMARY AND DISCUSSION OF ESDGC SUPPORT

The section above has shown the effort that was put into the development of ESDGC in north-west Wales. LEA officers appeared to take ESDGC seriously and tried to provide a reasonable level of support. However, ESDGC competes with other priorities and the general feeling of the education advisers was that they felt schools could do with more comprehensive support. Those providing support to specific related areas such as Healthy School and Green School were generally satisfied with their level of support. There was considerable liaison between LEA support officers. There was also considerable support from other organisations outside of the local authorities and substantial collaboration between local authorities and these support organisations. Some of this collaboration was done on an individual local authority officer basis, however, the local ESDGC forum provided a particular mechanism for networking with other support organisations and for coordination of this support. This had led to some collaborative ESDGC support events which demonstrated the breadth of ESDGC and which appeared to have been worthwhile for teachers. Although it was not possible to work out how many schools received comprehensive support across the full range of ESDGC aspects, it was clear that many were receiving some kinds of support. It was likely also, as noted by Jackson (2007), that certain schools with an interest in ESDGC would have taken full advantage of this support. This will be investigated in the case study schools.

Figure 5.3 presents a model of this regional support and development based on a framework of a second generation activity system (Engeström, 1987). This model is a useful way of envisualising regional ESDGC development. It illustrates how a regional group of players wishing to develop ESDGC e.g. LEA officers, support organisations and the local ESDGC forum, i.e. Engeström's community, worked together to help and encourage schools to develop ESDGC (the object). They used national and regional tools such as policy guidance and funding and local tools such as training courses, conferences

and peer education support (Engeström's tools). The 'rules' included the description of ESDGC in WAG guidance documents, the pupil-centred, skills-based nature of the revised curriculum, subject orders, and the ESDGC questions on which school inspections focused. Division of labour occurred according to the specialities of the group members, for example some provided specialised courses, others coordinated support. However this was not a simple process. As noted by Engeström (2009) it included groups with different purposes and values, for example there were NGOs wanting to promote their particular cause, the LEA wanting to see schools' develop ESDGC as a whole, and schools looking for new ideas; this required discussion and time to come to an agreed meaning and purpose.

Figure 5.3 Second generation activity theory (Engeström, 1987) applied to regional school development. Engeström used an oval shape to indicate that the object included surprise and revelation.



Because the members of the local ESDGC Forum were all coming from different communities of practice, with different purposes and values, it may be more appropriate to describe this collaboration as a meeting of several activity systems, i.e. as Third generation Activity System (Engeström, 2009). This was described in Chapter 2. The common object would be the same as in Figure 5.3 above. This would be a similar situation to that described by Norcliffe and Bennell (2010) for the national development of ESDGC policy, but in this case the communities were meeting at a local level. The meeting of different groups could also have encouraged each other to re-examine their existing ways of thinking, sparking new ideas for their own future support.

5.7 CHAPTER SUMMARY

This chapter has outlined the way in which the analysis of results is presented. It has described the views of local education authority support officers on schools' levels of ESDGC development and shed some light on factors affecting these developments. It has shown that although some schools were believed to be doing ESDGC well, the consensus of LEA officers was that provision in the majority of schools was fragmented. Key factors affecting schools were felt to be: commitment of the head teacher; enthusiastic teachers and coordinators; attendance at training events or time out of class to develop ESDGC; and the ability to exploit opportunities for ESDGC in other areas of the curriculum. In general, schools were believed to be doing more environmental than global dimension activities, but it was recognised that a small number of schools were doing some excellent global work, often through international partnerships. Schools in general were thought to prioritise other areas of the curriculum before ESDGC and many were seen to have delayed ESDGC development as a result. There was seen to be a need for more guidance for schools on the breadth of ESDGC and an ESDGC contact point for schools.

The study has also shown that the local authorities and other organisations in the study area had given a considerable amount of support to ESDGC development although it was still felt that more general support was needed. There was evidence of collaboration between Local Authority officers and also of support mechanisms to ensure that all LA advisory staff were aware of ESDGC possibilities. The LA officers also collaborated with other ESDGC support organisations, using them to complement areas of support. A regional

ESDGC forum encouraged networking. This working together was presented as an example of second generation activity system (Engeström 1987) with an alternative proposition of it being represented by a third generation activity system (Engeström, 2009)

As noted earlier, the findings of the LEA interviews informed and influenced the design of the research study on the five case study schools. The more general findings discussed in this chapter will now be compared with those from the case study schools in the next five chapters.

CHAPTER 6 CASE STUDY SCHOOLS PART 1

PROFILES OF THE SCHOOLS

This chapter commences the analysis of the case study schools. As described in Chapter 4, these were all primary schools of various sizes and locations in north-west Wales. They all were said to have good education standards (from school inspection reports), to have been developing ESDGC for some time and to have received some kind of positive recognition for the standard of their work. The analysis draws on the thirty-three interviews with teachers, on the thirty-four survey responses, on twenty-seven network questionnaire responses and on focus group interviews with pupils in years five and six.

This first chapter begins exploring answers to Key Question 1, i.e. What are the characteristics of schools recognised for their ESDGC practice? It explores the following questions:

- vii. What kinds of learning and teaching activities do they carry out?
- viii. What kinds of learning and teaching methodologies are used?
- ix. Are pupils given opportunities to participate meaningfully in the life of the school?

A brief profile of each school is presented, followed by a comparison of each school's teaching and learning activities and strategies for learning.

6.1 CASE STUDY SCHOOL PROFILES

The case study schools varied in size and location. Table 6.1 provides a brief description of each school. The schools have been given pseudonyms.

Table 6.1 Description of the study schools

	Faban	Llefn	Gyrn	Bera	Drosgl
Number of pupils	233	244	100	26	96
Number of teachers	11	10	6	2	7
Situation	town	village adjoining small town	village, rural	rural	village, rural
Proximity to key ESDGC training sites	close	close	far	far	far
General education standards (from recent inspection report)	good (2010)	good (2010)	good with outstanding features (2008)	good with outstanding features (2008)	good with outstanding features (2008)
ESDGC mention in recent inspection report	global citizenship plays important part	global citizenship outstanding; good attention to environmental learning	outstanding	sustainable development 'good with outstanding features'; global citizenship - 'outstanding feature'	outstanding attention to awareness of ESDGC
% free school meals (Combined county average 15%)	well below average 4%	higher than average 21%	below average 10%	well below average 4%	about average 13%
Pupils of Ethnic origins other than English or Welsh	high	very low	none	very low	very low

6.1.1 Faban School

Faban school is a church controlled primary school situated in one of the key towns in north-west Wales. At the time of the study it had around 233 pupils with an intake of around 25% from various nationalities with neither English nor Welsh as their first

language. The number of pupils entitled to free school meals was around 4%, very much lower than the county average. It is a pleasant looking school, housed in modern buildings and, although on a main road, it is surrounded by playing fields; there is a small garden at the front. Inside the school were many colourful displays of children's work. These displays reflected the multicultural make-up of the school as well as its international links, for example there were exhibitions about racism, children's art, children's countries of origin and their work with a school in a southern Asian country.

The head teacher had been in post for around 10 years and had been a teacher in the school for over fifteen years. There was an ESDGC coordinator as well as other teachers with responsibility for Green Schools, Healthy Schools, the School Council, Personal and Social Education and one who taught a special 'diversity and skills' unit. Teachers' profiles with responsibilities are given in Table 6.2. The school had a relatively large number of young teachers with nine of the eleven being thirty-five or under, and three under twenty-five (table 6.3). Five teachers had been teaching for four years or less; one of these was a newly qualified teacher. There was only one male teacher.

ESDGC provision had been audited in the school, firstly against the Oxfam criteria for Global Citizenship (Oxfam, 1997; 2006) and the Gwynedd and Anglesey Green Schools scheme (Cynnal, 2000) and then more recently against the Welsh Assembly Government criteria in the ESDGC Common Understanding (Welsh Assembly Government, 2008b). ESDGC had been planned into class activities and subject teaching and links made to whole school schemes. The school was working towards Gold level of the Anglesey and Gwynedd Green School's award and towards Eco-School status; it was a Healthy School. It had achieved the full accreditation for the British Council's International School award (ISA) (available at: <http://schoolsonline.britishcouncil.org/International-School-Award>, accessed 13/03/2012). There was an active school council with individual class councils feeding into this.

There was no separate strategy for ESDGC but there was a prominent statement on global citizenship on the school's website, based on the Oxfam (2006) explanation; this statement explained why the school thought it was beneficial to the pupils. The school had an active link with a school in southern Asia and a less developed link with a Chinese school. Some

parents contributed to school ESDGC activities and the governors were said to be supportive.

Table 6.2 Faban school teachers' profiles

Teacher	Class(es) taught	Special responsibility	Age	Gender
1F		Head teacher	over 45	F
2F	Key stage 1 yr 2	Coordinator Geography & Global Citizenship, ESDGC	26-35	F
3F	Key Stage 2 yr 6	Information and Communications Technology (ICT) Coordinator	26-35	M
4F	Key Stage 2 yr 6	Maths and Music	26-35	F
5F	Key Stage 2	Newly qualified teacher	25 or under	F
6F	Key Stage 2 yr 3	Art, Design and Technology	36-45	F
7F	Key Stage 2 yr 4	Coordinator PSE , Health, Religious Education	26-35	F
8F	Key stage 1	Healthy School, Key Stage 2 PSE diversity unit	26-35	F
9F	Foundation Phase, reception	Physical Education Coordinator	25 or under	F
10F	Foundation Phase, reception	Responsible for the Foundation Phase	36-45	F
11F	Key stage 1	Foundation Phase Music Coordinator	25 or under	F

Table 6.3 Faban school teachers' age profiles

Age	25 or under	26-35	36-45	Over 45
Number of teachers	3	6	1	1

Both groups were kept informed of school ESDGC activities through the school newsletter and reports respectively.

The school was inspected in 2010 and the inspection report positively mentioned pupils' understanding and experiences of global citizenship, learning through school international partnerships, activities to develop pupils' recognition of sustainability and the environment, and

the way in which the school emphasised the importance of appreciating diversity in their daily life and work.

6.1.2 Llefyn School

Llefyn School is situated in a council estate in a village at the foot of the north Wales mountains, close to a small town. The playground is mostly concrete, and, due to a high level of vandalism, it is surrounded by high wire fencing. Inside, however, there were colourful displays of children's work including a large display on skills for learning which features people from many cultural backgrounds. There were around 240 pupils with around 21% entitled to free school meals, above the county average and considerably higher than in the other four case study schools. The majority of pupils had Welsh as their first language.

At the time of the study there were ten teachers in the school, two of whom were part-time and job-shared. The majority were in the 36-45 age group; one was a newly qualified teacher, one of two male teachers in the school.

The school had made many innovative advances in ESDGC and had a high profile across Wales and the UK for its development of global partnerships and ESDGC. It had a comprehensive policy for ESDGC which outlined roles and responsibilities, aims and targets. There had been a dedicated ESDGC coordinator for some years and there was also a teacher responsible for both Green School and School Council and another who had responsibility for Personal and Social Education. The school had an inspection in 2011 which stated that the school gave good attention to environmental learning and that global citizenship was outstanding.

ESDGC occurred throughout the school, in lessons, in whole school activities and it was evident in the school ethos and conduct. School awards played a large part in Llefyn School's ESDGC development. At whole school level it was a Green School working towards Gold level, a Healthy School and a Fairtrade school. It had achieved the full International School Award (ISA) and had active partnerships with schools in the Caribbean and China. These partnerships were a major feature of the school activities and

included much more than simple cultural exchanges. There was an active School Council which included pupils, teachers, ancillary staff and school governors.

Table 6.4 Llefyn school teachers' profiles

Teacher	Classes) taught	Special responsibility	Age	Gender
1L		Head teacher	36-45	F
2L	Key Stage 2, yrs 5 and 6	Coordinator Geography, ESDGC, Fairtrade, Modern Languages, French and Mandarin Club	36-45	F
3L	Foundation Phase	Head of Foundation Phase, RE, PSE coordinator, Healthy School,	36-45	F
4L	Key Stage 2, yrs 5 and 6	Green School, School Council, Technology and Science	36-45	M
5L	Key Stage 2, yrs 3 and 4	Newly qualified teacher	25 or under	M
6L	Foundation Phase, reception	None	26-35	F
7L	Key Stage 1 yrs 1 and 2	Management team, Art Curriculum leader, Music, History, Welsh	over 45	F
8L	Key Stage 2, years 3 and 4	Subject coordinator/ maths	26-35	F
9L	Key Stage 1, job share with 10L	Subject leader, Design Technology	26-35	F
10L	Key Stage 1, job share with 9L	Not known	?	F

6.1.3 Gyrn School

Gyrn school is in a village close to a small town in west Gwynedd. It is situated on the outskirts of the village but within easy reach by foot. Its catchment area includes the village, surrounding hamlets and countryside. There are just over one hundred pupils. According to the most recent inspection report the number entitled to receive free school

meals was just below than the county and national average. The Welsh language is spoken by 80% of pupils although for half it is their second language.

At the time of the study there were six teachers, three in the infants and three in Key Stage 2. The head teacher taught year 6. The school had a very mature, stable staff (Table 6.5) with the head teacher having been in post since the early nineteen-nineties. Change was imminent, however. He has now left the school to lead another local school. In addition, teacher 6G and the deputy head, 2G, who was also the ESDGC coordinator, were both close to retirement age. Table 6.5 shows the profiles of the teachers.

The school had been developing aspects of ESDGC for some time although it had become more strategic in its approach during the last two years “*since the publication of official guidance*” (Gyrn head teacher). It had a policy on ESDGC and an ESDGC coordinator.

Table 6.5 Gyrn school teachers’ profiles

Teacher	Class(se) taught	Special responsibility	Age	Gender
Head	Key Stage 2, year 6	Head teacher	36-45	M
2G	Key Stage 2, year 5	Deputy Head teacher	46 or older	F
3G	Key Stage 2, Years 1 and 2	Coordinator for Special Needs and Art	46 or older	F
4G	Key Stage 2, years 3 and 4	Joint coordinator Physical Education and Geography	36-45	F
5G	Infants and Key Stage 2		36-45	F
6G	Foundation Phase	Part-time	46 or older	F

A school inspection in 2008, which predated the latest ESDGC guidance, described the general school’s provision as good with outstanding features and noted that it ensured that all involved with the school were aware of its commitment to promote sustainable development and world-wide citizenship through the Green Schools initiative; this provision was described as ‘outstanding’.

Gyrn school was a Green School at Gold level, a Healthy School, a developing Fairtrade school and it had the full International Schools Award, for which it was runner up in Wales in 2010. It had two active international partnerships, a long-standing one with a school in southern Africa, and a more recent one with a school in China. The school had an active School Council. The school also had close links with the community with a special school friends group which raised funds for school ventures.

6.1.4 Bera School

This is a very small, very rural, school in a small village in the heart of Welsh-speaking north Wales. It is an attractive school, surrounded by flowers and attractive play equipment. It has twenty-six pupils in two classes, Foundation Phase/Key Stage 1 and Key Stage 2. According to the most recent school inspection report Welsh is the main language spoken in the homes of approximately 88% of pupils but the school believed that all pupils now speak Welsh to first language standard. 4% of pupils were entitled to receive free school meals, a figure considerably lower than county and national percentages. There were no pupils from a minority ethnic background.

The staff was longstanding and mature. There were two teachers, one teaching assistant and a cook/caretaker. The teaching staff were both in the older age bracket having taught for over 20 years (Head teacher) and thirty years (Teacher 2B) (Table 6.6). The cook had also been there for 20 years. There was a young teaching assistant in the infants. Both teachers had a strong interest in ESDGC.

Table 6.6 Bera school teachers' profiles

Teacher	Classes taught	Special responsibility	Age	Gender
1B	Key Stage 2 Years 4-6	Head teacher	over 45	F
2B	Key stage 1 and Foundation Phase	ESDGC Coordinator	over 45	F

The school had been a pilot school for the development of the Foundation Phase and as part of this they had received extra support from the county's Welsh Assembly

Government-funded Foundation Phase officer who had a special interest in ESDGC. ESDGC had been in the school's development plans since 2008, there was a comprehensive policy on ESDGC, also dating from that time, and there was a link governor for this topic. At the time of the study the infants' teacher was ESDGC coordinator. However, she was due to retire at the end of the summer term and the Head teacher was planning for continuation of ESDGC. The school is a Gold Green School and was starting on the Healthy School scheme. It had no international partnerships.

The school had an inspection in 2008 in which it received standards of 'Good with outstanding features' for all four key questions, with the Head teacher's leadership being described as outstanding. The report stated that attention given to sustainable development was good with outstanding features and that pupils' understanding of global citizenship was also an outstanding feature. There was particular mention of contributing to charitable causes, fair trade being integrated into the curriculum, and a member of staff contributing to other schools' training.

6.1.5 Drosgl School

Drosgl School is a fairly remote, rural school situated in a small village in the countryside of north Anglesey. The school is housed in modern buildings on the outskirts of this village within easy walking distance of the centre. There were around ninety-six pupils in the school with the intake mostly coming from the village and surrounding countryside; around 16% of pupils came from outside of its catchment area. According to their latest inspection report half of the pupils had English as their first language although over 90% were described by the school as speaking Welsh to first language standard. The percentage of pupils who were entitled to receive free school meals was 13%, around the county and national averages. Although the Head teacher gave permission for the study, at the time of the data collection he had been absent for several months and the deputy head teacher was Acting Head teacher.

Table 6.7 shows the teachers' profiles. There was a mix of experienced and recently qualified teachers; four teachers were full-time and two part-time. Teacher 5D, who taught years 3 and 4, was a newly qualified teacher employed on full-time supply teaching cover

during the head teacher's absence. Teacher 3D, also a newly qualified teacher, taught year 6 and was part-time (4 days/week).

Table 6.7 Droschl school teachers' profiles

Teacher	Class(es) taught	Special responsibility	Age	Gender
1D	KS2, years 5 and 6	Head teacher (absent)		M
2 D	KS 2 years 3 and 4	Deputy Head, Acting Head	36-45	F
3 D	KS2, years 5 and 6, part-time	Turkey link, PE- clubs, activities,	25 or under	F
4D	Reception class,	Head of Infants, ADY, Foundation Phase, reception	36-45	F
5D	KS2 years 3 and 4	Supply teacher	25 or under	F
6D	KS1 years 1 and 2	Coordinator for Eco-School, Fairtrade, Humanities	26-35	F
7D	KS1 years 1 and 2, Part-time		over 45	F

The school had attained the Eco-School Banner, Gold level Green School, Fairtrade School and Healthy School status; it had an active Eco Council and school and class councils. It did not have an ESDGC policy or a dedicated ESDGC coordinator but it did have a coordinator for Eco-School who also looked after the Fairtrade school development and other similar topics at whole school level. Aspects of ESDGC had occurred under other titles in the school development plan. It had an embryonic link with a school in Turkey and was exploring the possibility of a link with a Zambian school. The school was last inspected in 2008 when it received Grade 1 for all inspection questions and was described as a very good school with many outstanding features. The report said that outstanding attention was given to developing pupils' awareness of global citizenship and sustainable development, with especial mention of its Green School Gold award, charitable and humanitarian work and links with, and studies of other countries

6.2 ESDGC ACTIVITIES IN THE SCHOOLS

This section looks in detail first at the types of ESDGC activities that the schools were offering to their pupils and secondly, at the kinds of learning pedagogies they promoted.

Of course the two are strongly interlinked. For example, if a school puts in place the opportunity to have a school council then it is, or should be, explicitly offering pupils the opportunity to participate in decision-making. All schools were carrying out a large number of activities related to ESDGC across all school years; some are described below. A list of each school's activities can be found in Appendices 3.1 to 3.5.

6.2.1 Whole school activities

Whole school award schemes

As described above, all schools were taking part in two or more school award schemes. These included the Eco-School, Gwynedd and Anglesey Green Schools, Healthy School, Fairtrade school awards, the International School Award (ISA) and international school linking and global partnership schemes. In all schools these awards contributed a substantial amount to their ESDGC activities. In Drosogl ESDGC activities were described as mostly “*whole school activities*” (teacher 6D), whereas in Faban, Gyrn and Llefn teachers noted that the award schemes were well integrated into curricular work. In all schools there were many opportunities for pupil participation in these awards. For example in Faban, all pupils were involved in working and planning for the school garden; in Gyrn, Llefn, Bera and Drosogl pupils planned for biodiversity, completed energy audits and took responsibility for monitoring aspects of sustainability in the school; pupils in Llefn learned about the banana trade. One Faban teacher, recognised the learning value of Eco-School when she noted how knowledgeable the children were about recycling when it arose in projects with their partner school in southern Asia,

“they were interested, yeh, because recycling has become a big thing in this country and they are completely knowledgeable about it.” (4F)

Not all teachers, however, recognised the learning value, or even the curricular value of their whole school environmental activities. The year 6 teacher in Faban, who was coordinator for both Green and Eco-School, commented,

“A lot of them are.... to be honest, they don't fit into the curriculum. There was a lad from the Council came in the day before and he was talking to the school about recycling.” (Teacher 3F)

All schools were working towards the Fairtrade schools award and had received support from local part-time school support workers. This award requires that schools include a certain number of curriculum activities each year (www.fairtradewales.com/schools/473, accessed 01/04/12). The award criteria were also reflected in daily activities such as pupils running a fair trade stall, and the annual celebration of Fairtrade Fortnight which included special assemblies and fair trade events to which the community and parents were invited.

School partnerships and widening views

In Faban, Gyrn and Llefyn a substantial amount of ESDGC work was related to their school international partnerships and they had all received DFID/British Council Global Schools curriculum development grants for this work. Their other award schemes' activities were often integrated into their partnership activities. For example, Faban pupils had been exchanging project work on recycling and biodiversity with their partner school in southern Asia, Llefyn pupils had exchanged work on human rights and Gyrn's pupils were beginning work on climate change with their Chinese partner school. Such integration of projects into the curriculum can help schools move away from simple 'getting to know each other projects' and bring a deeper understanding of issues through comparisons of issues in different countries. However, although Llefyn and Gyrn had good communications with their partners, in Faban communication, particularly with their Chinese partner, had been scarce and pupils were said to be disappointed. In all three schools the visits of their teachers to the countries, and visits from partnership teachers, were also said to have enhanced learning by giving the pupils first hand information. However, this would surely depend on how insightful their teachers were, especially when their visits were very short, a point made by Martin (2008) and Martin and Griffiths (2012). It is worth noting that the ESDGC coordinators in both Llefyn and Faban had attended the first Global School Partnership workshops in Bangor in 2008; these were described in Chapter 5.

In Llefyn, to increase and simplify communications they had made extensive use of the eLanguages project (elanguages.org/ accessed 01/04/12) to enhance their partnership's communication. They exchanged most of the curriculum project work through this, but it was also a very good way of learning from each other in a more informal way. Teacher 5L

described how, when they were exchanging Christmas cards “[it was great]] seeing the smile on their faces”. He also noted,

“So it’s been great for them seeing their pictures They.... ask them about things like language for example, ‘What’s Merry Christmas in Welsh?’ – ‘Nadolig Llawen’ - and language, ICT, sports, everything. For sure, the variety”

School assemblies

Special school assemblies on ESDGC topics were often held for the whole school and one teacher in Faban pointed out some of the difficulties of catering for all ages of pupils,

[we] had the service this morning with Fair Trade. The little children perhaps didn’t quite understand although M did make it so simple, but the little children didn’t quite get it (laughs). They just understand that it doesn’t grow in this country (laughs) That’s a good thing.” (Teacher 10F, Head of Infants).

Although classroom activities over the years could help consolidate and progress learning there is also the danger that exposure to such assemblies at an early age may encourage certain uncritical and unquestioning views in children. For example, it could be difficult to later introduce critical thinking around fair trade to children who have already been told that it is good. Scott and Vare (2008) emphasise the need for critical thinking about such issues in their article *Education for Sustainable Development: Two sides and an edge*.

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One special event celebrated yearly in these schools was the Urdd’s (young people’s Welsh language organisation) message of Goodwill; that year it was on climate change. Pupils in both Gyrn and Bera were preparing for this at the time of the interviews. In Gyrn the older pupils delivered an assembly for the whole school. In Bera, parents and grandparents are invited to these activities each year.

Input from visitors

Most of the schools also used considerable input from visitors. These could be one-off visits, such as a visit to Drosogl by a teacher from a southern African country, or they could be purposefully sought to enhance particular aspects of learning. Llefyn was interesting in the way that it brought in a constant flow of visitors related to their partnership countries. These were not only teachers from their partnership schools teachers, but other relevant

visitors; these included high profile poets such as Benjamin Zephaniah and visitors from their local Chinese community. These experiences must have widened the pupils' (and teachers') experience and understanding and gone some way to avoiding the formation of stereotypes, as well as keeping the topics to the fore in their learning. The head teacher in Llefni, when discussing the impact of a visit by a Jamaican poet, noted,

“and he was talking about tolerance and respect, and, you know, he was talking about his childhood in Jamaica, and we could compare the childhood of the children there. I think the important word is that they ‘live’ the experience.” (Llefni head teacher)

Another way of enhancing learning had occurred in Faban. They had applied for a grant to bring a residential artist into the school; the subsequent art work on their partnership country was seen to be very successful, leaving a lasting legacy of which the children continued to be proud.

Special ‘country’ days

Most of the schools also organised special ‘country’ days each year. These included days on their partnership countries in Faban, Gyrn and Llefni and other days such as Chinese New Year. Experiential activities included researching information, tasting foods, art and making music (Llefni, Faban). Faban runs a yearly European day when each class chooses a country and then learns about it. Bera was the only school not to go down the route of special days, *“We decided not go that way”* (Bera head teacher). It is not known whether or not this was due to a concern about these days tending to reinforce stereotypes, but there is a certain possibility of this happening.

In many of the infants classes e.g. in Llefni and Faban, these days, together with the special events noted above, seemed to contribute a fair proportion of their global education activities. That these activities can only contribute a certain level of learning was recognised by some teachers, including teacher 7L,

“In the infants it’s explaining that it’s the world about us that is important, and [then] getting wider as they go up through the school on more topics as things go ahead really.”

However, there was a certain amount of other ESDGC-related work happening in the infants' classes in each school. In Faban, for example, the Year 1 class had enjoyed doing a comparison of toys in southern Asia and Wales and swapping a project on recycling with their partner school. Other activities included questionnaires for local people, recycling, gardening, and learning about their neighbourhood and wildlife (Llefn), running the Eco-Council (Drosgl) and using artefacts and stories to learn about other countries (Bera).

Charitable events

All schools undertook many charitable activities and these were most mentioned in Bera and Drosgl. Here they regularly raised funds for, and studied issues related to, Operation Christmas Child, Christian Aid appeals, Comic Relief, Send a Cow, Action Aid and water supplies in Africa, and Children in Need. They also followed television appeals on the Blue Peter children's programme; this often gave substantial information about issues. Although these activities can influence their humanitarian dispositions, again, without some extra research there can be a tendency for inaccurate information to be assimilated. This will be discussed further in the pupil interview section. In a similar vein to Morgan's (2009) findings on inspection comments, the head teacher in Bera mentioned that they had done global citizenship for many years through their charitable work.

Varying levels of activity over time

Although some teachers, notably the Gyrn head teacher, Teacher 2B and Teacher 2F noted that ESDGC was a regular daily or weekly occurrence, other teachers noted that attention to it varied throughout the year. For example, Teacher 2G the Gyrn ESDGC coordinator, reckoned that ESDGC coverage varied throughout the year with high priority during special 'country days', fair trade fortnight and, for example, the Urdd's message of goodwill.

6.2.2 ESDGC issues and topics in junior classes

In the junior sections of the schools, classroom work on issues and topics relating to ESDGC was very varied and of a greater depth than in the Infants. It included the exploration of issues such as slavery (Llefn, Faban), human rights (Faban, Llefn, Gyrn),

the right to education (Llefn, Drosogl, Gyrn), climate change (Llefn, Gyrn) and the journeys of food in relation to sustainability (Gyrn). Some of these activities reflected the availability of local support. For example, a schools' worker employed by the local Development Education Centre delivered Oxfam-funded workshops on the right to education; the same person also delivered fair trade workshops. The work on slavery reflected the involvement of teachers in an earlier initial teacher education project on slavery links between quarries in Wales and the sugar trade. In Llefn this had led to the development of their international partnership and their ongoing work on social justice, slavery and human rights; this had featured in a major local exhibition. All schools were doing some work on climate change, but this was the least mentioned of the ESDGC themes and possibly the one which had caused the most problems, as noted by the head teacher in Bera,

“Some of them... one or two of them here, know exactly what is going to happen... that the water is going to... sea levels an all that, and you know... it's going to affect [us] unless they can do something about it as it were. But it's hard isn't it – explaining, as it were?”

This difficulty was also reflected in the pupils' interviews where some showed quite a confused understanding of climate change. This may also reflect a lack of teacher understanding of a complex topic. Indeed, this was backed up by the results of the case study teacher survey, where climate change was the least understood ESDGC theme.

Perhaps as a recognition of the need for accurate information, visits were also undertaken to places of ESDGC expertise, for example to the Centre for Alternative Technology and field centres.

Using current news and events

All schools made extensive use of current events as learning stimuli. These included the Iceland volcano which was active at that time and the earthquakes in Chile and Haiti. Teachers in Llefn, Drosogl and Gyrn mentioned that they made extensive use of the children's newspaper First News (Newsbridge, 2012), as well as children's television news programmes. In Gyrn, year 6 pupils were given daily opportunities to explore and discuss the BBC news on computer and weekly whiteboard sessions on First News stories. In Drosogl, teachers 2D and 6D also noted the frequent use of this source of information. As

will be seen in the pupil focus group interviews, these activities had played a significant part in raising their awareness of global events and issues.

6.2.3 Key differences between the schools' ESDGC activities

There were several key differences between schools. As mentioned above some schools extensively used their school international partnerships whereas others such as Droschl were just beginning development in this areas and Bera had not taken that route at all. Llefyn had studied very many key ESDGC issues and Droschl, Llefyn and Gyrn used current news on a regular basis. Droschl had a definite emphasis on its Eco-School activities. Gyrn appeared to be the school that was addressing sustainable development in the most integrated manner; pupils were not only learning about local sustainability issues but also being encouraged to make connections to issues in the wider world through discussing procurement and ethical trade in an interconnected way. In Faban there was a strong emphasis on diversity issues, drawing on the pupils' own diverse backgrounds. The pupils were encouraged to talk about their experiences, as teacher 7F describes,

“They really enjoyed it. We have a boy who is more confident and he enjoyed saying ‘Oh in Iraq we eat camel meat’. And they come out with ‘Oh we did that!..... Oh yes, and there is a girl from Pakistan, and she’s say ‘well there were five brides and five weddings, and everyone was there and it lasted 5 days’. They did really enjoy doing it. They weren’t shy.” (7F)

They had taken part in the competition *Giving Racism the Red Flag* and one girl had won. In Llefyn, a focus on diversity was maintained through its many diverse visitors, projects and its global partnerships, but also through its everyday work. The skills for life poster in their foyer which features people of many ethnic origins confirmed this.

It was interesting that there was a strong global dimension in all the schools studied. Even in Droschl, which had begun its ESDGC work as an Eco-School there was a significant amount of activity on global issues. As mentioned in Chapter 1, both Estyn (2006a) and Morgan (2009) had found that the global dimension was generally weaker in schools. The schools in this study were especially chosen for their ESDGC achievements and it may be significant that four of the five actually began their ESDGC with the global dimension

rather than with environmental activities. Chapter 8 will discuss the particular reasons behind this.

6.3 LEARNING AND TEACHING PEDAGOGY

6.3.1 General approaches

Chapter 1 looked at the kinds of learning pedagogies promoted within ESDGC-related educations. It was seen that these were multi-method and included pupil-centred, contextual, experiential, participative, collaborative, democratic, constructivist methods which promote various forms of communication, reflection, critical and lateral, holistic, creative and connective or systems thinking (e.g. Sterling, 2001; Pike and Selby, 1998; Hicks, 2003; Scott and Gough, 2003; Breiting et al. 2005; Welsh Assembly Government, 2008b). This type of learning is also promoted in the Skills Framework (Welsh Assembly Government, 2008e).

What kinds of learning and teaching pedagogies were being used in these case study schools which were said to be doing ESDGC well? Teachers were asked about the kind of methods they used for learning and teaching, and also about their views on the relationship between skills-based education, pupil-centred education and ESDGC.

In all the schools learning opportunities were strongly pupil-centred, skills-based and experiential and generally flexible enough to adapt to opportunities arising. These were seen as natural ways of teaching. For example, in reply to a question on the connections between ESDGC and the skills-based, pupil centred curriculum, the Faban head teacher noted,

“Well, it’s part of their lives isn’t it. One thing develops skills, and the other..., they just run through each other.”

There was a very similar response from the head teachers in Gyrn, Drosogl and Bera. In the latter school the head teacher explained,

“Well, it’s just a part of it isn’t it? It’s just woven into each other I’d say. If we’re going to put them all in separate sections, we’re going to get into quite a hole!”

In Drosogl, most teachers, and especially the infants' teachers, believed that skills-based learning was the way forward,

“Well this is built into everything we do however. We are trying to develop the children to operate in that way. Then it just goes through things.” (Acting Head 2D)

In Gyrn also, the head teacher said that thinking skills *“play a key role in giving more opportunities for the children to play an active part (in their learning)”*.

In Llefn, all teachers, from the Foundation Phase through to Key Stage 2, confirmed that they use strongly pupil-centred, experiential approaches. Both the head teacher and ESDGC coordinator felt that ESDGC is a good medium for learning and Teacher 2L stressed that having fun was an important issue that they tried to promote in their pupils' learning. The head teacher explained,

“I think we are a very lively school here, a school where the emphasis is on children enjoying themselves while learning, and where pupils get experiences, and this area lends itself (to this) so well.” (Llefn head teacher)

She also agreed that the kind of learning promoted in the Skills Framework occurs easily,

“Yes. The skills framework, I think this area, if you do it well, the Skills Framework just works, nearly automatically as it were. It just works well.” (Llefn head teacher)

It was clear in Faban, Llefn and Gyrn that many teachers had used these approaches for a long time and certainly from well before the Skills Framework (Welsh Assembly Government, 2008e) was introduced,

“... good teaching – that's what good teaching was like - getting the children to think” (Faban head teacher)

The only query came from Teacher 3D, in Drosogl. She was a newly qualified teacher, teaching years 5 and 6. She felt that her training course had often emphasised skills over knowledge in and that she was personally keen to enable the children to gain some more knowledge. She did, however, say that they often did this through skills-based activities which she, too, described as “good education”. The impact of the Skills Framework will be discussed further in Chapter 9

6.3.2 Learning pedagogy in the Infants' and Foundation Phase classes

In the infants' section of all schools these approaches were said to be a natural part of the learning process. Many of their comments reflected the nature of the recently introduced Foundation Phase (Welsh Assembly Government, 2008d), which, as described in Chapter 3, is strongly pupil centred and experiential. In the case study schools the approaches described above were seen as absolutely core to learning and teachers used the children's own experiences very frequently. For example in Llefyn, the Reception class teacher, 6L explained,

"in the reception class the emphasis is on them, it's them who are important, because if they don't understand themselves they will never understand how other people in other countries live. Yes, they have food from other countries [and so on] but we concentrate for the most part in the Reception class on them [the pupils]."
(Teacher 6L)

She noted that this then leads on to helping them learn about others. In Faban, reflecting a two-way approach to learning, one infant's teacher, when asked how she would go about teaching topics she knew little about, said,

"I prefer to find out through talking [with the children] more, [it's] the way I work. There's a lot of oral work. I'd rather that they have a chance to say..." (8F, year 2 teacher)

In Drosogl, Teacher 6D who teaches years 1 and 2 felt that the Skills Framework made the children more independent and to *"think, evaluate, reflect. It tries to do that"*. The infants' teacher in Bera, Teacher 2B, described her story-based approach to helping the children learn about other places,

"We always start in the Foundation stage with a story... [For example] I will never start with China... I will start with the Boy from Hing Ping..... Then it starts with the questioning. Who is he, and why he is different? Is he the same as us? And so that's how we start every theme." (Teacher 2B)

In Gyrn, the infants Teacher 6G mentioned that stories were used more frequently as they became a little older, *"It's good to have a story. When they get to Year 2 it's a bit better to have a story to help give them empathy"* (Teacher 3G).

6.3.3 Key Stage 2 learning and teaching methods

Pupil-centred learning

In Llefyn, the head teacher gave an example which further illustrated pupil-centred learning in action,

“they were studying the big Strike, and they could see that things weren’t fair, and they went after human rights... racism... slavery... and it meant we did, you know, the exhibition in the Castle... art skills... ICT skills... all kind of skills come into it. And it’s a very real education – something relevant to them. A fire in their belly, and we go with it as it were.” (Llefyn head teacher)

In Bera, the head teacher also gave another example of catering for the interests of the children,

“I’m doing the World Cup next term because there are boys in my class, and they like the World Cup, and that’s what they like. Well, that’s not what I had intended to do, but since it’s on, you do it.” (Bera Head teacher)

This was the only gender-based remark in all the interviews. Interestingly, in the pupil interviews the girls were also enthusiastic about this topic.

Skills development

In Key Stage 2 classes in Faban, attention to skills has been carefully planned in a more targeted manner than in the other schools, and their methods used ESDGC-relevant materials. They had developed a thinking skills unit on diversity, based on an English Qualifications and Curriculum Council publication and Oxfam skills-based learning materials. The unit was delivered to all Key Stage 2 pupils by teacher 8F while the other teachers were on their in-school time for planning, preparing and assessing (PPA). This unit was mapped against ESDGC, Personal and Social Education and the Skills framework, as well as subject targets. Skills development was not, however, confined to the work of this one teacher. Most Key stage 2 teachers in Faban also mentioned other activities which developed skills.

Throughout the schools learning strategies used for ESDGC at Key Stage 2 were said to involve discussion, writing for a purpose, thinking skills e.g. through using grids and

diamond ranking, online research and preparing materials, problem-solving activities, questioning e.g. photographs, practical activities such as planning and working in the school garden, working with a partner, decision-making in the class and school council. In Llefni, Teacher 5L, the newly qualified teacher (NQT) recognized the natural inclusion of skills-based teaching,

“there are skills in everything, with ICT, the research there, communicating, looking at numbers, number skills, language skills, and then everything comes in together.”

Experiential learning and participation

In all schools children were given many opportunities for interactive experiences such as being members of the school council and eco-councils, arranging events, researching articles in the news and working in the garden. The fact that the children had “*real*” experiences and were discussing things which were relevant to them was particularly strongly emphasised in Gyrn by Teachers 5G, 6G, 1G, 4G. For example, they had undertaken entrepreneurship activities to raise funds for a chicken hut; this included arranging and cooking for a fair trade community party and arranging a visit to a chicken farmer to learn more about looking after the chickens. Pupils also ran the fresh fruit shop. Some of these aspects were also confirmed by the pupils themselves (see later). In Drosogl the children were actively involved in running the fair trade shop. In Faban the pupils had taken part in a potato growing competition to raise money for their school garden. In Llefni, Teacher 5L, the Newly Qualified Teacher (NQT) gave some other examples,

“Instead of giving responsibility to the teachers as before, we can now bring the pupils in and it all goes together with Healthy school etc. We can appoint pupils to look at waste of paper and the pupils more than anything now play a part.”

As will be seen below the pupils interviewed in Llefni, Gyrn and Drosogl were very enthusiastic about their participation. Teachers in Faban and Bera noted that they used stories with the aim of developing understanding and empathy. The Bera head teacher gave an example of how she took advantage of issues arising in stories, even when she wasn't expecting them,

“[In] that book we were discussing – ‘Boy Overboard’ it was called – there was a refugee and Afghanistan and things like that coming into it. Well, without us being aware, it had come up hadn't it? Then we discussed refugees as people and things like that.” (Bera head teacher)

Taking advantage of opportunities - a flexible way of working

The example above illustrates one instance of how teachers took advantage of opportunities. 'Being flexible' was a common point made across all the schools, with teachers taking advantage of opportunities as they arise. As teacher (2B) in Bera noted,

“We can be flexible and follow any lead. We’re very lucky that we can both be flexible enough to follow any lead that comes up to be honest”.

The input from parents was also seen to be a useful source of unexpected opportunities which were appreciated by the children. For example, in Faban, the year 4 teacher, 7F, noted,

*“e.g. when we were doing Russia we had a parent come in and say ‘Oh I had a doll from Russia when I was eight and I can bring it in’ and that again lets the children go home and say ‘Mrs * is doing this [in class]’”*

The use of the news stories, for example in Gyrn and Drosgl as stimuli, where unexpected stories were arising all the time, is also an example of deliberately choosing to be flexible.

Using Philosophy

The ESDGC coordinator in Llefn mentioned that she had used the Philosophy for Children technique (www.philosophy4children.co.uk/, accessed 02/11/11) with her year 5 and 6 pupils and that this had been successful in helping them consider issues. This uses a structured approach in which children are encouraged to discuss and issue or a story, democratically choose an issue and discuss it further. As will be seen in the next chapter, the children interviewed in this school, and others, gave many examples of being involved in their learning and of thinking for themselves.

Making connections

In Llefn, Gyrn and Bera particularly, both local and global learning was often interconnected. A global example in Bera involved the children examining the living conditions in both Chile and Haiti following their earthquakes and then comparing them; a local example came after their Thanksgiving service which concentrated on water, the children then looked at water issues around the world and were encouraged to compare this with how the well in their school had been used.

A whole school pupil centred approach

An example of a whole school pupil-centred approach was seen in Faban School where there are many pupils with their origins in countries other than Wales. There was a large map in the foyer noting where the pupils come from, and in every classroom there were also maps showing the country of origin of pupils and/or their parents. Pupils were encouraged to raise issues to be explored or compared. In all schools, however, there was a whole school ethos which valued pupils, their participation, and their skills development.

6.4 SUMMARY OF ESDGC LEARNING AND TEACHING APPROACHES

The sections above have shown that the case study schools were indeed using many of the methodologies and principles that were suggested in the literature review as being core to ESD/GC. There was a distinct use of varied experiential opportunities which aimed to help widen pupils horizons, give them enjoyment and motivation for learning, develop their skills and importantly, to develop individual pupils to their best ability. Although most teachers appeared very much at ease with these ways of teaching it was clear that the Skills Framework and the revised curriculum in Wales had encouraged some changes in their ways of working. Key common features in the schools' learning and teaching approaches were:

- a large number of ESDGC activities which ranged across global, environmental and sustainability dimensions;
- extensive use of global partnerships;
- extensive use of visitors;
- integration of school award schools with ESDGC;
- extensive use of pupil-centred, skills-based activities;
- extensive use of experiential activities.

In general, these characteristics fit with a more 'transformative' rather than 'transmissive' form of education as described by Sterling (2001, p. 38).

6.5 CHAPTER SUMMARY

This chapter has outlined the way in which the case study schools' analysis is presented over Chapters 6 to 10. A profile of each case study school has been presented and their ESDGC activities and learning and teaching methodologies described. It has been shown that all case study schools were, or had recently been, regarded as doing ESDGC well. All of the schools were carrying out a great number of ESDGC activities with global, environmental and sustainability dimensions. There had been particular attention to bringing in a strong global dimension, an aspect which their LEA officers and Morgan (2009) pointed out as being done by only a small number of schools. Although there was definitely a strong awareness of poverty and charitable issues, as noted across Wales by Morgan (2009), schools had also looked in depth at many other complex issues. Some of these activities were being carried out within the framework of school award schemes but others were part of regular classroom activities. The methods which they used to promote learning were broadly pupil-centred and participative and learners had many opportunities for contextual and experiential learning and for critical thinking. Much of this reflected the nature of the revised national curriculum, the Skills Framework and the Foundation Phase.

The next chapter presents teachers' views of how they felt ESDGC development had moved on in their schools, particularly significant changes that they believed had occurred, and benefits that they had seen in their pupils. Then, drawing on interviews with pupils in years 5 and 6, it investigates how the activities, methods and benefits mentioned by the teachers manifested themselves in the children's responses. Finally, it will compare the perceived levels of teaching and learning in each school with some of the criteria discussed in the review of literature.

CHAPTER 7 CASE STUDY SCHOOLS PART 2

VIEWS OF SCHOOLS' ESDGC PROGRESS

This chapter continues with the discussion of Key question 1. It first describes teachers' views on the level of ESDGC development in their schools and significant changes that they believed had occurred in relation to ESDGC. Some of these changes were benefits to their pupils. Therefore, the second section focuses on these. The third section then examines pupils' responses in their focus group interviews to find out if there was evidence of the benefits that their teachers perceived. Finally, levels of practice in each school are compared with some of the criteria discussed in the review of literature.

7.1 TEACHERS' VIEWS ON THEIR SCHOOL'S ESDGC DEVELOPMENT

Teachers were asked for their views on how development of ESDGC had moved on in their school. Generally, the response was very positive in all schools with all teachers acknowledging that ESDGC development had moved on significantly. In making their assessments the teachers were using not only their own self evaluation but also positive confirmation from outside bodies which had recognized their achievements. In Drosgl and Bera this had come from school inspections, but in Drosgl they had also achieved the highest level of Eco-Schools, the banner, and Faban, Gyrn and Llefyn had received awards and recognition from the Global School Partnerships team for their international work. The ESDGC coordinator in Llefyn, 2L, recognized the importance of this external confirmation of their work, noting that self assessment could be biased,

“Well I’ll tell you why I think we are very strong on the global education – because of external feedback You know, when you go through an audit, it depends what your measuring stick is, and what your benchmark is, but it’s been easier to see that we are on the [right track,] that we operate on a high level with the global education aspect, because of the recognition from[outside].”

7.1.1 Common observations

Many common points were made by teachers from across the schools. Some were related to teachers' awareness and confidence, others to whole school actions and many were benefits associated with the pupils. They are summarised below.

In general, teachers in the case study schools felt that they:

- were aware of what ESDGC entails (Faban, Llefyn, Gyrn, Bera);
- had increased confidence and enjoyed teaching about ESDGC (Faban, Llefyn, Bera);
- were becoming more aware of where to obtain resources (Faban, Bera).

At the whole school level they noted that:

- there was generally a coordinated approach with teachers working together (Faban, Llefyn, Gyrn, Bera);
- ESDGC occurred throughout the school (Faban, Llefyn, Gyrn and Bera) and is being more recognised in subjects (Drosgl);
- ESDGC was seen to now come in naturally (all schools);
- school award schemes were now more integrated with ESDGC (Faban, Llefyn, Gyrn, Bera). This included the links with their partner schools becoming more integrated into the curriculum (Faban, Llefyn and Gyrn);
- the impact of teachers visiting their partner schools had had an effect on both teachers and pupils (Gyrn and Faban);
- a more flexible curriculum was giving time to take advantage of opportunities (particularly noted in Llefyn and implied in all other four schools);
- there was an increased number of visitors to the school (Llefyn, Gyrn);
- there were increased environmental and sustainable actions (Llefyn, Gyrn, Drosgl);
- there were more ESDGC opportunities being given to the pupils (Faban, Gyrn, Drosgl);
- there was greater valuing of contributions from the children's various cultural perspectives (Faban);
- entrepreneurial activities were "*making it more alive for the children*" (Gyrn head teacher).

Pupils were perceived to have:

- greater understanding and awareness of ESDGC issues and to be able to talk about them confidently (all schools);
- contributed many ideas and much discussion (Gyrn);
- participated frequently (Llefn, Gyrn, Drosogl);
- increased awareness of healthy eating and growing (Gyrn);
- to have more tolerance of others (Faban).

Some of the changes noted in individual schools are now discussed below.

7.1.2 Faban

In Faban, all teachers felt ESDGC had moved on well, especially in the last few years.

Some of their comments are noted below,

“I think everyone is much more aware and more ready to do things because they know how to develop it. We have moved on a lot. Everyone’s aware and everyone’s responsible for what they do in their teaching.” (Teacher 6F);

“I think it’s moved on a lot, an awful lot, we’ve done a lot with it. We give the children lots of opportunities; they’ve become aware of a lot more.” (Teacher 11F)

Even newer teachers had noticed the developments. Teacher 9F who had been in the school for two and a half years said,

“When I started here [Teacher 2F, the coordinator] had already started so I don’t know what it was like before. Since I’ve been here it has developed.” (Teacher 9F)

When asked about the most *significant change* that they had seen in ESDGC in the school, the teachers answers were similar: the increased understanding and awareness of the pupils, that they are more tolerant of others; the increased level of priority and the fact that all classes are doing it regularly; and that it is integrated across the school in lessons, projects and schemes. Teacher 7F elaborated on this when discussing their southern Asia link,

“it has helped them see that it’s not just [us] that’s here, there’s outside too.”

7.1.3 Llefyn

In Llefyn teachers were unanimously positive about how ESDGC had moved, and especially on the global education aspects. Teachers used phrases such as,

“Well, it has moved on significantly.” (Llefyn head teacher);

“It has really moved forward.... I’d say we are strong.” (Teacher 2L, ESDGC coordinator);

“Oh I think we are a bit ahead of the field.” (Teacher 3L);

“I would say it’s gone from strength to strength” (Teacher 5L);

Reflecting Teacher 2L’s comments about outside confirmation, Teacher 7L said *“we had an ‘outstanding’ from Estyn, we’ve got the evidence”*. Teacher 2L pointed out that they had,

“been chosen as one of five schools in the world to portray how to sustain a successful partnership that flows into the whole education, the education of the children.”

In a sign of *her* confidence in their developments, the head teacher explained that they were now giving priority to developing other areas, because,

“I think we have reached the excellence field, so that’s why I’m feeling now that this is a part of the school life now, and we maybe have to give some attention to other fields because this maintains itself by now.” (Llefyn head teacher)

Having looked critically at their audit of ESDGC, the ESDGC coordinator, 2L, was, however, a little more cautious. She felt that they had reached the top level i.e. *“Embedded”* for global education as described in the ESDGC Common Understanding (Welsh Assembly Government, 2008b, p. 45) and that aspects of education in the classroom were *“quite good”*. She felt that perhaps they were at level 3, *“Developed”*, for sustainable development.

In response to the question about the most significant change in the school all teachers interviewed mentioned beneficial effects for the children. These are discussed in section

7.2. The head teacher, the ESDGC Coordinator and Teacher 3L felt that there had also been other significant changes such as the revised curriculum's move to experiential learning and the fact that it is "*reflecting society*" (Teacher 3L). In line with the curriculum's recommendations, they took a very a flexible approach that enabled them to prioritise opportunities that were good for the children. Teacher 2L explained,

"we take any opportunity that is... that we don't say "well, that's too much hassle", if an email comes saying that some poet is on the way or something– that we do take the opportunities." (Teacher 2L)

7.1.4 Gyrn

In Gyrn teachers were seen to have increased their awareness of what ESDGC encompasses and of the information in the guidance documents when planning (Gyrn Head teacher and teachers 2G and 3G),

"We are far more aware of the content, in the documents, than we were before. Although we were doing it before, global education and so on, we are more aware, more aware of the needs" (Gyrn head teacher)

Other significant changes included: developments in the Healthy School and Green School (Teacher 5G); the school international links which had been used a lot in teaching (Gyrn head teacher, Teacher 5G) the impact of teachers having visited other countries (Gyrn head teacher, Teachers 3G, 4G, 6G); the ongoing entrepreneurial activities of the children and "*making it more alive for the children*" (Gyrn head teacher) including interesting new projects being developed such as keeping chickens and a wind turbine (Gyrn head teacher, Teacher 5G).

Teacher 2G, the ESDGC coordinator, who had looked at ESDGC provision in the school felt that the school was at the "*Embedded*" level of the ESDGC Common Understanding, although both she and two others (Teachers 4G, 5G) recognised that they were continuing to develop. The head teacher agreed, saying that although Key stage 2 had been strong to start with they were now moving with Key Stage 1.

7.1.5 Bera

In Bera both teachers were also very positive, saying that ESDGC issues now came in naturally, and that they were more aware of doing ESDGC. As in Llefyn, they noted that they were more inclined to deal with opportunities as they arose. The head teacher explained,

“Well, we’re more aware that we are doing more work about countries that are, maybe, developing, poor countries.”

This emphasis on poverty was a recurring theme throughout her interview and the pupil interviews. She sounded quite confident that they were on the right track,

“Ok, maybe I won’t reach the top, or where I’m supposed to go, but by the time they go through secondary school and everything, there’s a chance they will have got the whole picture as it were.” (Bera head teacher)

When asked about the most significant change in the school the head teacher repeated the fact that they are more aware of how topics are connected and added, *“You know, it’s very interesting isn’t it?”* A more integrated approach, with collaboration between the infants and juniors was mentioned by Teacher 2B,

“Where we worked in units before – the upper class doing it and me doing it – there is [now]more collaboration and more flow of ideas and work... children working closer together... the little ones and the older ones.”

An increased confidence in bringing ESDGC into learning, and in knowing how to access suitable resources, was also reflected in her comments, along with her clear enjoyment of the work,

“Oh, we’ve moved on quite a bit, since we started doing it. We feel that we... we enjoy it more to start with. We aren’t scared of doing it..” (Teacher 2B)

She, too, had compared their ESDGC work to the four levels of development given in the ESDGC Common Understanding (Welsh Assembly Government 2008b) and believed it to be level 4, i.e. *“Embedded”*.

7.1.6 Droschl

In Droschl, ESDGC was generally viewed by the established teachers, 2D, 4D, 6D and 7D, as something that had been developed in the school but which had not been given particular prominence by itself. They all mentioned the influence of the school award schemes. Teacher 4D, who was Head of Infants and also on the senior management team reflected,

“Well it’s has moved on very well, especially in the last few years, yes. Because before there wasn’t so [much emphasis]”

In that time she noted that they had become a fairtrade school, begun using the children’s newspaper, developed their link with Turkey and teachers had been on several courses. ESDGC was seen as being a part of other aspects of education, for example, Eco-School and subjects, and arising naturally, rather than an overarching theme. It was also recognised as something that needed more development. Teacher 2D, the Acting Head teacher explained,

“We are trying to make sure it arises naturally within the curriculum, ehmm, ... so it isn’t a big thing, but it is something that is happening here, , the recycling, for example, it happens because we are an Eco-School. It [ESDGC] arises naturally from the point of view of science, from the viewpoint of geography, and we want to work on it, to go after stronger links with other countries, and at the moment we are just starting on that.”

However, she felt, *“I think we’re on the right route”*. Teacher 7D, whilst also recognising their progress noted that they had sometimes missed opportunities because they were so *“so bogged down with day to day things”*. Four teachers could not think of anything that particularly stood out as significant change. Teacher 7D summed this up their feelings, *“I think it’s just a natural merger into the school”* Teacher 2D did note the Eco-School developments and the children’s ability to discuss topical issues,

“I think that the fact that we are an Eco-School, a lot arises from that, the Green Council is there and the children are really hands on, and that really is a help. The children also discuss topical issues and that stands out.”

Teacher 4D gave a very similar response. The two new teachers, 3D and 5D, could not judge the changes in the school, having only been there for just over a term. However,

Teacher 3D did make some insightful comments on how she perceived their development of ESDGC,

“Yes I’d say [it has developed] especially in the Foundation phase. They have done the Eco-School and the School Council and are responsible for it. I see years 3 and 4 and 5 and 6, more on knowledge instead of more of doing.....”

These were interesting observations, particularly as she was the only teacher to mention these facts. It is possibly that being new in the school she noticed things that others took for granted. She also noted some of the possible constraints that had occurred due to staff absences,

“I think the struggle is that there’s a pressure to lift it up as much as we can because they have had so many teachers.” (Teacher 3D)

7.1.7 Discussion of schools’ levels of development

Many of the whole school and teacher changes were very similar to those noted in the review of literature. For example, Jackson (2007) noted that schools found ESDGC to be a motivator, creating enthusiasm in both teachers and pupils. Certainly in this current study, the enthusiasm and belief in the ESDGC changes was noticeable from teachers across all schools. The more joined-up approach to ESDGC, indicated by many of the teachers’ comments, was also noted in schools addressing ESD/GC by Ofsted (2003, 2008), Hren (2004) and Jackson (2007). The involvement in a number of school award schemes, and especially international linking, was also noted by Jackson (2007) as being different to schools that did not address ESDGC deeply. The interaction with the community was noted by Ofsted (2003) and Global Action Plan (2007). Ofsted (2003), Jackson (2007), Hren (2004), EES-SW (2007) and Gayford (2009) found that pupil participation was a key feature in ESD/GC schools.

From my previous experience in this field I had usually found ESDGC being developed first in Key Stage 2. This had certainly occurred in Llefni and Gyrn. However, it was enlightening that in Drosogl ESDGC development was seen by one teacher to have moved on most in the infants’ section of the school. Also, in three of the five schools (Faban, Gyrn and Drosogl) ESDGC was being coordinated by infants’ teachers. Perhaps the previously more rigid curriculum had hampered some schools’ developments at Key Stage

2, or perhaps it just depended on where the keen teachers were located. This will be discussed further later. Some of the changes discussed above are returned to in Chapters 8 and 9, and considered with other possible factors affecting ESDGC implementation.

The remainder of this chapter explores the benefits that teachers felt ESDGC was having for their pupils. These are then compared to benefits evident in the pupils' own responses in their focus group interviews. No matter how many ESDGC activities are carried out, they will not have been successful if the pupils are unchanged. Outcomes at pupil level are the ultimate measure of achievement in schools; this is stressed in the guidance from school inspectorates such as Estyn (2010) in Wales and Ofsted (2012) in England.

7.2 TEACHERS' PERCEPTIONS OF IMPACT OF ESDGC ON, AND BENEFITS FOR, THE PUPILS

This section brings together evidence of the benefits of ESDGC to pupils. Teachers' views (Table 7.1) have been compiled from comments made throughout their interviews and particularly from their answers to the questions 'what has been successful?' and 'what has been the most significant change in relation to ESDGC in the school?', rather from responses to a direct question about benefits of ESDGC; the benefits listed, therefore, may not entirely be comprehensive.

A great number of benefits were listed (table 7.1) and in each school all teachers mentioned some benefits. Nearly all of the benefits, apart from the knowledge and awareness of certain issues, could be considered as general education benefits, and not specific to ESDGC. Some of these were values such as empathy with, and increased tolerance of others, whilst others were skills, for example, discussion, language and research skills. The individual benefits are now discussed.

Table 7.1 A summary of benefits to pupils mentioned by their teachers. (An asterix indicates that the response was stressed by the head teacher or ESDGC coordinator.)

Benefit to pupils	Number of sources					
	All schools (from 35 teachers)	Faban (from 11)	Llefn (from 10)	Gyrn (from 6)	Bera (from 2)	Drosgl (from 6)
Enjoyment of learning	19	6	4	4	2	3
Interested, motivated and enthusiastic pupils (e.g. through real contexts for learning)	14	6	2*	4	1	1
Knowledgeable, aware (of issues and other people), and learning pupils	12	5	1*	2	1	2
Children make decisions/involved and interacting pupils/ Pupils think for themselves/ Pupils' readiness to consider alternative arguments/ responsible	10	2	2	3	1	2
Pupils have self esteem and are keen to contribute views from their cultural perspective/ Pupils have sense of belonging/ Pupils have pride in their school and selves; More independent and confident pupils	9	6	2*	1*		
Pupils tolerant and appreciative of others/ Less racism in school/ Pupils have appreciation of differences/ everyone included	6	4	1		1	
ICT, language, bilingual, research and discussion skills	5	3	2*			
Parents involved	4	1	1	1	1	
Pupils transfer learning to new situations/ Pupils make connections	3		1	1	1	
Pupils aware of healthy eating	1			1		
Pupils have more humanitarian feelings	1				1	

7.2.1 Enjoyment of learning

The most frequently mentioned benefit was ‘enjoyment of learning’ with nineteen teachers saying that pupils had enjoyed ESDGC activities. In Llefñ, for example, four teachers mentioned this value of ESDGC with the head teacher and ESDGC coordinator saying that this was one of their main aims. In Bera, Teacher 2B, the infants’ teacher, talked enthusiastically about the young children’s reactions to learning about other countries and peoples,

“It’s great, and the reaction you get from them, while teaching about countries, about people, about anything to do with the world beyond their own little worlds – their own square mile. And we’ve had fun you know! And that enjoyment is infectious. It is fantastic.

They like doing that, they’re in their element – in their element doing the countries, dressing up and trying food and seeing how other people are different to us, even though we are all the same deep down – that everybody is different, with different interest and traditions.” (Teacher 2B)

Although this teacher was clearly aware of matching enjoyment with the need for the children to consider similarities and differences, it is possible that in some cases the noting of enjoyment could mask a lack of awareness in some teachers of the need for a deeper understanding and of what ESDGC entails. However, it appears that there were other benefits which resulted from this enjoyment.

7.2.2 Interested, motivated and enthusiastic pupils

Related to enjoyment of learning was the benefit of developing interested, motivated and enthusiastic pupils, mentioned by fourteen teachers. In these schools this was mostly attributed to giving them real contexts for learning. These ‘real’ contexts ranged from learning from visitors to the school, learning with their fellow pupils in partnership schools around the world, to taking part in local and school activities such as looking after school grounds and entrepreneurship activities. In Gyrn, four out of six teachers emphasised this, saying that it made pupils more “interested” and “motivated”, for example children would readily bring things in to the class after doing a session in school (5G). This was also noted by Teacher 2D in Drosgl and six teachers in Faban who mentioned that the children

were asking to do ‘things’. Although these responses may partly be a response to the more pupil-centred, skill-based curriculum, many of the comments were specifically made in the context of their ESDGC activities. In Llefñ, the Head teacher emphasised the move to experiential learning which had helped the children understand and empathise with others,

Before, we tended to learn about these things through books, and maybe through the internet, but now, it's a direct experience for them. They live the experience. (Llefñ head teacher)

7.2.3 Knowledgeable, aware (of issues and other people) and learning pupils

Knowledgeable, learning, and aware (of issues and other people) pupils was the third most mentioned perceived benefit. This was attributed to the experiences described above and to the number of ESDGC opportunities offered to pupils. Some comments were tempered by some doubts about the depth, and persistence, of learning. For example, although the head of infants in Drosgl said that the younger children had enjoyed everything they had done in this field, Teacher 6D, who also teaches infants, qualified this with the comment,

“Well I think they enjoy it all but they don't think wider than that I think. They do enjoy it [though]”

As mentioned earlier some other teachers, such as Teacher 7L, were also quite clear that in the younger classes they were only giving the children tasters of other cultures, and that their understanding was expected to grow throughout their school lives. The acting head teacher of Drosgl, also felt that the children's interest and memories were often short-lived,

“I would say, what I find, is like we saw this morning with the World Cup, that things are fresh [when they are] in the news then when we ask them 6 months or a year later they have forgotten all about it..... Yes... We had a visitor from Lesotho and the children thought it was great... and then some months later they didn't remember it.” (Drosgl Acting Head teacher 2D)

However, this view was not reflected by other teachers or the pupils in the school. Teacher 6D noted, *“She brought visitors from Lesotho here and the children from that time still remember it too”* and in the pupil interviews several excitedly mentioned their visitor talking about Lesotho.

Some of the other schools had found ways to give pupils more lasting experiences. For example, the head teacher of Faban and teachers in Gyrn noted that pupils were more interested in countries because their teachers had been there and visited their partnership schools. Teacher 2F explained,

“Because the head teacher and another teacher in the school had been there they had taken lots of pictures and the children really loved looking at the photos, because they couldn’t really believe how different it was there. In their minds every school is like this school so they enjoyed seeing that too.” (2F)

These vicarious experiences undoubtedly raise awareness. However, the pictures would ideally be backed up with information from several other sources which would allow the children to question and research differences and go some way to overcoming the danger of stereotyping. Llefyn was notable in bringing a constant flow of visitors related to their partnership countries. For example, as well as having visitors from teacher in their partnership schools teachers, they also invited poets such as Benjamin Zephaniah into their school, and visitors from their local Chinese community. These were felt to widen the pupils’ (and teachers’) experience and understanding as well as keeping the topics in their minds. As mentioned earlier, empathy and understanding was also seen to be raised through the use of relevant stories.

7.2.4 Values, attitudes, dispositions and skills

Although enjoyment of learning and gaining understanding and awareness is a useful basis for pupils’ development in ESDGC, in the longer term it will be their values, attitudes and dispositions and their skills which will impact on how they see and change the world (Pike and Selby, 1998; Sterling, 2001; Scott and Gough, 2003; Breiting et al., 2005). It was notable that most of the teachers’ comments related to the development of these.

Values attitudes and dispositions

Children making decisions, being involved, interacting and thinking for themselves were mentioned by teachers across all schools. For example, in Faban Teacher 8F noted,

“They like to come and discuss, and in the class council they come with things for the school too.”

Teachers in Drosogl noted that the children were responsible,

“yes they are responsible. Years 3 and 4 are in the [school] Council but it’s not us who are responsible for it, they are responsible in a way”. (Teacher 3D)

A readiness to consider other opinions was also noted as a significant change by Teacher 2L in Llefñ,

“And also, their readiness to consider... their readiness to change an opinion and consider new ideas, which I think is the most important things for sustainable development, that they are prepared to consider.”

In the more multicultural school, Faban, there was considerable mention of pupils gaining self esteem from being able to contribute views from their own cultural perspective. This was undoubtedly because the school’s emphasis on helping the children to integrate. The head teacher pointed out that they had concentrated on this aspect following, rather than before, the success of their Asian partnership work. Her reasons were,

*“we felt that they were getting to know the children in ****, but that they didn’t know each other somehow.”* (1F)

Four teachers noted an increase in pupils’ confidence, self esteem, and their tolerance and respect for others as a result of encouraging the children to share information about themselves,

“And they had to do self portraits and write one thing we didn’t know about them, something interesting – it had to be interesting; and they had to write ‘I am special because’ They enjoyed that. They all wanted to say something but it really comes in from day to day life – how to respect others, how would we like to be treated. And it all underlines behaviour and so on I think.” (Teacher 8F)

The head teacher added,

“There isn’t lot of racism, very, very little, nearly none..... So I think that the tolerance that children have towards each other [is significant]. I’d say that was [due to] the ethos of the school.”

The impact of the ethos of the school on pupils gaining self esteem was also mentioned in Llefñ and Gyrn. The Gyrn head teacher explained how their approach extended across the school and helped the children,

“and it comes almost daily into lots of different things: in how we praise the children, the way they look after themselves, stick to their values ... and [it] helps

their self esteem,[and] how they interact with other children and how they [realise that they] are similar and different; [it comes] into work on friends, work on their social life.” (Gyrn head teacher).

In Bera the head teacher commented on the impact of the work in the infants’ class, saying that this had led to the children coming into the juniors with more humanitarian feelings,

“Well... because [Teacher 2B] enjoys doing a lot of the work, or puts an emphasis on the work, then the children that come up [to Key Stage 2] have a bit more understanding. I see that more of that now than I did in the years before..... you know, more humanitarian feelings maybe...”

Pupils’ skills

In terms of skills, in Droschl, teachers mentioned that the children were more independent, able to think, evaluate and reflect. In Gyrn the head teacher said *“It’s encouraged lots of ideas and discussion which have come from the children.”* Pupils there were said also to be learning to make connections between their lives and where things they eat come from; these comments were backed up by the pupils in their focus group interview. In this school the children were also said to be *“able to think more for themselves”* and to be *“involved and interacting”* (Teacher 5G). The ability to consider other opinions, mentioned above by Teacher 2L is also a skill. Lateral thinking was noted in Bera where the head teacher had also seen evidence of the children comparing, and critically thinking about other topics related to ones they had been studying, for example when comparing the earthquake damage in Chile and Haiti mentioned earlier. Other general educational benefits included improved ICT skills, language and research and discussion skills. For example, the Llefn head teacher noted how working through the medium of English within their international partnership, as opposed to their first language Welsh, i.e. in a real context, had been beneficial for the children’s bilingual language skills,

“And they see a purpose to communicating in English, and their English oral skills have come on well, and the trans-language aspect – from the Welsh to English” (Llefn head teacher)

In Faban also, the real and relevant nature of their work with the southern Asian school, i.e. doing work for a purpose, was believed to have raised standards of writing and communication as well as helping pupils gain ICT and research skills,

“They’ve reacted really well, and they know it’s for someone else, and that’s raised

the standard of the work. Yes, they know there's a reason for doing it, that there's a purpose, and that there's another audience going to read it." (Faban head teacher)

"..... and it was good because it was teaching them too, to use the internet as well as helping them understand more about the country. They definitely enjoyed that." (Teacher 11F)

Working in a relevant context was noted as a criterion for ESD in the outcomes of the European study of Eco-Schools (Breiting et al., 2005) and is implicit in all the literature promoting pupil participation.

7.2.5 Parental involvement

The head teachers in Llefñ, Faban, Bera and Gyrn all mentioned the benefits to children of their parents being involved in their learning, for example by coming to events in the school. This is suggested in general education by, for example, Fullan (2001) and in ESD/GC by (Ofsted, 2003; Hren et al., 2004; Global Action Plan, 2007; EES-SW, 2007; Jackson, 2007). However, although some parents were involved in coming to events in Llefñ they did not seem to contribute to lessons, and even in Faban, where some did, the head teacher mentioned that there were some who were actively opposed to the school's global citizenship work. It is possible that some of these parents in the latter school, coming from a different cultural and educational background, valued a more didactic form of learning than was being practised in the school.

The next section looks at the degree to which the pupils themselves demonstrate the benefits noticed by their teachers and outside bodies.

7.3 EVIDENCE FROM THE PUPILS' FOCUS GROUP INTERVIEWS

This section presents findings from the pupil focus group discussions. These groups included pupils from years 5 and 6 although in Faban only year 6 pupils were involved. The pupils' comments will first be compared to Gayford's (2009) four levels of both 'content knowledge and understanding' and 'process abilities'; these are the most detailed

available for pupil outcomes. Comparison will be made to further published criteria at the end of the section. All pupils have been given pseudonyms.

7.3.1 Faban pupils' responses

One group of six year 5 and 6 pupils was interviewed, two girls and four boys. They were a very lively, confident group and seemed to enjoy the interview. In contrast to the other schools most of the interview was conducted through the medium of English; this was the pupils' choice. As they left all said *"thank you"* enthusiastically with one boy saying *"Thank you for coming, I've learned a lot today"* and a girl *"yes we really enjoyed this discussion, this laughter"*.

When asked what they liked about their school, five made comments about liking the teachers, having good friends and having fun. The pupils confirmed their teachers' views of them being confident, knowledgeable and aware, interested and motivated, and appreciative of others. In many ways they surpassed what their teachers had said about them. They had a wide range of understanding across all the ESDGC themes; many of the topics discussed had not even been mentioned by their teachers. They mentioned in depth, for example, Barack Obama, Martin Luther King, apartheid, Nelson Mandela, global and UK conflict, issues and causes of poverty in other countries and the UK, overuse of resources, recycling, growing plants in the garden and looking after the wildlife, global health issues such as malaria and swine flu, the Haiti earthquake and fair-trade. They confirmed their teachers' views on the impact of their work on racism, and were very well informed and opinionated about this in both local and international contexts. For example, when discussing Barack Obama, Gill made this insightful observation,

"Ehmm, well the reason that Barack Obama is quite good is because he's the first black president and everyone is actually going to be testing him." (Gill)

Tara, a pupil whose parents are originally from India, and who was initially quite shy, commented, *"Mmm, I think everyone is the same really."* Charitable concerns had obviously played a fairly large part in their knowledge of some global issues. However, they also showed they had considered things, for example, whether countries were completely poor,

“South Africa has a big football stadium so must have some money even although lots of people are poor (boy)

On poverty in their own country some showed they were perhaps reflecting adult comments they had heard,

“Well actually some people pretend that they are poor sometimes just so that they can get money to go out and so on” (girl).

They gave the standard definition for fair trade and they knew about other charitable initiatives such as *Send a Cow*, albeit with some misconceptions. They showed that they knew about connections between themes e.g. the effect of poverty on health,

“yes and people, because they don’t have a lot of money they can’t have infections (sic)... injections.” (Len)

News about celebrities in the media had also impacted on them,

“Ehmm, some people are dying because mosquitoes are biting them because like Cheryl Cole, she went to Africa and she didn’t have an infection (sic) and now she’s ill.” (John)

They also showed considerable thinking skills, for example thinking about their futures and reconsidering how those choices might be good or bad for their environment. They were convinced that they would have to make changes in the future such as driving less. One thought there would be more, and one less, pollution; one said oil would run out. Some explained how technology could help, one thought there would be less war because they could talk about peace whilst another thought there would be more war, because she had seen the recent street fighting in the UK. They could also see dilemmas,

“If we start recycling more, where does the plastic go, [to] a factory, well the factory is making the pollution with all the smoke so,..... mmm. It is very difficult.” (Ian)

Another, having just been discussing climate change, then talked about his aspirations,

“I think I either want to be a doctor or a pilot, but mmm, a pilot’s not really helping the world!” (John)

In comparison with the other schools with international partnerships it was interesting that they did not dwell on their partnership in southern Asia, only briefly mentioning pen pals there and appearing to know only a little about the country. This reflected some comments made by their head teacher who expressed some doubts about the impact of their

partnership. Their general knowledge of issues and ability to make connections between them would put this group generally at Gayford's (2009) level 4 for both content knowledge and understanding and at somewhere between levels 3 and 4 for process abilities.

7.3.2 Llefyn pupils' responses

Both groups of pupils interviewed in Llefyn were very enthusiastic about their learning and, confirming their teachers' views, seem to have especially enjoyed, and been affected by, the numerous visitors from other countries and their experiences of linking with a school in a Caribbean and China. When asked 'what do you like about your school' their replies reflected this,

"I like the visitors. They come from lots of all kinds of countries, Jamaica and all kinds and they're fun to learn from. The whole school has the experience too, not just us, so it's good." (Girl 4L)

"To me the most interesting visitor has been Yasuf and the reason is because from his answers we got lots of information and liked when he told us about the toys he made when he was little out of wood and he couldn't buy them and he liked to make things like little cars and he made a sound with his mouth." (Girl 3L)

"with links we've had meetings with people from different countries.. We've met someone for Finland, someone from Jamaica and people from.... (other whispers).. China and we've had fun meeting them." (Boy 2L)

Reflecting a stimulating environment, but also one where they gained knowledge and understanding, Girl 2L said,

"Also with the teachers, because they teach you new things each day, you don't wait to hear. It's good for your education and it's also fun learning."

Three pupils also pointed out that they enjoyed their school council and their participation in decision making,

"I like it because we have a school council; the club gets to help and to choose what to do and I like that." (Girl 7L)

Girl 6L added, demonstrating their humanitarian feelings “*We have been raising money for children in ****, children who are without education.*” This reflected their previous involvement with an Oxfam-funded ‘Right to Education’ workshop and their subsequent class work. Their sources of information were wide, from visitors, pen pals in the Caribbean and China, teachers’ visits to a variety of countries, news, newspapers, their home life, and their own observations of trends, for example, when shopping, where one had noticed a sustainability issue,

“and if you think, we go to supermarkets today and we buy things like biscuits and they are four different wrappers, a bit like pass the parcel.” (Girl 3L)

This showed that they were not confining their learning to school but also taking it home and into the community as also noted by Gayford (2009). There was a host of comments reflecting ‘real’ or experiential experiences. It seems that their head teacher’s and ESDGC coordinator’s aim to give these children a real experience of living in a multicultural world has succeeded; their education had become alive. They were confident and could talk comfortably about local and global poverty, local environmental issues, waste and climate change. They showed that they were trying to work things out for themselves. For example, when discussing fair trade and why people don’t earn a lot of money the following comments were made,

“and perhaps with people who work on the farm, [if] there is only one farm in the village and everyone has to work there, perhaps because there are a lot of them they can only pay a little to everyone, not much to one person.” (Girl 1L)

“Ehmm, perhaps because the business needs lots of money to buy other things and perhaps that’s one reason and perhaps there are other reasons too.” (Girl 3L)

They were also zealous about changing the world for the better and truly believed they could help with this. Their attitudes can be summed up by the following comments,

“People think only adults can change the world but I think that everyone, even very, very little children can learn now so when they grow, when they’re big they don’t do bad things. And I think children can even help through playing in the yard, using the recycling bin, putting fruit away in the compost bin.” (Girl 1L)

no, we don’t needs Ipods and things like that, just things that help us live and can help us, but we throw away a lot of money that we make on things like that. (Girl 2L)

The following two comments show that they recognized that efforts were being made to change to more sustainable methods, and that sometimes incentives might be needed to encourage change,

“also in supermarkets they make bags out of plants instead of out of plastic. When people buy plastic bags a lot of people throw them and turtles eat them and things like that and jellyfish” (Girl 4L)

“and also with plastic bags they say in Tesco and places like they will give you more points and that makes people want to.” (Girl 2L)

Finally, showing that she had enjoyed the interview and could see further possibilities, Girl 3L said,

“I think we should talk to the Government, have a chat like this with him, with them, and it has the power to do something, without children just doing it.”

This reflects Gayford’s (2009) comment in level 4 process ability where he notes that pupils begin to realise that not only they can change things but are aware of who else they need to persuade in order for change to happen. When questioned about this, the pupils added that they had been studying the government recently. The focus group was held just after the general election, therefore this was not too surprising. Their general ability to think and their keenness to change the world put many of these pupils at Gayford’s level 4 on process abilities. On content knowledge and understanding, they generally also appeared to be at level 3-4.

7.3.3 Gyrn pupils’ responses

Two mixed groups from years 5 and 6 were interviewed, with a total of thirteen pupils, comprising seven girls and six boys. Both groups were fairly talkative but appeared more formal than some of the pupils in other schools. They had all been involved in filming for a new ESDGC DVD during the previous fortnight and some, at times, seemed to be quoting pre-prepared lines. Once again their responses confirmed much of what their teachers had said. They seemed to really enjoy being in the school. Many of their ‘likes’ about the school reflected their own participation. For example, some had enjoyed aspects such as taking part in the school council and *“making decisions for the school”* (Louise). These pupils tended to be in Group 1 which contained more members of the school council

than the other group. Pupils in the Group 2 were much less enthusiastic about this and referred to the school council as something others were involved in, again reflecting the importance of actually taking part. Other pupils liked being a Green School “*because we have healthy food and we recycle and reuse.*” (Gari). James liked the fruit at break time.

When asked about what they knew about global issues they were very knowledgeable. A key stimulus for learning in this school, also noted by the teachers, appeared to be the news, for example,

We get reading the newspaper whenever we want and we see issues and we all get to see what's happening. (Louise)

They mentioned the Iceland volcano, a local murder, the new government and the Haitian earthquake. They were aware of the influence of poverty on the outcomes of natural disasters,

“The people in Haiti are poor and it destroyed their houses and it had a big effect on them.” (Ellie)

They were very interested in global issues such as poverty and curious to know more. They suggested many things they would like to know, such as why everyone doesn't have an earthquake, and why some countries are good and some not, and that that wasn't fair. They asked questions like “*Why are some people fighting in countries like Afghanistan?*” (Gari) and “*Why do people steal and things like that, steal money?*” (Ellie). They had a growing understanding of some of their global connections, and mentioned many types of goods they used that came from other countries,

“We have food from across the sea and it costs, and it wastes energy and it's not good for the environment because there's lots of aeroplanes and we should pay a fair price to the people who make the good food.” (Gari)

They also had a good understanding of what could be causing climate change and many ideas about what they could do to lessen carbon dioxide emissions (although one called it ‘smoke’). They described fun activities such as fair trade parties and visiting a farm to learn about keeping hens. They had also taken a large role in arranging this visit.

The pupils were enthusiastic about their international partnership work. It was clear that their teachers' visits to China, and particularly southern Africa, had had a large impact on

their learning about those countries as well as the emails and letters exchanged with their “friends”. They had also had visitors from these countries. They knew a lot about the geography and about the ways of children’s lives in southern Africa and China, including many positive things, and they were keen to find out more. When talking about southern Africa they did not emphasise poverty, but talked instead of different ways of doing things, for example, of the children walking to school and being good at football and making balls from plastic. “*They make them themselves*” (Helen). This indicated that their teachers were successfully avoiding some stereotyping. They were not, however, interested in making their own plastic balls!

On Gayford’s (2009) Content knowledge and understanding statements they were perhaps at level 3. On his Process abilities some seemed to be at level 2-3 whilst others, who showed lateral, critical thinking and curiosity, were nearer level 4.

7.3.4 Bera pupils’ responses

Two groups of five pupils were interviewed from years 5 and 6; these comprised all pupils from these years, which are taught together. The first group contained mostly year 6 pupils and the second year mostly year 5. The children seemed to enjoy the interviews and talked freely. They were generally very aware of, and more passionate about, local sustainability issues which had touched their families’ lives, than other issues. For example one boy from a farming family was very knowledgeable about the impact of the Chernobyl nuclear accident which still affected his farm. He also knew a lot about the local nuclear power stations. All the pupils had stories to tell about the drowning of their local valley to make a reservoir. The importance of this kind of local understanding is stressed by Orr (1992) and Sterling (2003). They also recognised the contradiction between driving less and wanting to drive themselves, although they recognised that living in a rural area meant they would probably have to drive. They knew a great amount about the importance of keeping healthy and about their environment, although this was mostly mentioned in terms of keeping them healthy, probably a reflection of emphasis on this in the Healthy School scheme.

They also had a very wide range of knowledge and awareness of global issues. The following topics arose when asked about global issues and their connections with the world:

- earthquakes in Chile and Haiti (and impact on the people there);
- the volcanic eruption in Iceland and the impact of the ash cloud;
- the oil spill in the Gulf of Mexico and its impact;
- conflict in Afghanistan and local involvement;
- fair trade (what it is about and what they do about it in school);
- charitable work for Christian Aid, Comic Relief (on malaria), Send a Cow, Action Aid and water supplies in Africa, Children in Need;
- poverty in Africa; and a little about diseases affecting people in other countries e.g. malaria;
- the football World Cup;
- the new US President, Barack Obama;
- climate change and their impact on other countries;
- nuclear power locally and also the Cherbobyl nuclear accident incident on local farming;
- levels of water in their local lake and the movement of people when it was flooded in the past;
- Lesotho (many facts);
- South Africa – geographical facts, colours of people, World Cup, rich and poor.

However, some of this knowledge was quite stereotypical. Several seemed under the impression that most people in Africa are poor, although, as in Faban, two pupils did acknowledge that South Africa had rich and poor people; this was mentioned in relationship to the Football World Cup. They knew something about reasons for poverty (mainly in a fair-trade context),

“There’s not a lot of food in Africa and it hits them because they don’t have a lot of rain.” (Girl 6B)

They believed that Africa is hot and dry all over and they were unsure about where individual countries actually were. They knew a great amount about the geographical areas of South Africa but when questioned about apartheid they had not heard of it

(although it is possible they had discussed this without the word itself being used). When questioned further about poverty in Wales they acknowledged that not everyone in Wales is rich either but said that there are poor people in Cardiff.

“yes, in Cardiff, there are people on the streets, sleeping on the street.” (Boy 3B)

Their views perhaps reflected the fact that they all come from an extremely rural area where they certainly don't *feel* poor - most are from farming families. (The low number eligible for free schools meals confirms this). They also knew about the impact of climate change on other countries; some were very knowledgeable about the causes of climate change, whilst some had an inaccurate understanding. They were aware of some things they could do to influence the future such as eating healthily and buying fair-trade goods,

“We've got a Fair trade shop and we sell orange juice,, apple juice, raisins and bananas” (Girl 3B)

The impact of television based fund-raising also showed,

“people in the world can give £5 to Sport relief to buy a net to put over children so when mosquitoes come they can't bite them and give them malaria.” (Boy 2B)

In summary, the pupils' responses in this school reflected its very rural position, an emphasis in the school on charitable events and geography, and perhaps fewer experiences of meeting people from other countries than in the other schools. The level of understanding of issues for these year 5 and 6 pupils would seem to be at Gayford's level 2 of Content knowledge and understanding for global issues, but at level 3 for local sustainability issues. However, on his Process abilities more were at level 3. It should be remembered, however, that the ESDGC coordinator who had spent more time studying ESDGC and had more support with its development than the head teacher, teaches the infants classes. It is known that she uses very interactive activities in this class and brings in many visitors with links to other countries. It was also noted by the head teacher that pupils were moving up from infants with a wider understanding of global issues. As is only a few years since they began concentrating on ESDGC in the infants and these pupils have not yet reached years 5 and 6 and it may be that when they do they will show a greater depth of understanding of global issues than current pupils. In retrospect, it would have been useful to interview some of the younger pupils too.

7.3.5 Drosogl pupils' responses

Group 1 from Year 6 was a lively, confident group of children who all enjoyed talking. The five pupils in this group were aware of many global issues gleaned from frequently watching the programme *Newyddion Plant* (Children's News) and from fund-raising activities. They also seemed to look at newspapers at home too. They mentioned Afghanistan, Barack Obama's visit there, the earthquake in Haiti, the Asian Tsunami (although the girl who brought this up only had vague childhood memories of this), Water Aid helping to give clean water and helping people live longer, and fair trade. One girl explained,

"Tesco has had lots of fair trade products and every time we buy Fair trade the money goes to farmers who can grow more things like bananas." (Girl)

This 'slightly' inaccurate description was typical of Gayford's (2009) level 2 for content knowledge and understanding. They were enthusiastic about their new link with Turkey and said they had emailed pupils and sent presentations; however when asked about the country they mentioned mostly facts about its currency. This link had been forged by a newly qualified teacher and was still in its early days.

The four Year 5 pupils in Group 2 were much shyer and knew more about green issues than about current global issues. Their views were quite stereotyped about both poverty and African countries, and hinged around charitable ideas. They implied that the latter had mostly poor people needing help, for example,

"The children in Africa are poor and they don't get presents at Christmas so we, in the school each year, we make a box of things and send them." (Annie)

This was an issue recognised by teacher 7D,

"And that's something too, when the children think about Africa they tend to think they all are poor so we need to be careful" (Teacher 7D)

Pupils in both groups knew something about health issues in other countries, such as illnesses due to dirty water. Two children had links with other countries, one with Libya, where a parent had lived, and another with Borneo and Kenya where he had travelled with his family. The year 6 pupils knew a lot of reasonably accurate information about climate change causes and impacts and about actions they could take to lessen it; the year 5 pupils knew very little. This was surprising as they were being taught by the same teacher.

As in Bera, although the children knew a fair amount about other countries and global issues, the key issues about which they were passionate were local issues, such as why they should eat healthily and exercise, the environment and vandalism. They had an active Eco council and the pupils who were members of this were exceptionally enthusiastic and, as noted by their teachers, they were responsible and highly motivated to make their environment better,

*“and there were people in the park who just throw things and me and **** we went with a bin bag to pick the rubbish up.”* (Fay)

When asked about what they thought the future would be like Fay gave an optimistic answer, *“more people walking.... then people will be healthy and the world will be happy.”* The others were equally passionate about the future but some were more cynical, *“I don’t think people will recycle, never.”* (Boy) The school council was said to be very active. The children said that this made decisions about raising money for charity.

7.4 COMPARISON OF CHILDREN’S RESPONSES AND TEACHERS’ PERCEPTIONS OF ESDGC BENEFITS

Generally, the pupils’ responses supported the benefits for their education suggested by their teachers (Table 7.2). As noted by their teachers, pupils in all schools clearly enjoyed their ESDGC learning and were motivated and interested in ESDGC topics. They were confident and keen to contribute their own views. They were aware of a wide range of global issues although there were some stereotyped views on poverty and misunderstandings about climate change; these were noted by some, but not all, teachers. They were particularly enthused by experiences that really touched their lives. For two of the five schools (Bera, Droschl) these were mostly local sustainability issues. In Llefn, due probably to the large numbers of relevant visitors, and to two undoubtedly enthusiastic teachers, the pupils were very enthusiastic about issues in several other countries. This school seemed to have succeeded in giving experiential global experiences which really enriched their pupils’ lives.

Table 7.2 Comparison of children's responses and teachers' perceived benefits.

Benefits suggested by teachers	Evidence of benefits from pupil focus groups				
	Faban	Llefn	Gyrn	Bera	Drosgl
Enjoyment of learning	√	√	√	√	√
Knowledgeable, aware (of issues and other people) and learning pupils	√	√	√	√	√
Interested, motivated and enthusiastic pupils (e.g. through real contexts for learning)	√	√	√	√	√
Children make decisions/involved and interacting pupils/ Pupils think for themselves/ Pupils readiness to consider alternative arguments/ responsible	√	√	√	√	√
Pupils have self esteem and are keen to contribute views from their cultural perspective/ Pupils have sense of belonging/ Pupils have pride in their school and selves	√	√	√	√	√
Pupils tolerant and appreciative of others/ Less racism in school/ Pupils have appreciation of differences/ everyone included	√	√	√	√	√
Pupils have real and relevant experiences	√	√	√	√	√
IT and research and discussion skills	√	√			√
More independent and confident pupils	√	√	√	√	√
Pupils transfer learning to new situations/ Pupils make connections	√	√	√	√	√
Pupils aware of healthy eating	√	√	√	√	√
Pupils have more humanitarian feelings	√	√	√	√	√
Pupils develop as bilingual learners		√			
Parents involved				√	

There was a similar situation in Gyrn with interest sparked by their two international partnerships, and in Faban where the pupils were very aware of, and passionate about many global issues. The location of this school near a hospital may mean that a large number of these pupils are likely to have well-educated parents and they may well have

picked up extra ideas from them. The low number entitled to free school meals may support this suggestion.

Pupils in all schools also confirmed their teachers' points that they were given many opportunities to participate in the life of the school; they clearly enjoyed this and those who were in the school council or Eco-council were particularly enthusiastic about this. This agrees with Gayford's (2009) observations that pupils enjoyed participative activities. They all took action for sustainability and charity and in Llefyn and Drosogl schools they were extremely passionate about this. Some were almost incredulous at the unsustainable actions of some people and showed that they wanted to influence others; some realised that they may well have to influence those at higher levels too. Most of them had thought about the future and about solutions to climate change; some were positive, some realistic and others quite pessimistic. All groups showed considerable evidence of critical thinking and lateral thinking, and the topics raised in the focus group provoked most of them to critically consider issues and to make some considerable deductions spontaneously. Obviously some pupils would naturally be better at this than others but they gave the impression that all schools had, as mentioned by their teachers, given pupils considerable opportunities for developing thinking skills in their school life.

7.5 COMPARISON OF TEACHING AND LEARNING LEVELS WITH PUBLISHED CRITERIA

As mentioned above, three schools had completed an audit of ESDGC against the WAG criteria (Welsh Assembly Government 2008b). They estimated that they were at the following levels:

- 'Embedded' for Global citizenship and 'Developed' for ESD (Llefyn);
- 'Embedded' (Gym);
- 'Embedded' (Bera).

The closer examination of practice and pupil responses in this section of the study has shed some more light on schools' achievements, especially in the learning and teaching categories of the self assessment tool. These findings are now compared to the Estyn (2010) criteria which give a little more detail on pupil achievement than the otherwise

similar WAG criteria (Welsh Assembly Government, 2008b) and also to other sets of criteria for learning, teaching and pupil involvement from Gayford (2009) and Oxfam (2006). Levels of whole school development, leadership and management and partnership and community will be compared to the WAG (Welsh Assembly Government, 2008b) and Scott (2010) criteria in Chapters 8 and 9.

Compared to the Estyn (2010) levels it is estimated that all five schools were indeed at the 'embedded' level for aspects of pupil involvement, i.e.

Pupils make regular suggestions for and take initiatives in SD and GC practices of the school; arrangements for pupil participation is well developed; ... Pupils are active in making decisions about wider issues in the school (p. 6),

They also appeared, generally, to be at this level for pupils' knowledge, understanding and skills in the area of sustainable development,

Pupils develop their understanding and skills through decision making and carrying out their own initiatives (p. 5)

The critical and lateral thinking on global issues from pupils in Faban, Llefyn and Gyrn confirmed the embedded level in these schools,

'Pupils understand and apply knowledge of EDSGC to analyse a range of interpretations about sustainability and to challenge simplified or stereo-typical views of other societies (p.5)

The Gyrn pupils were notable for their positive images of other countries and insightful questions, and the Faban and Llefyn pupils for their wide range of understanding and application of critical thought. However, in Bera and Drosogl, although aware of many global issues, the pupils' more stereotyped views reflected the lower end of the 'developed level' for global education aspects.

In a comparison with Gayford's (2009) levels, as noted above, it is considered that most groups displayed the characteristics of level 3 for both content knowledge and understanding and for process abilities. However, there were some who displayed considerable characteristics of his level 4 for both categories and some who appeared to be

closer to level 1-2 on aspects of poverty. It should also be remembered that these pupils are of primary school age and that the criteria above do not differentiate by age. To be achieving levels 3 and 4 at this age gives much hope for their future development, especially with the increasing development of skills-based learning in secondary schools.

Oxfam's (2006) *Curriculum for Global Citizenship* does differentiate by age and looks separately at knowledge and understanding, skills, and values and attitudes. In a comparison with achievement levels within this publication, remarkably many pupils in the focus groups were displaying values and attitudes at the top end of the scale i.e. for ages 16-19. These included: open mindedness, sense of individual and collective responsibility, valuing all people as equal and different, commitment to sustainable development and willingness to work towards a more equitable future (p. 7). On skills, most were achieving those suggested for their age group, apart from those who were not 'detecting bias, and stereotypes' (p. 6). Most were displaying knowledge and understanding at the Key Stage 3 level, for example, on inequalities within and between societies, basic rights and responsibilities, understanding of issues of diversity, awareness of interdependence, awareness of our political system and others, and understanding the concepts of possible and preferable futures. Also, they were at least questioning the causes and effects of conflict, and the local and global relationships in conflict (p. 5).

On the more generic skills listed in the ESDGC Common Understanding (Welsh Assembly Government, 2008b), pupils' responses were around the middle of the progression statements for 'Developing thinking in ESDGC' and slightly further along on 'Developing Communication in ESDGC'. For example, some pupils could certainly 'use some prior knowledge to explain links between cause and effect and justify inferences/predictions (p. 22), 'link the learning to similar situations within and outside of the school' and 'form considered opinions and make informed decisions. They could also 'take into account the opinions of others' and 'communicate effectively, in a way that suits the subject, audience and purpose.' (p. 23). They did not use much 'ESDGC specific vocabulary' (p. 23), but that, perhaps, is not such a bad thing.

In summary, these findings do reflect schools which are well on their way to enabling pupils' to develop ESDGC awareness, understanding and skills. Pupils are also developing skills and an appetite for learning which should be of benefit to them throughout their lives and also be of benefit to society in general.

7.6 TEACHERS' VIEWS ON FURTHER ESDGC DEVELOPMENT

It was noted above that although teachers were fairly satisfied with their ESDGC development, few were complacent; in all schools it was recognised that their ESDGC journey was not over and that there were still areas to develop. In Llefyn and Faban they intended to give more attention to sustainable development. In Faban this included making more explicit links between their vegetable growing, food miles and climate change. Both Faban and Gyrn were in the process of further developing their curriculum links with their partnership countries to enable joint learning about sustainable development and climate change respectively. Also in Faban the head teacher was concerned about winning over some parents who did not understand the need for ESDGC; she was planning “an evening so they can understand why we do what we do” (Faban head teacher). Teachers in Drosogl were considering developing a link with a Zambian school, writing an ESDGC policy and sending teachers on further training courses. In Bera the Eco-School development was noted as the next thing to do. Teacher 2B summed up the general attitude to development of ESDGC,

“We have to move forward, we have to move forward, and it’s likely, as the world changes that we will have more and more things that we will need to do.” (Teacher 2B)

This attitude is often said to be in short supply in schools where external pressures leave teachers exhausted and stressed (Fullan, 2001). It appears that these schools have gone some way to developing a forward thinking ethos of enthusiasm; this has also impacted on their pupils.

7.7 CHAPTER SUMMARY

This chapter has looked at teachers’ perceptions of their schools’ ESDGC development. It has shown that teachers in four schools were fairly satisfied with their school’s level of ESDGC development. They felt that it had moved on well, particularly in terms of pupil and teacher awareness and the way in which ESDGC was integrated across the curriculum. In the fifth school, Drosogl, it was recognised that, while they had made a reasonable

amount of progress, there was still work to be done on developing ESDGC in an integrated manner. Teachers in all the schools acknowledged a need for some further development.

A sizeable proportion of teachers in each school noted benefits for their pupils in terms of knowledge and awareness, values, attitudes and dispositions and skills. Enjoyment of learning was most commonly mentioned. Pupils were said to be more aware of ESDGC issues, thinking critically, making decisions and playing a significant role in the life of the school. It was suggested that these generic skills and attitudes could be beneficial to them and to society. In Faban, the school with the high multi-ethnic intake, respect for others in the school and increased self esteem was mentioned frequently. Pupil focus group interviews generally confirmed their teachers' observations. In general, pupils had a wide awareness of both local and global issues. On some topics they had a greater degree of understanding than their teachers suggested, and on others, such as poverty, some showed a lesser degree of understanding. In two schools pupils appeared to have a greater passion for local issues than global ones; in the others their interest in global issues was just as prominent.

A comparison was made of pupils' knowledge, understanding and awareness, their skills, values and attitudes and their participation in the life of the schools with various sets of criteria. This showed that in general they demonstrated fairly high levels of skills and values. Indeed many showed very high levels of critical thinking for their age.

The next two chapters now move on to discuss in detail some of the factors which appeared to be influencing the developments in these schools.

CHAPTER 8 CASE STUDY SCHOOLS PART 3

FACTORS INFLUENCING ESDGC DEVELOPMENT

Chapter 8 commences the examination of factors affecting the development of ESDGC in the cases study schools, i.e. it addresses Key Question 2, ‘What factors influence the development of a comprehensive approach to ESDGC in primary schools?’

The two previous chapters gave an outline of the teaching and learning activities introduced in the schools and the methods promoted by teachers. Teachers in all schools felt that their school had progressed well with its ESDGC development and they named a number of ways in which they felt their schools had moved on. It was noted that many of these changes, such as increased staff awareness, greater integration of ESDGC across the school and greater pupil participation could also be seen as factors which could further affect ESDGC developments. In turn, it was noted that there are many other factors which could impact on the use of these teaching and learning approaches. This chapter begins by examining factors that teachers themselves thought were important to their school’s development of ESDGC. It examines common factors and ways in which factors differed between schools. It then looks at some of the teachers’ comments on why, when and how their school began developing ESDGC; this raised some additional factors.

8.1 TEACHERS’ VIEWS OF FACTORS AFFECTING THEIR SCHOOL’S DEVELOPMENT OF ESDGC

8.1.1 How the factors were elicited

The interviews addressed the factors in several ways. Firstly, throughout their interviews teachers positively mentioned factors that had helped their school’s ESDGC development. As described in Chapter 4, these were coded into ‘factor’ nodes in the NVivo-8 qualitative data analysis programme. This resulted in a large list of factors. Secondly, teachers were asked a specific question about factors i.e. ‘What would you say have been the most important factors in the school’s development of ESDGC?’. They were first given the

opportunity to name some factors without prompting and then they were given the option to consider a list of possible factors, compiled from the literature review findings and LEA officers' suggestions. These were:

- the head teacher's drive;
- dedication, or interest, of other teachers;
- attention to planning;
- teacher collaboration;
- training events;
- peer mentor support;
- networking with other schools;
- case studies from other schools;
- visitors to the school;
- taking advantage of specific opportunities that arise;
- guidance from WAG or Estyn.

Teachers named a great number of factors many of which were the same as those arising during the rest of the interviews. Table 8.1 shows the number of teachers in each school who felt that certain factors had impacted on their school's ESDGC development. There are three columns of ranked factors, columns A, B and C. Column A shows the number of teachers who mentioned factors in answer to the specific question 'What would you say have been the *most* important factors in the school's development of ESDGC? Columns B and C show the number of teachers mentioning the factors positively somewhere within their interview responses. Column D indicates whether LEA officers also mentioned the factors positively.

The actual figures have to be viewed carefully. It should be fairly certain that when a high proportion of teachers mentioned the same factor it was likely that it was important. However there are some issues which complicate interpretation. Firstly, it will be seen that the rank order of the factors in columns A and B is not the same and that the frequency of mention is generally higher in column B. For example, the factor 'Being flexible and exploiting opportunities that arise' is much higher up the ranking in column B than in column A, i.e. it was mentioned by many more teachers during their full interview than in response to the particular question on factors. This may be because the factor was not on

the prompt list presented to teachers, suggesting that teachers were perhaps favouring factors on the list rather than thinking of their own factors. The difference could also have occurred because in the particular question on factors teachers were asked which factors they thought had been *most* important. Secondly, the head teachers and/or ESDGC coordinators who had been most involved in driving the developments often stressed extra factors as important, some of which perhaps went unnoticed by class teachers. Although these factors had the potential to be very important in the schools' development they appear lower down the list order. They have, therefore, been marked with an asterix (*). Where the head teachers and coordinators gave a factor particularly strong emphasis the asterix and numbers stressing the factor are in bold style text. For example, in Llefyn school all the teachers mentioned the role of the coordinator as very important and most mentioned the positive impact of their international partnership. However only the ESDGC coordinator mentioned how much effort and perseverance had gone into maintain these links. This gave it a score of 1 out of 7 teachers (1/7), but it was undoubtedly an important overall factor. It should also be remembered that *every* factor listed was thought to be important by at least one teacher.

8.1.2 Common factors in the schools

Despite the issues of interpretation described above, it was clear that, whilst factors affecting ESDGC development did vary between the schools, there were some consistent factors arising. A motivated and supportive head teacher was mentioned frequently in all schools. The role of the ESDGC coordinator and visitors to the school, teachers working together, developing an international partnership, being flexible and exploiting opportunities that arise, and professional development were commonly mentioned in several schools. Personal interest was noted by the heads and coordinators in all schools.

Table 8.1 Teachers' views of factors affecting ESDGC development.

	Sources from specific question	Sources from the full interviews						
Factors	A.	B.	C. Number of sources in each school					D.
	Total sources	Total sources	Faban	Llefn	Gyrn	Bera	Drosgl	LEA
Motivation and support of head teacher	17/33	21/33	5/11*	7/8*	5/6*	2/2*	2/6	√
Role of the coordinator	17/33	21/33	10/11*	7/8*	1/6	2/2*	1/6*	√
Visitors to the school from community, parents, partner schools	16/33	21/33	3/11	7/8*	6/6*	2/2*	3/6*	√
Teachers working together/all teachers' contributions	13/33	11/33	4/11*	2/8*	4/6*	2/2*		√
Developing school international partnership(s); Visits to and from partner schools; grants for school links; working with a partner finding organisation	12/33	13/33	4/11*	5/8*	4/6			√
Professional development - course or mentor support	9/33	10/33	3/11*	2/8*	3/6*	2/2*	2/6*	√
Being flexible and exploiting opportunities that arise; following pupil's interests	7/33	14/33	3/11	3/8*	2/6*	2/2*	4/6	√
Personal interest	7/33	10/33	2/11*	2/8*	1/6*	2/2*	2/6*	√
Planning for ESDGC	7/33	9/33	2/11*	2/8	3/6		2/6	√
WAG ESDGC guidance documents	7/33	9/33	3/11*	1/8*	4/6*	1/2*		√
Naturally incorporating ESDGC rather than planning		6/33			2/6	2/2*	2/6	
The multi-ethnic pupil intake and opportunities	6/33	6/33	6/11*					
Dedication of the teachers	6/33	6/33			4/6		2/6*	√
Supportive governors	5/33	6/33	1/11	2/7	1/2	1/2*	1/6	√
Support and case studies from other schools	3/33	3/33			1/6		2/6	
High priority to/giving attention to ESDGC/ ESDGC in staff meetings agenda	3/33	4/33	2/11*	1/8*	1/11*			√

Professional development - in school experiences and training	2/33	10/33	5/11*	1/8*	1/6	1/2*	2/6	√
Taking part in school award schemes	2/33	9/33	2/11	2/8*	1/6	1/2	3/6*	√
ESDGC fits well into the new curriculum - greater flexibility	2/33	2/33		2/8				
Accessing key resources		3/33	2/11	1/8		1/2*		√
Working with community and their funding support**	2/33	2/33			2/6			√
Foundation Phase development	2/33	2/33		1/8		1/2*		√
Detailed ESDGC auditing		2/33	1/11*	1/8*				
Success breeds success	1/33	2/33	1/11		1/6			√
Forthcoming inspection	1/33	2/33	2/11					
Perseverance, patience and understanding (with the development of the school's partnerships)	1*/33	2*/33		2/8*				
Sharing information and networking with other schools	1/33	5/33	1/11	1/7	1/11	2/11		
Teaching approaches – sensitivity and enjoyment of learning	1/33	2/33		2/8*				
Special events and country days	1/33	1/33		1/8				
Colourful displays	1/33	1/33					1/6	
Proactively involving pupils		7/33	1/11	2/8	2/6		2/6	
Having an ESDGC policy		3/33	1	1/8	1/6			
Knowledgeable, enthusiastic staff*		4/33	1/11	1/8	1/6	2/2*		√

Notes:

1. 3/6 indicates that three out of six teachers interviewed mentioned a factor.
2. An asterix denotes factors noted by head teachers and/or ESDGC coordinators. Where they particularly stressed a factor the asterix and numbers are in bold style text.
3. Orange highlighting indicates a factor mentioned positively by around two-thirds of teachers or stressed by the head teacher and/or ESDGC coordinator.

The WAG ESDGC guidance was stressed by head teachers and/or coordinators in Faban, Llefñ, Gyrn and Bera. Giving high priority to ESDGC in staff meetings was noted in Faban, Llefñ and Gyrn. Not only were these factors also mentioned by the LEA officers but they also were noted in the literature review as key factors frequently suggested by other research.

8.1.3 Key differences between schools

Some key differences were noted between schools. The most noticeable difference was that teachers in Droschl mentioned fewer factors than teachers in the other four schools, and those they did mention were mentioned by only a few teachers. It was notable that factors like ‘the role of the coordinator’, ‘teachers working together’, ‘WAG guidance’, ‘success breeds success’ were not mentioned by teachers in this school. This may reflect the fact that it was at an earlier stage of ESDGC development than the other schools. For example, as it did not have a coordinator teachers might have been less likely to work together on ESDGC and to be aware of the WAG guidance. In the other four schools although certain factors stood out strongly there were differences. For example, around half the teachers in Llefñ and Faban and Gyrn thought their global partnership was an important factor and perseverance with these partnerships was noted in Llefñ. Neither Bera, nor Droschl, had such a partnership. Although ‘Teachers working together’ was mentioned in all four schools, it was especially notable in Gyrn. In this school the dedication of teachers was also stressed, suggesting strong collegiality. Interestingly, in Llefñ, although ‘Teachers working together’ was stressed by the head teacher and coordinator it was not mentioned by the other teachers. Did this mean they did not really feel so involved?

Taking part in school award schemes was particularly stressed in the full interviews in Llefñ and Droschl, but surprisingly, since all schools took part in such schemes, rarely mentioned in answer to the question on factors. This may reflect on how teachers see the relationships between school award schemes and ESDGC. In Faban, the only school with large multicultural intake, six of the eleven teachers mentioned this as a factor. Although formal planning received only moderate mention, detailed auditing was a feature in Faban and Llefñ.

8.2 WHEN, WHY AND HOW, DID THE SCHOOLS BEGIN DEVELOPING ESDGC?

Examining the reasons for schools beginning to develop ESDGC may throw light on certain influencing factors. In their interviews the head teachers were asked about when and why they began developing ESDGC. They gave various diverse reasons. Other teachers clarified some of their comments.

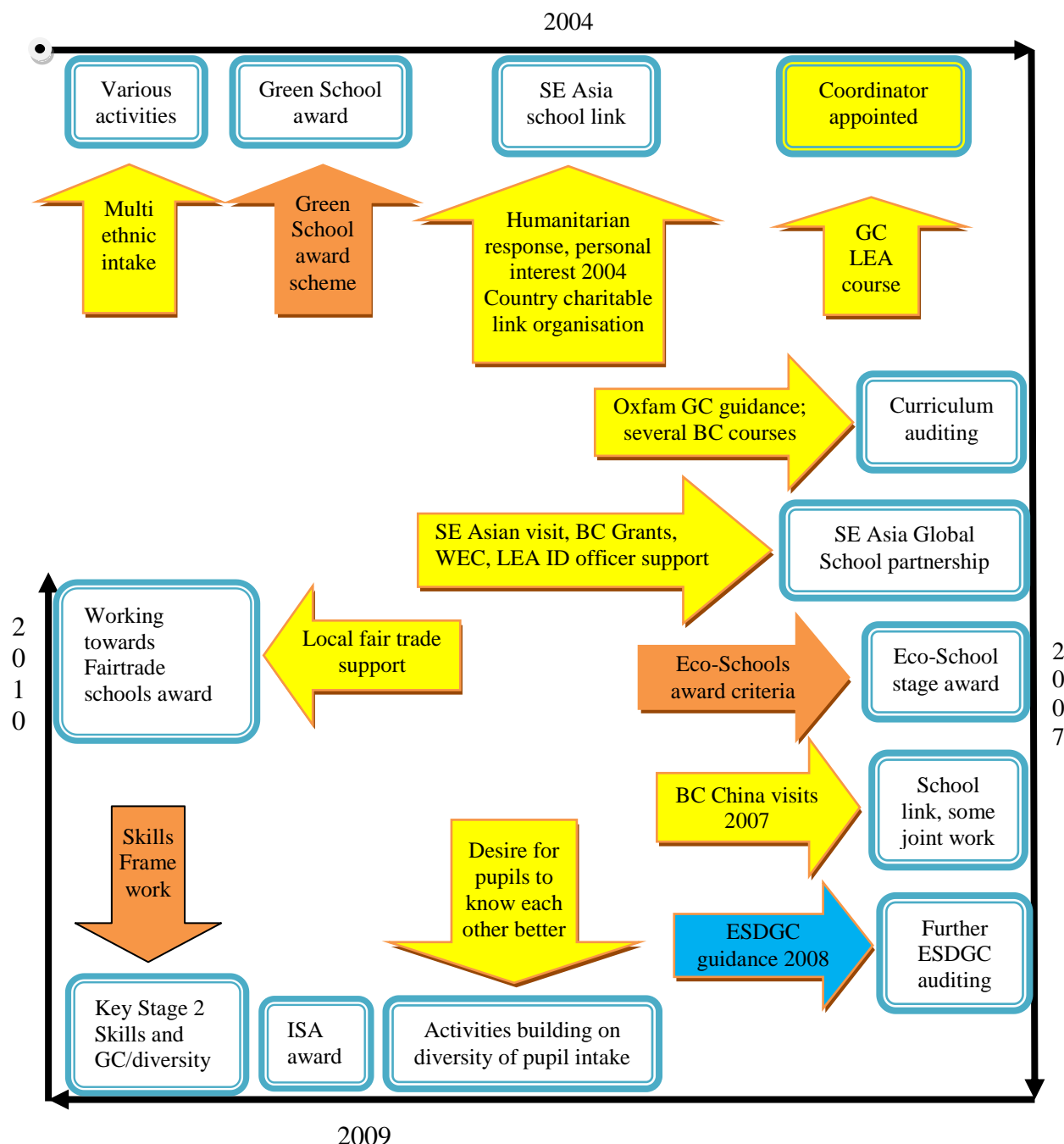
8.2.1 Faban

Although the Faban head teacher said that diversity issues had always been high on the school's agenda because of their multicultural intake, and the school had been taking part in the Gwynedd and Anglesey Green School scheme for some time, the key developments in global citizenship occurred in 2004 as a result of humanitarian, and partly personal interest, reasons. When a tsunami hit the countries of southern Asia she had particular interest as she herself came from a family with strong links to that area. Their initial twinning with a school there began as a humanitarian gesture; it was arranged through a charitable group and the British Council and they raised funds for a water system for their twin school. She visited their partner country in 2007 and the focus of the twinning subsequently changed when they successfully applied for a DFID Global Schools Partnership grant (DGSP). This scheme includes criteria to ensure that schools develop curriculum-based partnerships based on equality. Their schools' partnership was developed and continues to the present day although the head teacher still questions the educational benefits for their southern Asian partner which is a very poor school.

A coordinator was appointed to guide the developments in the school and, using the Oxfam *Curriculum for Global Citizenship* (Oxfam, 1997, 2006), she began auditing and developing education for global citizenship in the curriculum. After the introduction of the ESDGC Common Understanding in 2008 she then became the ESDGC coordinator; however she still often referred to global citizenship rather than ESDGC. A link was later made with a Chinese schools and a new link with another, more well-off school in southern Asia was also being investigated at the time of the study. (This issue will be discussed

further later.) Other award schemes and activities were adopted as opportunities arose (Figure 8.1).

Figure 8.1 Key stimuli and initiatives which encouraged Faban to develop ESDGC.



Note: Yellow arrows note opportunities which particularly sparked interest and development. Brown arrows denote less dominant influences. The blue arrow shows the introduction of the ESDGC Common Understanding. Dates are noted only when these were explicitly mentioned by teachers.

8.2.2 Llefyn

In Llefyn the Head teacher gave the policy driver of ESDGC guidance as one reason for developing it. She traced the development of ESDGC back six or seven years to when she knew ESDGC was an area to develop (this would have been shortly after the publication of the ACCAC (2002) ESDGC document. In her own words,

“the way it started was that I was aware that I, personally, didn’t know much about the area, and wanted to develop the area in the school, so I took the opportunity to appoint a member of staff and give the responsibility of coordinating this area to [her]. So that was a way of moving things forward.” (Llefyn head teacher)

Personal belief in children’s development also influenced her, as she explained,

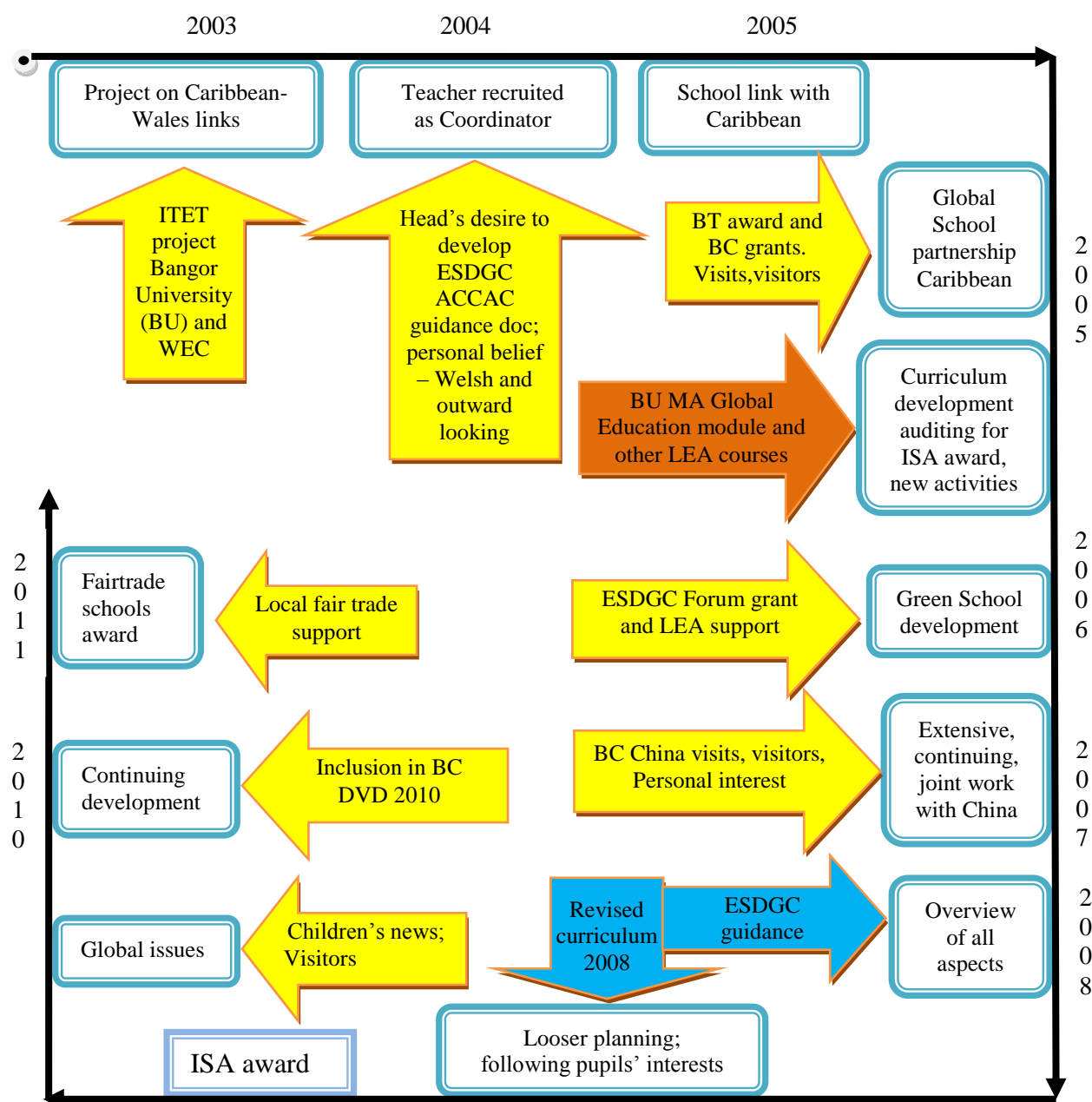
“Yes. I think I feel that we are so responsible for developing rounded personalities and that we want to give them an opportunity – a wide range of experiences to children – and like I mentioned earlier, teach them about their Welshness and their heritage, but also [help them to] realise that they are part of a bigger world, realising that the cultures of different countries are different, but that different doesn’t mean worse – that we can learn from each other.” (Llefyn head teacher)

The coordinator she appointed in 2004 already had a personal interest in global issues from being a member of what she, herself, refers to as a “*cosmopolitan family*” (Teacher 2L) and having worked as a teacher overseas. During her postgraduate teacher training year at Bangor University she had taken part in a project helping schools look at links between their own area and a Caribbean country. As part of this project she had been placed in Llefyn school and had impressed the head teacher. She, too, had a particularly strong belief in the importance of children being given the opportunity in school to communicate with people from other situations and cultures, rather than relying on this happening in their own family lives. In her own words, these experiences shouldn’t be “*the luck of upbringing*” (Teacher 2L).

They began by looking for, and developing, a link with a Caribbean school. After involving the ICT coordinator to develop website links the school won a BT award to develop its work further and their partnership went from strength to strength. The coordinator also took on the development of the Green School award, gaining a small grant to develop out-of-school residential visits for the children and in-school actions. This may have been prompted by her attendance at the local ESDGC forum. Other award schemes

and a China link came later.

Figure 8.2 Key stimuli and initiatives which encouraged Llefni to develop ESDGC



Note: The diagram is not to scale. Yellow arrows note opportunities which particularly sparked interest and development. Brown arrows denote less dominant influences. The blue arrows show the introduction of the ESDGC Common Understanding and Revised Curriculum. Dates are noted only when these were explicitly mentioned by teachers.

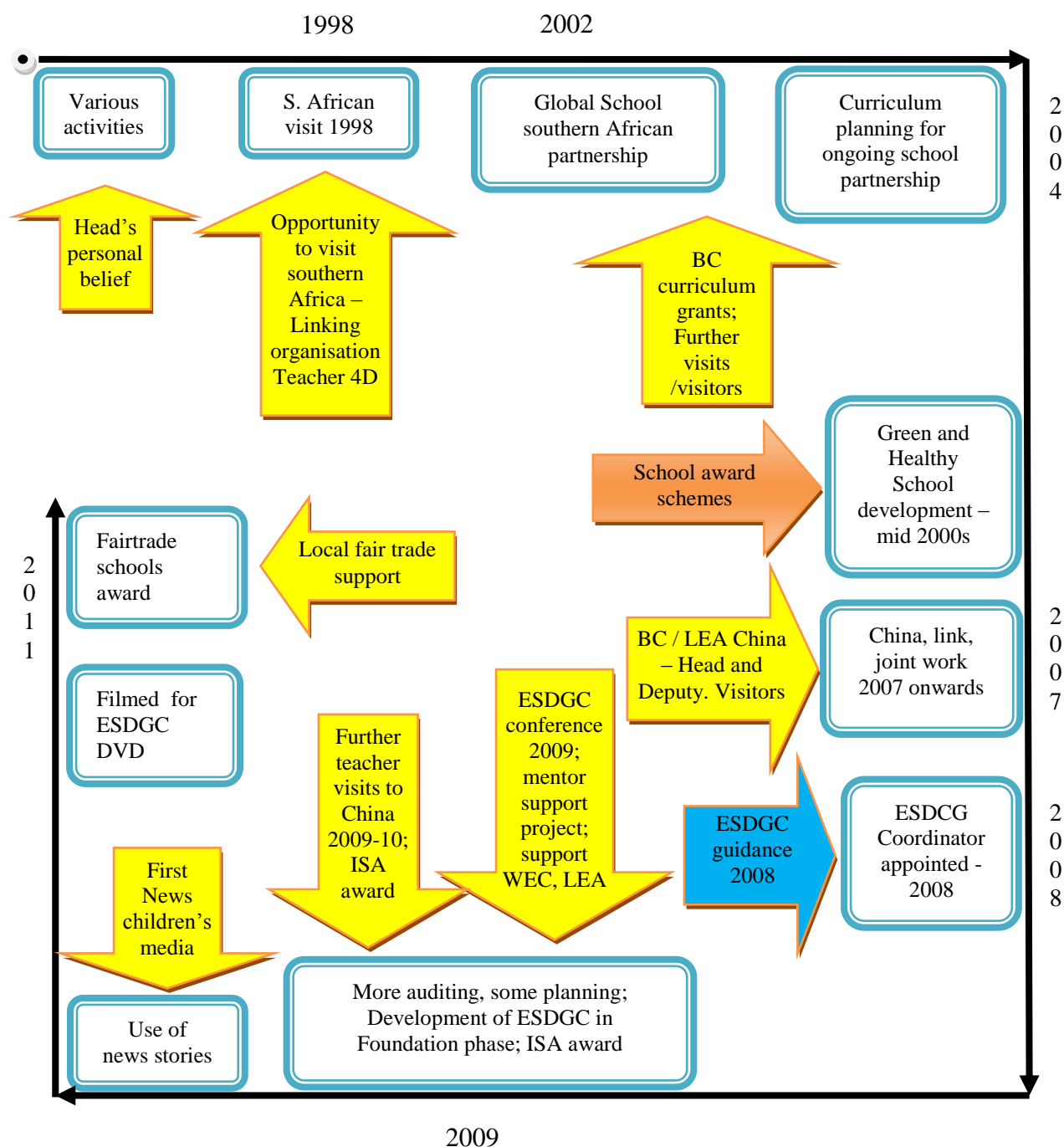
8.2.3 Gyrn

In Gyrn school the head teacher said that they had been doing aspects of ESDGC for some time “*we’ve always been doing it unofficially I think*” but he continued to say that it has been looked at more formally during the past two years since the publication of the Welsh Assembly Government guidance document (Welsh Assembly Government, 2008b) “*[since] when it’s become more necessary and directed*”. Again, personal belief was important. He saw it as “*a way of living*” saying that it was important that the children saw it as that rather than something they did once a week.

“As it happens it’s part of the ethos of the school. It’s a priority in the school, to me as Head and to the deputy and the members of team, that we develop these attitudes because we believe strongly in the values and principles that are behind it.” (Gyrn head teacher)

Teacher 3G confirmed that the school had a history of developing global aspects, saying that he had first got involved in the late 1990s when he was a young teacher and had been invited to attend meetings of an organisation which makes links between communities and schools in Wales and a southern African country. In north-west Wales a key player in this was the previous humanities adviser who emphasised ESDGC type practice (personal reflection). Since then this teacher had visited the African country twice through Development Awareness Fund/British Council-supported initiatives, developed a school partnership, and devised lessons for teachers to deliver throughout the school. When new international opportunities arose in 2007 the head teacher and deputy visited China, developing a successful link with a Chinese school. With subsequent teacher visits to China, the enthusiasm throughout the school was said to have risen even further.

Figure 8.3 Key stimuli and initiatives which encouraged Gyrn to develop ESDGC



Note: The diagram is not to scale. Yellow arrows note opportunities which particularly sparked interest and development. Brown arrows denote less dominant influences. The blue arrow shows the introduction of the ESDGC Common Understanding, a common feature in all school diagrams. Dates are noted only when these were explicitly mentioned by teachers.

8.2.4 Bera

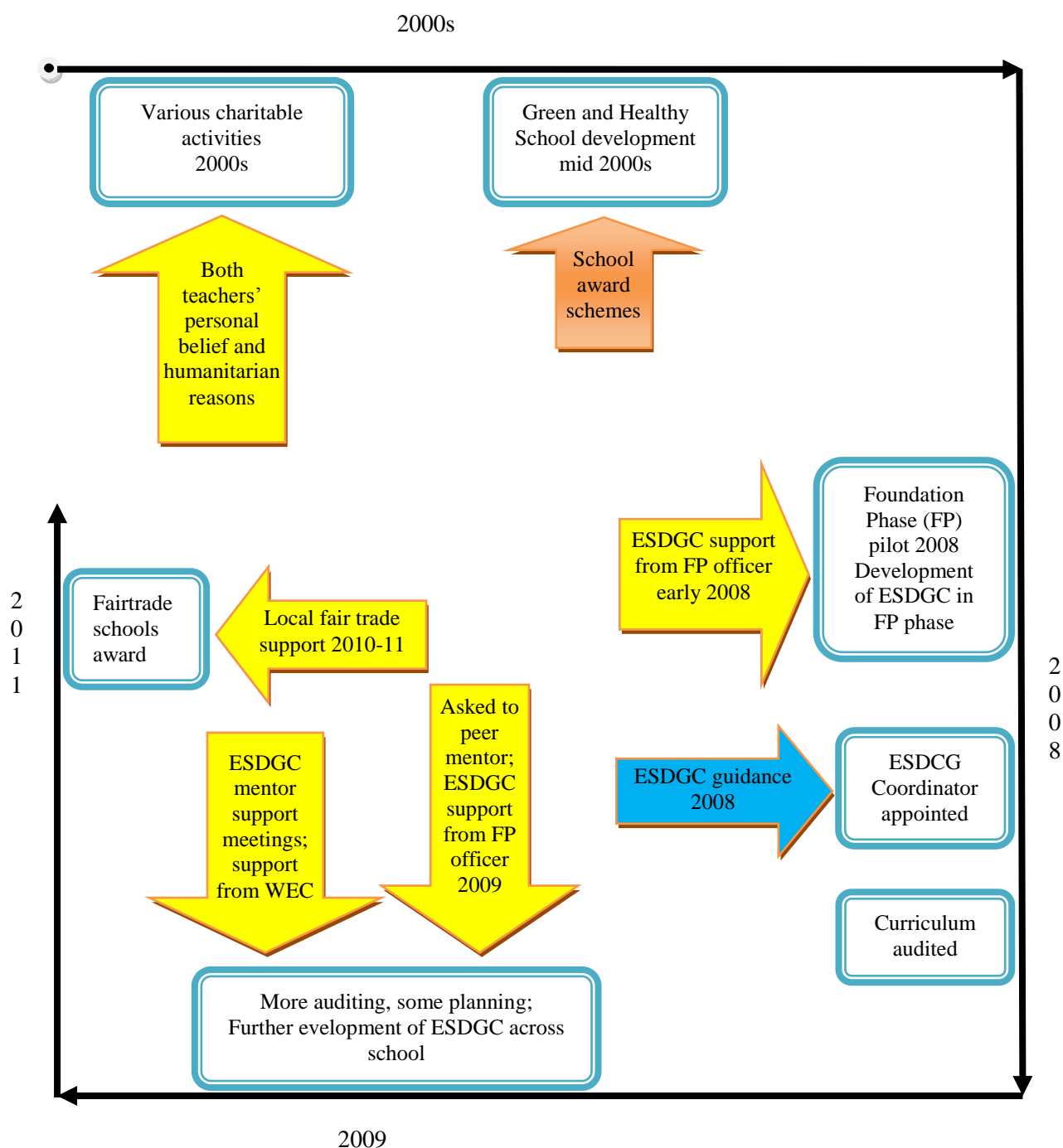
In the small Bera school both teachers also said they had been doing ESDGC for a long time because it was something they both believed in and were interested from their younger years. The head teacher said,

“I’d say we’ve always been doing that, but that we haven’t been aware that it was ESDGC. And so until the name came up, we had been doing things like Operation Christmas Child for years.”

This early emphasis on charitable ventures may indicate that the school was not actually doing ESDGC fully at that time. It is not known if they were, for example, making connections and thinking critically about issues or just raising awareness of poverty. As seen in Chapters 6 and 7, charitable ventures were prominent in every school studied, and in some schools, including Bera, some of the children’s understanding of other countries seemed to be heavily based on what they had learned through charities.

In Bera increased attention was given to ESDGC when they became part of a pilot project for the Foundation Phase in 2008. This work was supported by the keen Foundation Phase advisory teacher described in Chapter 5. It will be remembered that she was passionate and educated about global and environmental learning. She helped introduce a large variety of ESDGC-related activities. Because teacher 2B already had an interest in this field this aspect of learning grew from strength to strength and she became coordinator for ESDGC throughout the whole school.

Figure 8.4 Key stimuli and initiatives which encouraged Bera to develop ESDGC.



Note: The diagram is not to scale. Yellow arrows note opportunities which particularly sparked interest and development. Brown arrows denote less dominant influences. The blue arrow shows the introduction of the ESDGC Common Understanding, a common feature in all school diagrams. Dates are noted only when these were explicitly mentioned by teachers

8.2.5 Drosgl

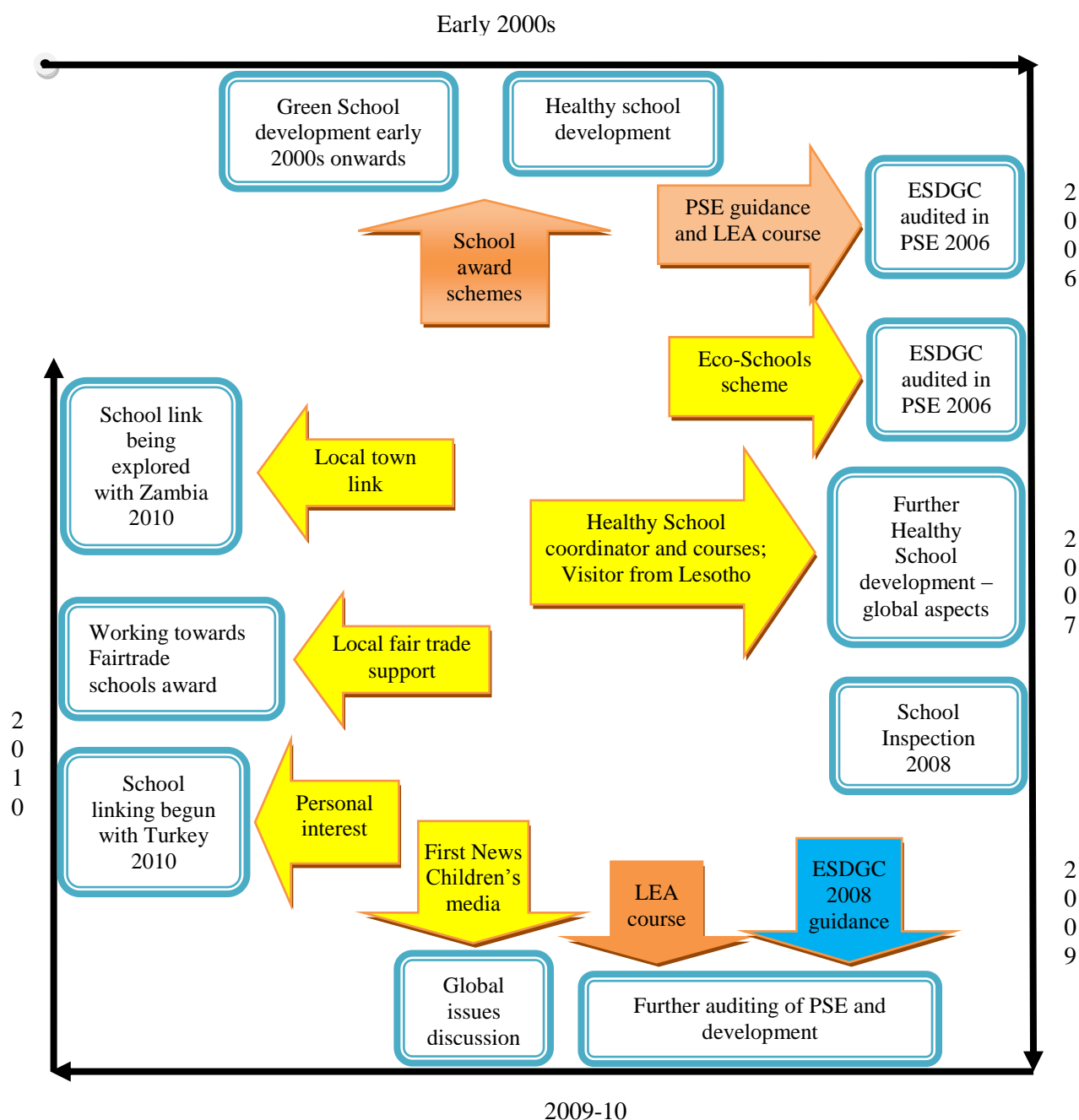
In Drosgl, teacher 2D, the acting head teacher, said it was about six years since they first began to address aspects of ESDGC, mainly within the Personal and Social Education (PSE) Framework. Teacher 4D confirmed that this was prior to their 2008 school inspection. (There was indeed very positive mention of sustainable development and global citizenship in their inspection report, with reference to their Green School development, raising funds for charity and learning about other countries.) The context of already becoming a Healthy School had also helped. However, ESDGC had not been one of their main priorities and it had taken “*bit of a back seat*” (Teacher 2D) after that until around 2009-10 when more detailed attention was given to it again. This seemed to be an example of what the PSE adviser described as a school wanting to “*get other areas sorted out first*”. Teacher 2D explained,

“..... it was about two years after the new curriculum came out in 2008. I looked at the curriculum, at the PSE framework and I worked on the plan at that time and I noticed how much work there was in ESDGC, with the whole thing at that time, but on looking at it, I saw that it was happening in the classroom; it was in the work plans”

Teacher 4D agreed that it had “*moved on*” in the last few years. This was helped by having been on some LEA courses and taking part in the Healthy School scheme. This mention of the Healthy School scheme is perhaps revealing. Although no teacher in this school *specifically* mentioned the global aspects of this, the Healthy Schools adviser for Anglesey had promoted them in the Healthy School scheme from the mid 2000s (see Chapter 5). She had borrowed resources from the local Development Education Centre for training sessions and explained the links between Healthy School, Green School and ESDGC. Drosgl had also been a Green School since the early 2000s and had followed this by becoming an Eco-School, fired by a personal interest of the head teacher and a keen infants’ teacher. All of these schemes would have been contributing to aspects of ESDGC, even if not explicitly recognised as such by the school at the beginning. Indeed, only in Llefyn was the role of Green School overtly mentioned as part of their ESDGC development. It was as if Green School was taken for granted and perhaps not fully considered as contributing to ESDGC. Figure 8.5 shows key features in Drosgl’s ESDGC

development.

Figure 8.5 Key stimuli and initiatives which encouraged Drosogl to develop ESDGC.



Note: The diagram is not to scale. Yellow arrows note opportunities which particularly sparked interest and development. Brown arrows denote less dominant influences. The blue arrow shows the introduction of the ESDGC Common Understanding, a common feature in all school diagrams. Dates are noted only when these were explicitly mentioned by teachers

8.2.6 Summary of why, when and how schools began developing ESDGC

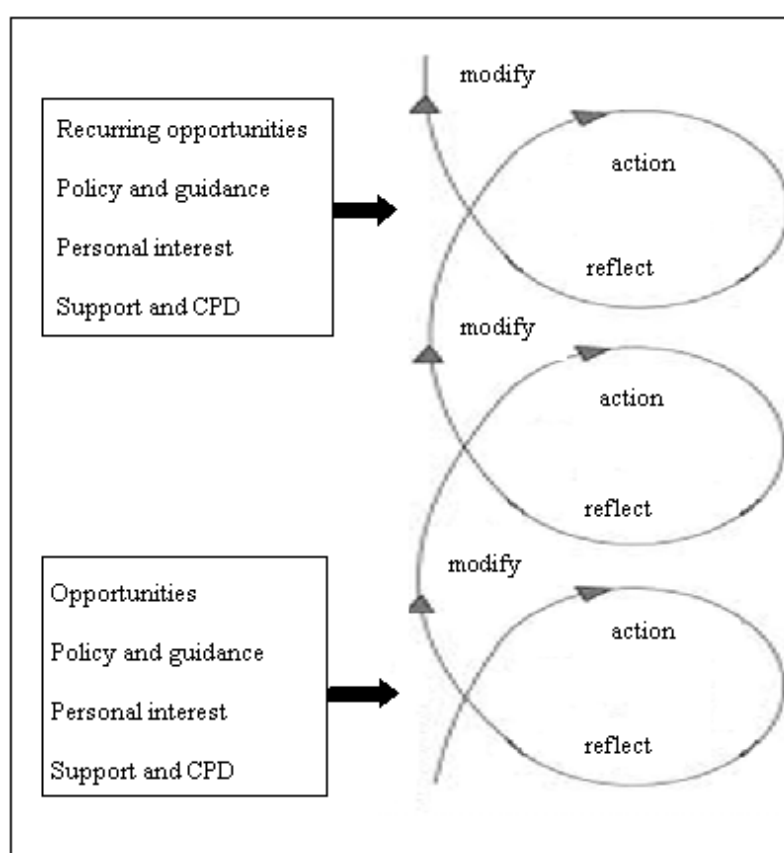
In summary, personal interest, teachers' humanitarian instincts, curriculum drivers and a belief in widening children experiences, all played a large role in the reasons for the schools beginning to address ESDGC, with all saying they had been doing *aspects* of ESDGC for some time. However, ESDGC's values approach also seemed to fit with the type of education head teachers wished to provide. In three schools, Faban, Llefyn and Gyrn, opportunities for curriculum-based global school partnerships and travel played a key role, and in Faban, the multicultural intake of the pupils was one of several factors. In four schools the particular stimuli or 'sparks' for innovation (yellow in the diagrams), occurred with global aspects well before the ESDGC guidance was published in 2008. The degree of personal interest in global issues involved may be significant to this, or it may be that some schools were just generally proactive at taking up opportunities. Although four schools had been taking part in the Green School award scheme for some time, its contribution to ESDGC did not seem to have been obvious at the time. For Drosgl being a Green School became very important and they continued this line of development with Eco-School. Healthy School was also a strong influence there. This was the only school which truly fitted Estyn's (2006a) observations that schools generally began with an emphasis on environmental aspects. Llefyn's Green School involvement came later than the others and this was prompted by a grant from the local ESDGC Forum which the ESDGC coordinator attended regularly. This could be one example of networking leading to change.

Increased emphasis on ESDGC in school inspections from 2005 (Estyn, 2005), attention to the breadth of ESDGC in the ESDGC Common Understanding guidance documents (Welsh Assembly Government, 2008b) and its inclusion in the curriculum from 2008 (Welsh Assembly Government, 2008a), all coupled with continuing professional development, gave increased impetus to all schools. In Bera most of their 'sparks' began with their involvement in a Foundation Phase pilot, also in 2008. In Drosgl's case many occurred even later.

The developments can be simplified to a general diagram of influences. Figure 8.6 is a model modified from McTaggart (1996) which draws on Lewin's (1946) action research

spiral. It is useful in that it incorporates reflective practice that is constantly evolving. A school is first influenced in its ESDGC development either by a teacher's personal interest, a policy change, or an opportunity that arises. This could be a one-off opportunity or it could be a form of support or professional development. This starts them off on a spiral of development, but change is not just through evaluation and modification of in-school activities but also through the continuing stimulus of other opportunities which continue to arise. This diagram will be revisited at the end of Chapter 9 after the detailed discussion on how schools reacted to opportunities and changes.

Figure 8.6 A model of how schools begin and continue to develop ESDGC



8.3 CHAPTER SUMMARY

This chapter has looked at factors which teachers felt were important in their school's ESDGC development. It has described how further information on these factors was elicited from teachers descriptions of when, why and how their schools began, and continued, to develop ESDGC. Key factors noted by teachers were a motivated and

supportive head teacher, having an ESDGC coordinator, visitors to the school, teachers working together, developing an international partnership, being flexible and exploiting opportunities that arose, and professional development. There were differences between the schools, the most notable of which was the lack of mention of many of the above factors by teachers in Drosogl. It was suggested that it may have been at an earlier stage of ESDGC development than the other schools; it did not, for example, have a dedicated coordinator. In the school with a high multi-ethnic intake this was noted as a factor in ESDGC development. Head teachers noted personal interest and several key events which had sparked, or encouraged, development of ESDGC. These included opportunities for school linking, teacher travel, school award schemes, availability of local LEA and NGO support and the publication of the ESDGC Common Understanding (Welsh Assembly Government, 2008b). Three schools had begun development with global aspects of ESDGC well before the 2008 guidance. However this guidance, together with the changed emphasis of the revised curriculum brought increased impetus to all schools and strongly influenced two schools to fully develop ESDGC. The impact of LEA advisers and other support was also evident. Models of how schools began and continued developing ESDGC were presented and from this a simple model of influences based on a spiral of development was proposed. This model will be expanded in Chapter 9 after examining the impacts on ESDGC development in detail.

CHAPTER 9 CASE STUDY SCHOOLS PART 4 LEADERSHIP AND MANAGEMENT FACTORS

A detailed analysis is now begun of the individual factors which teachers believed had affected their schools' development of ESDGC. In this chapter, factors associated with leadership and management are discussed. After examining the impact of ESDGC policy and guidance on schools, the role of the head teacher is discussed together with the measures that she or he put in place to encourage the development of ESDGC. A closer look is then taken at the ways in which leadership was shared across the school, the role of the ESDGC coordinator, where one existed, the development of an ESDGC ethos, and how auditing, planning and enriching the curriculum was approached.

The knowledge and understanding base of the teachers, the access to, and impact of professional development, teachers working together and working with partners and community to enrich ESDGC will be dealt with in Chapter 10 - Developing a knowledgeable learning community.

9.1 THE IMPACT OF NATIONAL POLICY AND GUIDANCE

It was noted in Chapter 2 that support from authority was seen to be important for schools developing ESD/GC (Jackson, 2007; Cheadle, 2004; Scott and Gough, 2003) and also for implementing general change (Levin, 2009). However, too much emphasis on top-down policy was also seen to restrict schools' flexibility and creativity (Symons, 2008; GAP, 2007; Anderson, 2008). As described in the Introduction, during the 2000s two sets of ESDGC guidance were published (ACCAC, 2002; Welsh Assembly Government, 2008b) as well as ESDGC inspection guidance (Estyn, 2005; 2006b; 2010). The latter guidance document gave schools more information on the breadth of ESDGC. At the same time ESDGC also became a key cross-cutting theme in the revised national curriculum (Welsh Assembly Government, 2008a) and a theme in Personal and Social Education (Welsh Assembly Government, 2008f). This section describes evidence for the impact of these changes on the case study schools.

9.1.1 Impact of ESDGC guidance documents

As described in Chapter 8, all schools had been developing aspects of ESDGC for some years, often without recognising their relationship to ESDGC. Some teachers in Llefn had known about ESDGC as a term since around 2002 because of the early ESDGC guidance (ACCAC, 2002). Faban was also aware of it, but was possibly more influenced by the Oxfam Curriculum for Global Citizenship (Oxfam, 1997, 2006) against which they audited their global activities. Both these schools talked about global citizenship much more often than they mentioned ESDGC, perhaps because of their particular interest in this area. However, the introduction of the ESDGC Common Understanding in 2008 (Welsh Assembly Government, 2008b) was seen to have had an impact on all schools re-examining their emphasis on ESDGC. It could be said to have altered some schools' sense of purpose in relation to ESDGC issues by widening their views of what it entailed. Teachers mentioning this were often ESDGC coordinators or head teachers, except in Gyrn where over half the teachers were quite familiar with the ESDGC guidance. As a result of this new guidance, the Faban ESDGC coordinator had re-audited the curriculum and realised that more needed to be done in terms of sustainable development. Similarly, in Gyrn the head teacher explained that this document had helped to raise their awareness,

"I'm sure the support from the government and from Estyn too [has been useful] as they have prepared the books for us and the whole thing is stronger...."

"We are far more aware of the content, in the documents, than we were before. Although we were doing it before, global education and so on, we are more aware more aware of the needs." (Gyrn head teacher)

In Llefn the head teacher described the ESDGC Common Understanding as very useful guidance and as the *"the bible for us"*. However, in Bera the coordinator was not so sure, perhaps because she, herself was a Foundation Phase teacher,

"How useful were they?" (interviewer)

"Yes and no. Some things were very useful, and other things I felt went over our heads, and I felt that we had to find our way some other way" (Teacher 2B)

9.1.2 The Personal and Social Education Framework

The mention of ESDGC in the Personal and Social Education Framework (ACCAC, 2000) and the increased emphasis on it in the revised PSE framework (Welsh Assembly Government, 2008f), where it appeared as one of the new PSE themes, gave it an official statutory role in the curriculum. This also had an impact on schools. In Drosogl, for example, ESDGC school activities had been noted *because* of its inclusion in PSE. Other schools simply used this to consolidate their curriculum auditing. For example, in Llefyn the same coordinator had been addressing both PSE and ESDGC and she cross-mapped activities. In Faban, Teacher 7F had her awareness of ESDGC raised on a course organised by the counties' PSE adviser in 2008. She and the ESDGC coordinator collaborated and noted where the two topics overlapped.

9.1.3 The impact of the pedagogy in the Revised National Curriculum

As described in Chapter 3 the Revised National Curriculum for Wales (Welsh Assembly Government, 2008a) brought an official change in emphasis to a more holistic, pupil-centred and skills-based curriculum and also to increased flexibility within the learning environment. The requirement for all schools to have a school council (Welsh Assembly Government, 2009b) also reinforced the need for pupil participation. These ways of working fitted well with the ethos of ESDGC and their formal introduction may have made it easier for teachers to adapt to using these methodologies within ESDGC topics. It was shown in Chapter 6 that many teachers found the pupil centred and skills' based learning to be a natural way of teaching. However, some suggested that a change may have occurred in their ways of working. For example, when asked directly if the Skills Framework and revised curriculum had changed their approach Teacher 2B replied,

“Oh yes, yes. Rather than being ‘chalk and talk’ as it were... the children have to go and search for information themselves. We were doing that before, yes. yes, .. but they’re more aware [now] of how they’re going to succeed, what they have to do to succeed. I don’t worry about that any more – I think, if I’ve given them the skills to go and search for information, and they use it, then...” (Teacher 2B)

There was a similar response in Drosgl and Gyrn. In the junior section of Gyrn Teachers 1G, 2G and 3G all felt that they now were more aware of, and planning for, encouraging skills-based thinking and that the children were more aware of how they were learning,

“I don’t think the things are so new but it has raised our awareness, making sure we do it with the ways of learning. Perhaps there is more emphasis on thinking and discussion than there was in the past.” (Gyrn head teacher)

“I think we did do it before but now we are more aware of how children are thinking rather than us feeding them. Then, yes it has changed,” (Teacher 4G)

It was also clear that some teachers who had previously used that way of learning still appreciated the introduction of the Skills Framework,

“Well, in a way, the Skills Framework has justified some of the teaching methods that we had been using before this, for example, with the [Caribbean] project” (Teacher 2L, Llefni ESDGC coordinator)

In Faban, the ESDGC coordinator made similar comments. As noted earlier, this school had taken the development of skills seriously; a whole unit had been devised to introduce both skills and diversity issues to Key Stage 2 pupils. However, there were some mixed messages. Teacher 3F, a key stage 2 teacher who had been in the school for some time gave the impression of more didactic teaching prior to the Skills Framework,

“No, (before, we were) just teaching the children. Differentiation was the thing, yes...” (Teacher 3F)

The Faban head teacher was quite cynical when she reflected on the compulsory nature of the curricular change, *“It’s a matter of necessity isn’t it? (repeats) The whole angle/tilt has changed.”* This reflected a reaction to a top-down approach as noted by Symons (2008) and Anderson (2008).

It was also shown in Chapter 6 that the Foundation Phase appeared to have had an impact on pedagogy. However, although the methods promoted by the Foundation Phase were very much approved there was one controversial comment from Teacher 3L in Llefni,

“and the only thing I’d say now is that although the Foundation Phase, although it is trying to promote children’s skills it’s still got a lot of paper work in it, that’s what I think, asking for evidence. I don’t think there is enough trust in the teachers

to do the job. Not trust, really but they don't give the chance to teachers to decide for themselves.” (Teacher 3L)

9.1.4 The impact of school inspections

The school inspection framework first introduced questions on ESDGC in 2006 (Estyn, 2006a). This was revised later in 2006 (Estyn 2006c) to reflect the findings of the baseline survey of schools' understanding and practice (Estyn 2006b), and again in 2010 to reflect the revised curriculum (Estyn, 2010). Guidance for inspecting ESDGC was also contained in these documents. It was noted earlier that all schools had received favourable mention of ESDGC in their inspection reports from this period onwards. Had their impending inspection had an impact on their ways of working? There were several signs of this. As noted earlier, Drosogl appeared to have actively audited ESDGC within PSE in preparation for their inspection. Whilst this school was indeed doing many ESDGC activities in school, the findings in this study suggest it was the least far of all the case study schools along the ESDGC development journey. The very positive mention of ESDGC in their inspection report raises questions about the criteria used to judge schools and, indeed, the inspectors' own levels of ESDGC understanding. Morgan (2009) noted that inspection reports often drew more attention to environmental aspects and to charitable aspects of global citizenship than the full breadth of the topic. Drosogl's positive report may also explain their subsequent delay in implementing further ESDGC developments; why give attention to an aspect which appears to be more than satisfactory?

The head teacher in Gyrn noted that they ought perhaps to be “*putting more on paper*” i.e. recording their actions more formally, and this seemed to be related to school inspection requirements, and perhaps LEA suggestions, rather than the desire of the teachers.

The Faban head teacher, once again showing a reaction to a top-down approach, was quite cynical when asked about the impact of school inspections,

“But, I'm not sure if we're doing it because of Estyn and the inspection or because... We need to start questioning ourselves as well, don't we? Why are we doing it eh? Someone else says 'it's a good idea'?”

But she also added, realistically reflecting the fact that Estyn *does* inspect this area of

learning, “*it’s also a tick in the box for Estyn. We have to show that it’s being done properly.*” This school had an inspection due at the time of the study. The head teacher proactively used this research study to raise teachers’ awareness of ESDGC.

The head teacher of Bera took a more positive view of inspections. She felt that inspectors were now more interested in what they could see in the children’s reactions rather than in written plans. This is certainly confirmed in all recent Estyn guidance (2006a, 2006c, 2010). The ESDGC coordinator in Llefyn, which had an impending inspection at the time of the study, hoped she had found a realistic way in which they could satisfy inspection requirements without doing extra work. As she had already had to write reports for their Global School partnership and Chinese link work, and to gather portfolios for the International Schools Award portfolio, Green School and Fair Trade school awards, she explained,

“So in a way I haven’t prepared, I just hope that the inspector feels that there are external organisations that have done audits or assessed that part of the work, and that the fact that we have these will be acceptable.”

This practical approach would seem to be very sensible given the multitude of areas schools have to address in inspections. However the very fact that she had had to write so many reports is problematic in itself. The head teacher of Llefyn had intended to use this study to raise awareness throughout the school, as had Faban, however, increased preparation for the inspection made this impossible and the study had to be continued after the inspection. It should be noted that both schools received excellent inspection comments about their ESDGC activity.

9.1.5 Summary of the impact of national formalisation of ESDGC

The increased guidance of ESDGC in 2008 and its formalisation in the national curriculum did appear to have impacted on how schools’ attitudes to it. Although some teachers mentioned the compulsory nature of change in a less than positive manner, those changes were largely approved by the teachers and therefore accepted more readily. This was helpful as when unwanted curriculum change is imposed Blenkin et al. (1997), Harris (2008) and Levin (2009) noted that there can be much resistance. As noted in Chapter 3,

the Welsh Assembly Government appeared to have listened to researchers and teachers. The school inspection guidance did appear to have influenced at least one school to pay more attention to ESDGC and all schools were aware of its implications. Generally, however, teachers seemed more relaxed and confident about this aspect, at least on the surface.

9.2 LEADERSHIP

Aspects of leadership were prominent in the research outcomes. Table 8.1 showed that a motivated and supportive head teacher was the most commonly mentioned factor and noted by teachers in all schools. the role of ESDGC coordinator stood out in second place. The roles of head teachers are discussed below together with the actions which they put in place. This is followed by a discussion of other forms of leadership in the schools.

9.2.1 The role of the head teacher

All head teachers displayed positive attitudes towards ESDGC and had actively developed it. In all five schools the heads were said to be key players, motivated and supportive, in fact this was the factor in ESDGC development which was most frequently mentioned by teachers. The importance of proactive head teachers was emphasised strongly by Sterling (2003), Jackson (2007) and Scott (2010).

In Gyrn, Faban, Llefñ and Drosgl it was the current head teacher who had decided to develop ESDGC. In Faban three teachers (2F, 3F and 4F) indicated that perhaps they wouldn't be doing it without the head teacher's motivation,

“yeh the interest of the head teacher, I think. It filters down to us too as teachers.”
(Teacher 4F)

“I would say the motivation of the head teacher to be honest, interest, isn't it. Yes everything starts with the Head.” (Teacher 3F)

In Llefñ also, it was clear from *all* the teachers interviewed that the head teacher's drive and interest had played a key role in the development of ESDGC. She, herself, recognised

the need for a proactive head teacher and it was she who had recruited a teacher with the capability to develop expertise to coordinate it. Developments in Gyrn also appeared to have been strongly guided by the head's dedication and belief in the value ESDGC. As mentioned above, he said it was important to him personally and he gave the impression throughout his interview that he certainly meant this,

“I try and make sure that the children have good... opportunities through this aspect and just make things happen.”

These were characteristics noted by Inman and Burke (2002). In Bera the head was said to be very supportive. It was also notable that the most recent inspection report for this school particularly noted the all-round excellence of leadership in this school. In Droschl, although the head teacher was absent at the time of the study it was clear from Teacher 6D's remarks that he had played a key role in instigating some of their ESDGC actions.

Leadership actions to encourage ESDGC development

These head teachers had put many actions into place to encourage the development of ESDGC. These included:

- the appointment of a coordinator to oversee ESDGC development;
- further distribution of leadership;
- discussing ESDGC with senior management and governors;
- giving attention to ESDGC in School Development Plans;
- creating a policy or strategy for ESDGC;
- auditing existing ESDGC practice in the school;
- planning for further inclusion of ESDGC topics to give comprehensive coverage;
- looking out for opportunities to enrich and to fund ESDGC coverage;
- putting ESDGC on the agenda of staff meetings;
- encouraging teachers to collaborate;
- supporting professional development for teachers both outside of, and within the school.

Many of these actions were described by Symons (2008) as part of the formalisation of ESD/GC in the school. Each action is now discussed. The discussion continues into the next chapter where the latter two aspects are addressed.

9.2.2 Distribution of leadership for ESDGC

As discussed in Chapter 2 distributed leadership has received much attention in the literature e.g. Jackson (2007), Harris (2008a, 2010); Scott (2010). There was evidence for distributed leadership in all of the case study schools although its nature varied from school to school. The role of ESDGC coordinators will be discussed first. This will be followed by a discussion of other kinds of leadership in the schools.

ESDGC coordinators

Cheadle (2004), Ofsted (2008), Murphy and Fawcett (2006) and EES-SW(2007) noted the benefit of having an ESDGC coordinator, or people with responsibility for overseeing its development, in the school. Symons (2007) suggested that this is one indicator of the level of importance attached to ESD/GC by the school. Four of the five schools, i.e. all except Drosogl, had named ESDGC coordinators. They were cited as key players in three schools, Faban (10 out of 11 teachers), Llefn (7 out of 7 teachers) and Bera (both teachers). In the two larger schools particularly, Faban and Llefn, the coordinators were very highly praised. These teachers were both longstanding in their roles (since around 2005); first being called Global Citizenship coordinators and then being renamed as ESDGC coordinators as ESDGC became more widely recognised.

Coordinators carried out several tasks. These included collecting portfolios of work, auditing work, supporting and encouraging others and initiating and organising projects with their partner schools. The appreciation shown for the coordinator in Faban is reflected in the comments below,

“It’s thanks to her that I’m doing as much as I am..... We give the children lots of opportunities; We’ve done that because of the coordinator more than anything” (Teacher 11F)

“If we need anything - [2F] - and [she] has been there to say ‘what is it you need?’” (Teacher 5F)

However, there was also evidence that some teachers perhaps may have depended a little too much on the coordinator, perhaps, for some, to the extent of doing activities just because she suggested them, for example,

“I tend to do it because perhaps a theme or something will arise in the class. Perhaps [2F] will say ‘we’re going to have this day’ and therefore as a class we will prepare for that day, book day or something like that.” (Teacher 10F, Head of Infants, Faban)

This teacher was different to the other teachers in that she had a lower level of interest in ESDGC and was possibly just doing it because she had to. However, the fact that she took part in ESDGC activities, did reflect on the impact of a coordinator.

In Llefni, ESDGC developments had been strongly driven by their coordinator, Teacher 2L, with all teachers except herself mentioning her role very positively. She had put great efforts into developing the school’s international partnerships, developing good teaching practice and bringing visitors into the school. She originally also had responsibility for Green School and PSE. Her head teacher described her,

“Well, the coordinator. She’s very, very special. She has the vision, and we have meetings and discuss the way forward, but she works tirelessly. She’s fantastic..... [2L] can work very effectively, But also, you know, she’s the one that goes under the skin of this subject, and who’s very knowledgeable.” (Llefni head teacher)

This enthusiasm, drive and understanding of the topic is reminiscent of characteristics of transformative individuals (Giroux and McLaren, 1985), of leaders in democratic schools (Inman and Burke, 2002), and robust teachers (Lyle and Salmon, 2004). As with the coordinator in Faban, she supported teachers within the school, but she was also very proactive in sharing their experiences with other schools, a key feature noted by Fullan (2001) as necessary for county-wide reform and by Inman and Burke (2002) as a characteristic of democratic teachers. Both of these coordinators had attended a substantial number of professional development courses and appeared to have a good understanding of ESDGC. The impact of this will be discussed further in Chapter 10.

Mutual responsibility

In the two smaller schools with ESDGC coordinators there was much more mutual responsibility, with the coordinators playing an important, but less prominent role. In the very small school, Bera, both teachers agreed that they were both key players and much responsibility was shared. The coordinator, however, had the overview of what was happening with ESDGC in the whole school and was more aware of the ESDGC guidance

documents than the head teacher. The Head teacher said of the coordinator, “[2B] is good.” and Teacher 2B, in turn, praised the head teacher for not being afraid of tackling any topic. Both teachers regularly assessed each other’s practice. The coordinator was due to retire and the head teacher was very aware that she would need to ensure continuity,

“At the moment, we are quite happy, but we will have to... I will have to sit down with (2B) before she goes and learn a lot more about what we should be doing, so I can share with the new teacher. Because I wouldn’t like to think that all the work is going to stop in the infants’ class.” (Bera head teacher)

In Gyrn, although there was a named ESDGC coordinator, the head teacher was very engaged and proactive in developing new initiatives. He said that there were no key players but that all teachers play a part, *“No, we’re just together.”* *“We have always been sharing responsibilities, everyone has a responsibility for things they do.”* This feeling of joint responsibility was noted by most members of staff in Gyrn. The head teacher initially developed the ESDGC policy in 2007 and had then handed responsibility to the deputy head. She was a natural choice as up until then she had been responsible for monitoring the related Green and Healthy School developments, duties with which she still continues. She was the specific contact person for many community links and had a wide network compared to the other class teachers (this is discussed in more detail in Chapter 10). She was recognised for bringing in visitors and bringing continuity of ESDGC, noting connections between the various award schemes. She had also recently attended several ESDGC professional development courses. She, herself, though, still recognised the role of the head teacher and other staff,

“I know I try to coordinate it but in the long run I would say the impetus from the head is very important and the fact that Mr [4G] and Mrs [3G] have been on visits, but on the whole [what’s important is] that we have new ideas and continue to develop further.” (Teacher 2G)

This also was another indication of awareness of the need for new ideas for continuing school development, features notable in Scott’s (2010) level 4, in Breiting et al.’s (2005) ESD criteria, and more generally in Mitchell and Sackney’s (2000) description of a reflective learning community.

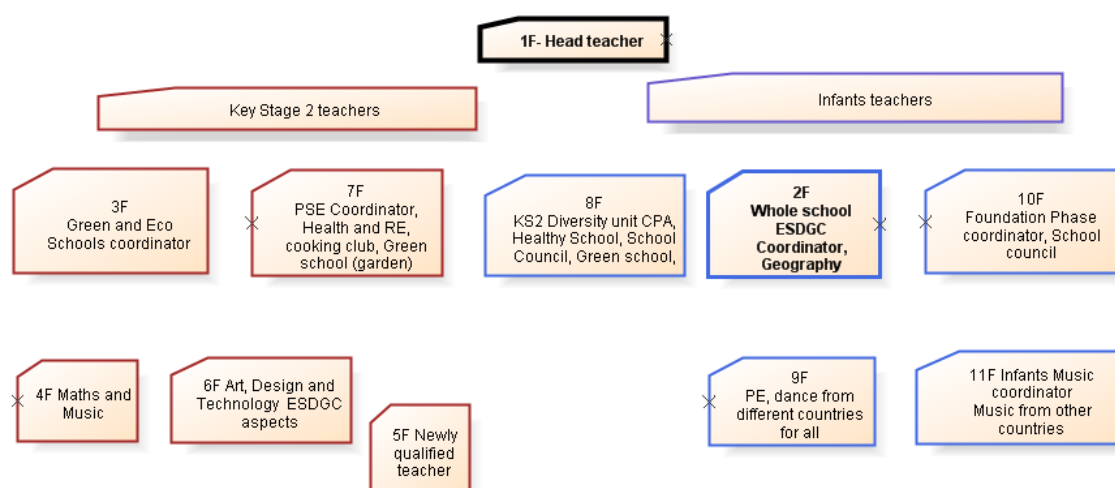
Teacher 4G had also played a key role through developing the southern African partnership and planning for this throughout the school, and although he appeared to have

taken a relatively back seat in terms of recent ESDGC initiatives, his work was still well embedded in the classrooms.

Further distribution of leadership

In Faban, although the ESDGC coordinator was a clear leader for ESDGC, there was also considerable evidence of further distributed leadership (Figure 9.1). Apart from the ESDGC coordinator, three other teachers were consistently recognised as playing a key role in the delivery of ESDGC, i.e. teachers 7F, 8F and 3F. Teacher 7F led on Personal and Social Education (PSE) and Religious Education (RE) as well as being responsible for the area outside of the school buildings, such as gardening; Teacher 8F was responsible for teaching the unit on diversity in all Key Stage 2 classes; Teacher 3F was the coordinator for the Green School and Eco-School schemes. The network analysis described in Chapter 10 (Figure 10.8) also shows that these three teachers discussed their work daily or weekly. Other teachers also contributed specific, diversity-related aspects of ESDGC across the school, for example teacher 6F had coordinated some notable ESDGC-related artwork, Teacher 11F, who was music coordinator for the infants incorporated music and instruments from other countries and teacher 9F, the PE coordinator introduced dance from other countries throughout the school.

Figure 9.1 Diagram of distributed leadership for ESDGC in Faban school



This devolvement certainly increased the involvement of the teachers. This, and the general distribution of responsibility at classroom level, was summed up by the following two teachers in Faban,

“Oh, everyone. Everyone does it in their own way, different, but they are all doing it.” (Teacher 11F)

“Well I would say that everyone plays a part in their way because it’s discussed in every class – where do you live, this is me – so everyone is doing it at a very personal level in the classroom.” (Teacher 7F)

This devolvement of responsibility was interesting. Despite the coordinator playing such a key role, the teachers’ interest had been captured by giving them ownership for their class development and for specific responsibilities. The importance of this transfer of ownership for embedding change was noted Coburn (2003), Levin (2008) and Jackson (2007). This distribution of leadership could possibly lead to a fragmented view of ESDGC for some individuals. Whether this or a joined up approach is obtained may depend on how much sharing of practice then occurs across the school. This will be discussed further in the next chapter when looking at teacher networks.

In Llef, despite the strong role of the ESDGC coordinator, other teachers had also recently played key roles and devolvement of responsibility was ongoing. The Green School coordination had been transferred several years ago to teacher 4F who had taken it on very enthusiastically and, shortly before the interviews, the role of PSE coordinator had been transferred to teacher 3L, the Head of Infants; she, however still appeared to be learning about the role of ESDGC within PSE. Teacher 7L was also a strong supporter of ESDGC and a member of the senior management team.

Less organised distribution of leadership

The situation in Drosgl was different in that it was the only school without a named ESDGC coordinator. The acting head, when asked about this, said, *“No, just people who are responsible for different aspects”*. However, Teacher 6D, who coordinated Eco School, Healthy School and Fairtrade school stood out as the person who took the most notice of ESDGC issues. As the acting head said of her, *“she has an understanding more, she takes notices of it, then I think she thinks there are more things she would like to do. and she is also very active.”* Teacher 7D confirmed this by mentioning that, if necessary, she would send a new teacher to her for support. However Teacher 6D, herself, played this down a little saying that she was only responsible for whole school level events and did not try to influence individual class teachers.

Other teachers played less prominent key roles, but important roles. For example, Teacher 2D had, through her responsibility for PSE, looked at ESDGC provision, and new teacher 3D had initiated the Turkish school link. Others teachers also made comments that suggested they also felt involved, for example teacher 4D who was head of infants, and teacher 7D who was part-time and shared teaching of years 1 and 2 with teacher 6D. Without a defined coordinator, however, the staff support and coordination role played by the ESDGC coordinators in Faban and Llefñ schools appeared to be much less well developed. The absence of the head teacher and frequent staff changes may have contributed to this and Teacher 6D did give the impression that the head had been a driver of many activities. This could possibly be an example of previous overreliance on one key leader who also acts as coordinator. When this is removed there may be a sense of incoherence (Harris, 2008).

9.2.3 Involvement of the senior management team

When a school involves, and reports to, the senior management team and governors it is a sign of special attention being given to ESDGC (Hren, 2004; Symons, 2008). Discussion of ESDGC by the senior management team was specifically mentioned in two schools, Llefñ and Drosñl, not only by the head teacher and ESDGC coordinator but also by other senior members of staff e.g. Teachers 7L and 3D, who are members of these groups. In Llefñ ESDGC was said to be regularly discussed by this team and reported to the Governors.

9.2.4 Involvement of governors

The board of governors in all schools was also kept up to date with reports on ESDGC progress except in Drosñl where matters relating to ESDGC were reported under subjects. All governors were said to be supportive and, in Bera, Llefñ and Gyrñ, positively proactive. Bera had a link governor for ESDGC who dealt with specific issues arising. The Gyrñ governors attended many events and one had accompanied the head teacher to receive their International School Award. The Llefñ governors offered support and a

welcome to many of their visitors. In the words of the Llefyn head teacher,

*“Well, this is something that’s in my report to the governors every time I report on this area. I have so much to say, and so many successes to share with them – and they celebrate our successes with us. But they do more than that - they take a very active role, for example, when we have visitors over from **, the governors are always keen to meet them, and take them to their homes, and give them a meal, so it’s part of the school’s big family in a way.”*

However, despite the governors’ support, in all schools there was a sense that they were reacting to the head teachers’ enthusiasm rather than leading from the front. Unfortunately it was not possible to interview any of the school governors to hear their own views.

9.2.5 Summary of leadership

In summary, the motivated leadership, enthusiastic coordinators and further distribution of leadership and the involvement of senior management and governors would appear to fit the description of leadership in the ESDGC Common Understanding embedded level (Welsh Assembly Government, 2008b). They also fit Scott’s more discerning suggestions (Scott, 2010) for his fourth ‘*Towards restorative*’ level for leadership. This was particularly notable in Gyrn. The fifth school, although addressing ESDGC and distributing some leadership, appears to better fit with Scott’s second level ‘some assimilation’.

9.3 PRIORITIES AND POLICIES

9.3.1 Inclusion of ESDGC in school development plans

Discussion at senior management level can lead to the inclusion of certain areas to develop in the School Development Plans. These are annual ways of schools formalising their priorities for development. Their progress is reported to the board of governors and Estyn pays attention to targets and progress towards them in their school inspection reports. Four of the five schools, Faban, Llefyn, Gyrn and Bera, had included ESDGC in their

development plans several times over the four years prior to the study. In Faban the ESDGC coordinator noted,

“And it helps that (the head) puts things like this on the schools development priorities. That ensures that they are done then doesn’t it?” (Teacher 2F)

However, the head teacher noted that it did not stand as a separate entity,

“We give it as much [attention] as anything else, because it goes cross-subjects. It feeds itself into a lot of other subjects. It doesn’t stand on its own.It’s not a subject on its own. It comes into a lot of subjects you know. It happens naturally doesn’t it – it happens in geography, it comes in to science, how to look after the world and all that.” (Faban head teacher)

Drosgl had not included ESDGC as a specific topic in their development plans, but, as in Faban, the acting head teacher, 2D, said that *“it arises with other things there”*. Cheadle (2004), Breiting et al. (2005), Ofsted (2008) and Scott (2010) all also noted that schools developing ESD/GC had emphasised it in their development plans.

Varying attention to ESDGC over time

All schools had given ESDGC special attention at some time. However, the levels of priority given to it not only varied from year to year but from time to time during each school year. Llefñ’s head teacher said that they had given it high priority earlier in their development but now that they saw it as established, it had less priority. She explained,

“Well, I think when we started establishing it here in the school, we gave it a high priority, but by now, it’s part of the work pattern of the school, so it happens more... casually, and as a part of our jobs.” (Llefñ head teacher)

The head teacher of Faban took a similar view, including it as a *“mini priority”* in their development plan in some, but not all, years. These comments show a realistic and integrative approach to ESDGC development, which could perhaps overcome some of the time limitations noted in schools (Fullan, 2001; Levin, 2008).

9.3.2 ESDGC policies

The usefulness of having policy or strategy for ESDGC was noted by Jackson (2007) and Scott (2010). Through having an ESDGC policy a school can show that it is committed to

action. Policies can also provide continuity of approach when there are staff changes. However, they could sometimes be a response to top-down advice, i.e. something they *should* have rather than something that is really wanted. The ESDGC Common Understanding (Welsh Assembly Government, 2008b), Estyn (2006) and local education authorities had all encouraged schools to have ESDGC policies; in the study area Cynnal had a sample policy on its website for some time.

Llefn, Gyrn and Bera all had comprehensive policies which included sections on definitions, actions, subject relevance and the role of the coordinator. Llefn's policy was particularly well tailored to fit the school's needs; it placed substantial emphasis on allowing pupils to develop values. The latter two schools appeared to have adapted their policy from the Cynnal model policy. None of the schools gave the impression that having a policy was an important factor in their ESDGC development and this was particularly noticeable in Bera where the head teacher said that having a policy was not top of her everyday agenda. This was confirmed when she was asked if they had a policy on ESDGC, *"I don't know. There's a hard question for me! I'll have a look through all of them. I'm sure we do have."* She then looked through her files and produced a copy. It may be that having a policy makes the most difference when a school is beginning development of an area of learning. The school development plan can then be used to determine each year's plans to implement areas of the policy. The acting head teacher of Drosogl, which had no ESDGC policy, also confirmed this attitude by saying that there could be too many policies, although, having heard about other schools' she was considering having one. Faban did not have a specific policy on ESDGC but it did have a recently updated, prominent statement on global citizenship on its website, telling parents why the school thought global citizenship was important to the children. This was a passionate document, aimed to inspire.

9.4 AN ESDGC ETHOS

9.4.1 Creating an ethos

All of the actions above had contributed to the whole school ethos and the head teachers in Gyrn, Llefn and Faban all mentioned the importance of ESDGC-related ethos in their

interviews. The manner in which a school acts, or its ethos, is believed to have as much of an impact on its teachers and pupils as class teaching and learning as they can see what the school values and take part real in real practice (e.g. Sterling, 2001; Estyn, 2006; Jackson, 2007; Webster and Johnson, 2009; Scott, 2010). As described in Chapter 6, all of the schools were either enrolled on the Gwynedd and Anglesey Green School scheme or the Eco-Schools award and the Healthy Schools scheme; all were also working towards Fairtrade school status, three had secured the International Schools Award and had flourishing Global School Partnerships which aimed to promote mutual respect and participation. Involvement in these schemes meant that they were obliged to take certain individual and whole school actions for the environment, sustainability, healthy living, ethical procurement and international understanding. Faban was particularly notable for its ethos of respect for diversity and inclusion, Llefyn for its international ethos, Gyrn for international and sustainability, and Drosogl for attention to environmental issues. All other schools also strongly promoted the local Welsh dimension.

Pupil participation was also strong in all five schools. All schools had colourful displays of children's ESDGC-related work widely displayed around the school. Teacher 6D commented on how important these displays were in promoting a pleasant atmosphere in the school. This aspect was also noted by Rowe (1996). That these actions were having an impact was evident from the children's responses, illustrated in Chapter 7.

9.4.2 Issues of procurement

Discussion did not dwell long on procurement in any school, but it was mentioned. There was varying practice and mixed messages on local authority support. In Faban the head teacher said that those matters were out of her hands and rested with the local authority. In Llefyn, however, they had taken steps towards more sustainable procurement themselves and the caretaker was actively involved in discussion of this in the school council. However, the ESDGC coordinator indicated that they would have preferred if this was done by the local authority as it would save the caretaker the time of attending these meetings. Gyrn bought its produce from a local greengrocer and it was also using substantial produce grown by the children. Their cook acknowledged that she used this produce for school lunches. Similarly in Bera the cook was very involved in the life of the

school and aware of ESDGC; she too used the children's vegetables. She had also been on a course about sustainable procurement, presumably run by the local authority.

However, although all schools were engaged in much sustainable and ethical practice, they were clearly not near to Scott's (2010) '*Towards restorative*' or Webster and Johnson's (2009) '*Eco-restorative*' levels. Barriers to achieving this level lay mainly in the physical constraints of their buildings. None had solar panels and the difficulty which Gyrn was finding in securing funding for a wind turbine was a sign of the economic restraints of the time. All five were perhaps around Scott's (2010) '*Some assimilation*' or '*More strategy*' stages in terms of sustainable development,

9.5 APPROACHES TO AUDITING, PLANNING AND MONITORING

Before beginning this study the author had assumed that schools that were said to be doing ESDGC well would have carried out considerable amounts of auditing and planning. This was suggested by the ESDGC Common Understanding (Welsh Assembly Government, 2008b) and it was also the view of some of the LEA officers interviewed for this study. Auditing and planning for ESDGC in the curriculum was noted as one of the enabling factors in ESD/GC school development by Shallcross (2003), Jackson (2007), Gayford (2007) and Symons (2008).

What in fact was found, was that whilst auditing of ESDGC was indeed a feature of all schools' work, in only two of the five schools, Faban and Llefñ, was it done very thoroughly for ESDGC as a whole. Also, no teachers mentioned auditing as a factor in their school's ESDGC development and only seven out of thirty-three mentioned planning. In contrast to strict planning, 'flexibility' and 'taking advantage of opportunities' were mentioned by fourteen teachers (Llefñ (3), Faban (3), Gyrn (2), Bera (2), Drosogl (4) and emphasised by key teachers in the latter three schools.

9.5.1 Examples of dedicated auditing and planning

The situation in Faban is described in detail as it sheds some light on how an industrious

coordinator went about her work. Auditing and planning appeared to be very thorough although, to an outsider, it was quite confusing. A separate file was kept for global citizenship. This was partly due to the coordinator originally being responsible for this, rather than ESDGC, and also because the school had to keep evidence of global activities for their Global School Partnership grant and the International Schools Awards. She had begun in 2007 by auditing the curriculum activities against the Oxfam Curriculum for Global Citizenship (Oxfam, 1997; 2006) with its tables of examples for developing skills, knowledge and understanding and values. To do so she had given all teachers a copy of their relevant key stage pages and asked them to note what they were already doing and to think of suggestions for new developments. This was another example of devolving responsibility and giving ownership. She continued to refer to global citizenship rather than ESDGC although when the ESDGC Common Understanding was produced (Welsh Assembly Government, 2008b) she did do another audit for ESDGC as a whole. She described her methods,

“When I did it – a quick audit, tick, tick, to see what we were doing – it becomes obvious then – oh, hold on, we’re not doing a lot in that area, we’ll have to develop that.” (Faban ESDGC coordinator 2F)

The ESDGC audit had shown that the global citizenship aspects had been stronger than those for sustainable development. Although they had done a lot of work for the Green and Eco-School awards this seemed to occur more at a whole school level and, as noted earlier, neither the head teacher nor and the coordinator felt that their work had yet got to the heart of learning about sustainable development issues. When asked if they made connections between the different award schemes the head teacher acknowledged that they were still working on this *“We have started yes.”*

The coordinator was aware that she had not yet sufficiently shared the results of this recent ESDGC audit with the other teachers. This was confirmed by the responses of several teachers who appeared unsure of what ESDGC entailed, and by the head teacher who was aware of the auditing but not very sure about exactly what had been done. She *was* aware however that they were *“ticking a lot of the boxes and have done a lot of the work.”* This was likely to have been a sign of lack of time and perhaps insufficient opportunities for networking in a busy school with an impending inspection. However this will be explored further in the next chapter.

The auditing and planning processes were closely intertwined and although teachers had a role in auditing the coordinator seemed more in control in terms of planning. She used the same method for ESDGC that she used for Geography, by looking at the whole school and,

“plan[ning] the grids ready over the year to make sure that every class is doing what they should and to make sure that the continuum is there”.

Each year she mapped out, and kept examples of which aspects were completed in each classroom to ensure that the pupils *“are getting the different areas during these years”*. As she explained,

“if anybody wants to know what they should be doing regarding the global citizenship subject, they come to me, and all the plans are in the folder for them”.

This was said to be useful for teachers who moved to teach another year class as they could access the portfolios to obtain ideas of what they can do; Teacher 6F who had moved classes noted that this was indeed useful. However, despite what appeared to be rather strict level of planning the ESDGC coordinator said that she left classroom planning to the teachers and a common thread running through the teachers' interviews was, *“just taking advantage of specific things that arise”* (10F).

9.5.2 Examples of more flexible planning

In Llefni school the planning approach had initially been similar to Faban's but, as noted earlier, their approach to planning had changed considerably with the introduction of the Revised Curriculum for Wales in 2008 (Welsh Assembly Government, 2008a), a curriculum which allows for more flexibility and places emphasis on pupil-centred, skills-based learning. This was the clearest example of a school that had taken on the new challenges. The ESDGC coordinator explained their approach to planning,

“When it comes to the way we plan, we look at the skills the children need, in the curriculum, and then in a way, let them lead where the project goes. So in a way, it's not us that plans – we follow the lead and the interests of the children. But, if an opportunity comes up, like the one to twin with China, we take it.” (Teacher 2L)

She explained further that, like Faban, individual teachers had considerable autonomy,

“We do have a plan – across the school – one page, noting roughly where everyone

is at for the term, and that supports plans... other plans have fed into that. Um... as for what the teachers do within their lessons, that's up to them to interpret it."
(Llefn ESDGC coordinator)

The new flexible approach allowed them to exploit opportunities as they arose and the Head teacher and the ESDGC coordinator particularly stressed it as an important factor in the school's development of ESDGC. This approach was already understood by the newest teacher in the school, teacher 5L, who taught years 3 and 4,

"If you plan ahead and then an experience comes up there's room in the curriculum now to go into the classroom and discuss it." (Teacher 5L)

For auditing and monitoring separate portfolios were, however, still kept for each of their many award schemes. Planning and auditing was helped initially by the same coordinator being responsible for the two award schemes *and* for Personal and Social Education; she could see the overlaps in requirements and deal with them appropriately. Reflecting the infusion method of embedding ESDGC (Pike and Selby, 1998) she explained that this way of working avoided ESDGC becoming a burden and that it came in naturally to subjects and whole school schemes,

"so you need to realise that there is a way to do sustainable development and world education in a very slick way if you combine it with the other subjects... and (by) what book you choose to read in English, or Welsh, and what art you choose to do... and geography and so on..... And also, you know, it leads you there nearly without any effort in this field." (Llefn ESDGC coordinator)

(This was similar to the Faban and Drosgl head teachers' comments.) Llefn's approach was strongly based on team work. She explained that the members of staff worked together as a team and adapted what they were doing to suit their situation, doing regular appraisals of, and sharing, the work they are doing. Sometimes this involved working together in a staff meeting and at other times it just involved informal staff discussion in the staffroom. The situation seemed to be slightly different in the infants' section of the school with three of these teachers suggesting ESDGC needed some special planning. The flexible approach being taken by Llefn was also found to various degrees in the smaller Gyrn, Bera and Drosgl schools where their approaches to monitoring and planning were even more relaxed. "*Happens naturally*" was a common phrase used to describe the status of ESDGC in these schools. In Gyrn, for example, whilst the head teacher recognised that they could do more on paper planning he clearly preferred his current way

of working,

“I’d rather it worked like that. I’d rather that the children have the chance to have the experiences.”

He explained further,

“I think that we as a school, we are small school, we don’t so think so formally. There are a lot of things that happen informally, that’s what happens, that haven’t been planned intentionally.If we were in a secondary school we’d have to do it more formally but with a school of this size it works well for us.”
(Gyrn head teacher)

The work of Llefyn, above, has shown, however, that this approach was not unique to small schools. Teacher 6G, an infants' teacher confirmed this approach in Gyrn. *“things arise daily so we’re a bit ahead of plans and it arises naturally.”* Teacher 3G confirmed this *“more or less we just plan at the end”*. Although the ESDGC Coordinator and the head teacher had looked closely at the ESDGC provision in the school they had not done a full audit using the ESDGC Common Understanding framework, rather they had *“looked over it and in our heads we’ve worked out what we need to do and have done.”* (Gyrn head teacher). The head teacher had, however, begun another more general detailed audit from the National Foundation for Educational Research (NFER) which he was finding very useful.

Bera and Drosogl also took a very loose approach to both auditing and planning. For example, in Bera, the ESDGC coordinator (Teacher 2B) had looked at the ESDGC Common Understanding and done a *“mental”* audit of ESDGC provision but this was not written down. Some specific activities were planned in, but as mentioned above they saw ESDGC as arising naturally and often spontaneously. She gave an example,

“The Fair Trade work started naturally – with the children bringing things in to the school, It goes from there really. ... and then a lot of the things, we don’t record them, write them down. They come naturally” (Teacher 2B)

In Drosogl, as mentioned earlier, ESDGC had been included in PSE planning since 2006 and connections were made across key stages; however ESDGC had not been formally audited and planned. She said she felt that they had enough plans already. This negative impact of initiative overload was noted by Kartsen et al. (2000). As in Gyrn, ESDGC was planned, often retrospectively, into subjects as Teacher 3D, a new teacher explained, *“Well*

it comes in when we do the plans altogether. We do the plans and then see where it comes in, like that.” Several teachers, including teacher 7D, said they did things spontaneously, for example as they arose in the news. Self assessment was said to be informal.

Although ESDGC planning was not always written in these three schools, some planning was, however, evident. For example,

“And also, to enable us to go to [southern Africa] we’ve got to get grants and to get the grant you must create a set of detailed plans of activities for what you will do when you go to the school out there and I’ve done that, and the plans for when you come back.” (Teacher 4G)

Also some planning showed in their choice of books, e.g. on migration in Bera, and in their portfolios of what they had covered in Green and Eco-School activities. When asked about their inclusion of Green School in ESDGC the Bera head teacher replied,

“Not as such – not on paper – not that we have been aware of it as it were, but... the things that we were doing for the Green school are still ongoing ...”

The flexible approaches adopted by these schools may have been a response to the revised curriculum, as discussed above, or, as suggested in some schools, it may have been a preferred way of working and a possible rejection of working on too regulated a way. A regulated way of working may suit schools which are beginning their ESDGC journey and local education authorities (LEAs) which wish all schools to progress with ESDGC, however as schools gain confidence this may be less necessary. Moreover, two LEA officers interviewed did stress the benefit of being flexible and their development of outline policies for schools to adapt themselves confirmed this. However, with flexible methods of working there must also be a risk of missing certain areas of ESDGC and also of having a fragmented approach (Scott, 2010). But does this really matter? As one LEA adviser suggested *“is it better to do one thing well or more in less detail?”* (PSE Adviser). To work in this flexible way requires confidence, and it was clear that the key teachers did have this in Llefni, Gyrn and Bera; it also was the case, but to a lesser extent, in Drosogl. Long years of experience and Llefni’s, Gyrn’s and Drosogl’s daily use of newspapers and current events may have helped them to gain this. It may well be different for less experienced teachers. In addition, because they audited their practice annually, and discussed their work regularly, teachers would have been able to note areas requiring

development and then address them. This feature was noted in schools by EES-SW (2007).

9.5.3 Tips for other teachers and new teachers

In their interviews teachers were asked if they had any tips for other teachers wanting to develop ESDGC. Their suggestions indicated what they themselves valued and most related to how they developed ESDGC. Their suggestions included: sitting down with the Skills Framework and conducting an audit (Teacher 2F), becoming familiar with the guidance documents (teacher 2B), making it fun (Teachers 2L and 2B), integrating it into subject learning (2L), and making connections and taking opportunities that arise (Teacher 5F).

9.6 FUNDING ESDGC

A feature of all schools studied was that they had been very proactive in seeking opportunities for funding and for enriching learning and teaching; they had used a great variety of sources and contacts to do so. This way of working was noted in ESD/GC schools by Ofsted (2003, Global Action Plan 2007) and Symons (2008) and in schools successful in change by Fullan (2001). It was also noted by several of the LEA officers interviewed; in fact one noted that schools which were doing ESDGC well were generally proactive schools. Three schools had received substantial grant funding for international partnerships from the British Council and Global School Partnerships (Faban, Llefyn and Gyrn); three had gained small grants for development of ESDGC from the local ESDGC Forum which was supported by the DFID Development Awareness Fund (Llefyn, Gyrn and Bera); some had won awards which enabled further development. e.g. Llefyn gained funding from British Telecom (BT) for developing its Caribbean link further; most had accessed funding for developing gardens from places like the Potato Council; and two were known to have accessed funding to develop pupil entrepreneurship projects (Gyrn and Faban).

Gyrn also had a strong ‘Friends of the school’ group which had raised substantial funds for school ESDGC projects. All schools had also used some of their own funds for ESDGC; in some instances their aims were included in their school development plans. For example, Gyrn was actively campaigning and raising funds aiming for a hen-house and wind turbine. When the head teacher of Faban was asked if they ring-fenced school funding for ESDGC she gave an answer which was fairly typical of the other schools’ attitudes to resourcing ESDGC,

“No. What we do is, there’s money there, and when that scheme comes to an end, we fund it. Because who knows what’s going to happen. It’s hard to know isn’t it, what the next plan is... what else needs to be done.” (Fabian head teacher)

The ESDGC coordinator in Bera emphasised how important it had been to them to learn about where to procure ESDGC resources.

9.7 SUMMARY, DISCUSSION AND SOME MODELS OF ESDGC DEVELOPMENT

Many similarities were found in the factors which appeared to have enabled schools to develop ESDGC. Table 9.1 presents a summary of the findings discussed in this chapter. Although some schools had been developing ESDGC for some time, the introduction of the ESDGC Common Understanding (Welsh Assembly Government, 2008b), and its formal inclusion in the revised curriculum and in school inspection guidance, appeared to have influenced all schools. For the three schools already involved in global partnerships this had encouraged them to review their overall coverage of ESDGC and to integrate school award schemes. For the two other schools it had provided a substantial stimulus to develop further, albeit later in one school. One of these schools had been particularly influenced by the support of an adviser who highlighted some stimulating opportunities for learning in the Foundation Phase.

All schools had keen, supportive head teachers who had given special attention to ESDGC at some time; four had included ESDGC in the school development plans; the fifth school had included aspects under curriculum subject development aims. However, this priority varied from time to time depending on needs. Four schools had appointed ESDGC

coordinators; the fifth had an enthusiastic teacher who organised some whole school aspects of ESDGC but did not consider herself a coordinator. These coordinators were enthusiastic, dedicated individuals, appreciated by other teachers. They audited provision, and supported and motivated others. There was found to be considerable further distribution of leadership within each school; this gave ownership to teachers. The nature of this distributed leadership varied from school to school, but in the school without a dedicated ESDGC coordinator less attention had been paid to integration of ESDGC activities.

Three schools had ESDGC policies and one of these was very detailed and comprehensive. However, it was not clear if these always played a crucial part in the school's ESDGC development; there was a sense that schools had too many policies. One school simply had a statement on global citizenship on its website, indicating a certain priority to this aspect. It was interesting to note also that in schools such as Faban, Llefyn and Gyrn, where global activities predated ESDGC, the teachers still tended to use such terms as 'global citizenship' and 'world education' almost interchangeably with the term 'ESDGC'.

Head teachers felt that developing an appropriate ESDGC ethos was important and all schools had made considerable positive moves in this area. However, in terms of becoming sustainable, most schools were hampered by ageing school premises and the need for substantial funding to develop further. In at least four of the schools it was obvious that they had been proactive in seeking substantial external funding to support their ESDGC development.

Auditing was used as a way of discovering which areas of ESDGC had been covered and also as a future planning alert. This was often done by first auditing contributing school award schemes and then taking an overview of the relationship of these and other developments to ESDGC. This was probably a matter of practicality and time saving. Planning for activities was not done rigidly, rather teachers valued being able to take advantage of opportunities that arose, for example from the children's interests, the media, visitors and funding opportunities. The nature of the Revised National Curriculum (Welsh Assembly Government, 2008a) appeared to have had an influence in this. Its approach to flexibility and pupil centred learning had been welcomed by the teachers.

Table 9.1 Summary of findings addressed in Chapter 8 about factors affecting ESDGC development

	Schools				
Factor	Faban	Llefn	Gyrn	Bera	Drosgl
Introduction of ESDGC Common Understanding (DCELLS, 2008)	Further auditing and integration of award schemes	Further auditing and integration of award schemes	Further auditing and integration of award schemes	A spur to development coupled with Foundation Phase pilot	Delayed impact for two years then substantial changes implemented
School inspection	Some attention	Little change, but noted	Some more planning on paper discussed	Not concerned	PSE planning prior to 2006 inspection
Motivated head	yes	yes	yes	√	yes, but absent
ESDGC coordinator	Yes, very key player	Yes, very key player	Yes, key player but head teacher more so	Yes	No
Further distributed leadership / No of key players	4 other key players; another 3 with some responsibility	Three further key teachers; all staff involved to some extent	Substantial, All teachers involved	Both teachers strongly involved	Three key players + head teacher
Head's view of priority to ESDGC	Same as other aspects	Was high; now lower because it is established	high	high	Moderate but increasing
Governor and senior management involvement	supportive	proactive	proactive	Link governor, supportive	supportive
ESDGC in School Development plans	recently	recently	recently	recently	no but aspects noted under subjects
ESDGC policy	Global citizenship statement	yes, very comprehensive	yes	yes	no
Ethos and Sustainable actions	Ethos obvious from displays; Green and	Ethos obvious from displays. Moving to	Ethos obvious from displays Taking	Ethos obvious from displays	Ethos obvious from displays.

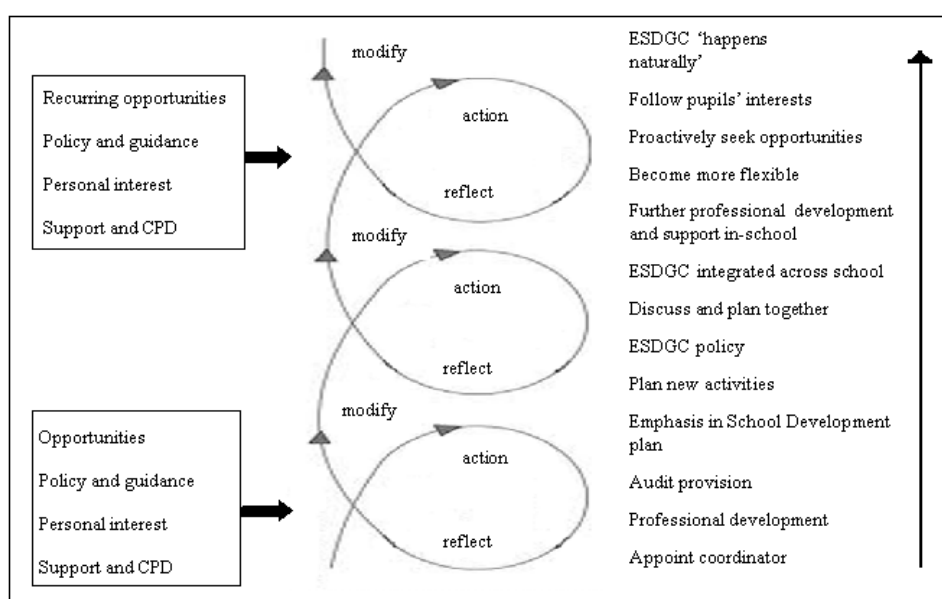
	Eco-school.	more sustainable procurement.	steps towards sustainable procurement; use own produce.	Cook has been on course; use own produce.	Use garden produce
Approaches to auditing	Done by ESDGC coordinator; Meticulous, on paper; Separate schemes audited separately but included in ESDGC audit also.	Done by ESDGC coordinator; Meticulous, on paper; Award schemes audited separately but included in ESDGC audit also. Awareness of how they complement each other.	More by discussion than official recording; Head and ESDGC coordinator have an overview; Award schemes audited separately but aware of the connections	Documents scanned and practice noted but not recorded on paper; Award schemes audited separately	Mostly audited within PSE and subjects; special schemes audited separately
Approaches to planning	Suggestions given to teachers across whole school; individual teacher planning for class; whole school events planned ahead	Originally detailed; now very loose, one page. Teachers follow the lead of children's interests; more detailed planning in infants.	Regular staff discussion and planning but little on paper; ESDGC arises naturally; but opportunities also sought; detailed planning for school partnerships	Little on paper; Teachers discuss together; opportunities noticed and used in day to day activities	'Retrospective planning' Detailed planning for Eco-School
Monitoring and evaluation	On-going auditing and reflection, and /or portfolios produced for each scheme	On-going auditing and reflection, evaluation reports and /or portfolios produced for each scheme	Through subject evaluation and staff discussion;	Staff appraise each other's practice regularly	Nothing yet in place apart from auditing
Funding and resourcing ESDGC	Many external sources of funding and projects	Many external sources of funding and projects	Many external sources of funding and projects	Some external sources of funding.	Some external sources of funding

It was as if it had allowed many, especially in the smaller schools, to approach learning and teaching in the way they already preferred. It seemed to stimulate most change in both of the larger schools. For example, when Llefni began developing ESDGC it carried out substantial auditing and planning but as it gained confidence teachers began to work more flexibly, to plan less and to trust that ESDGC would arise naturally. The fact that schools took advantage of many opportunities resonates particularly strongly with the findings of Ofsted (2003), Global Action Plan (2009) and EES-SW (2007) who all found that successful ESD schools worked in this way.

The findings summarised above are very similar to those from the LEA officers' interviews on factors in successful ESDGC schools. However, many of the barriers to ESDGC development noted by LEA officers appeared to have been overcome in these schools, most notably by head teachers being able to see ESDGC as an opportunity for the curriculum. This made it less of a chore and more of a stimulus. The findings also confirmed many of those enabling factors suggested by Symons (2008).

The model in Figure 9.2 below illustrates these points pictorially. Building on the model introduced in Figure 8.6 of Chapter 8, it suggests how the development of ESDGC progressed as schools put certain measures in place and responded to continuing stimuli.

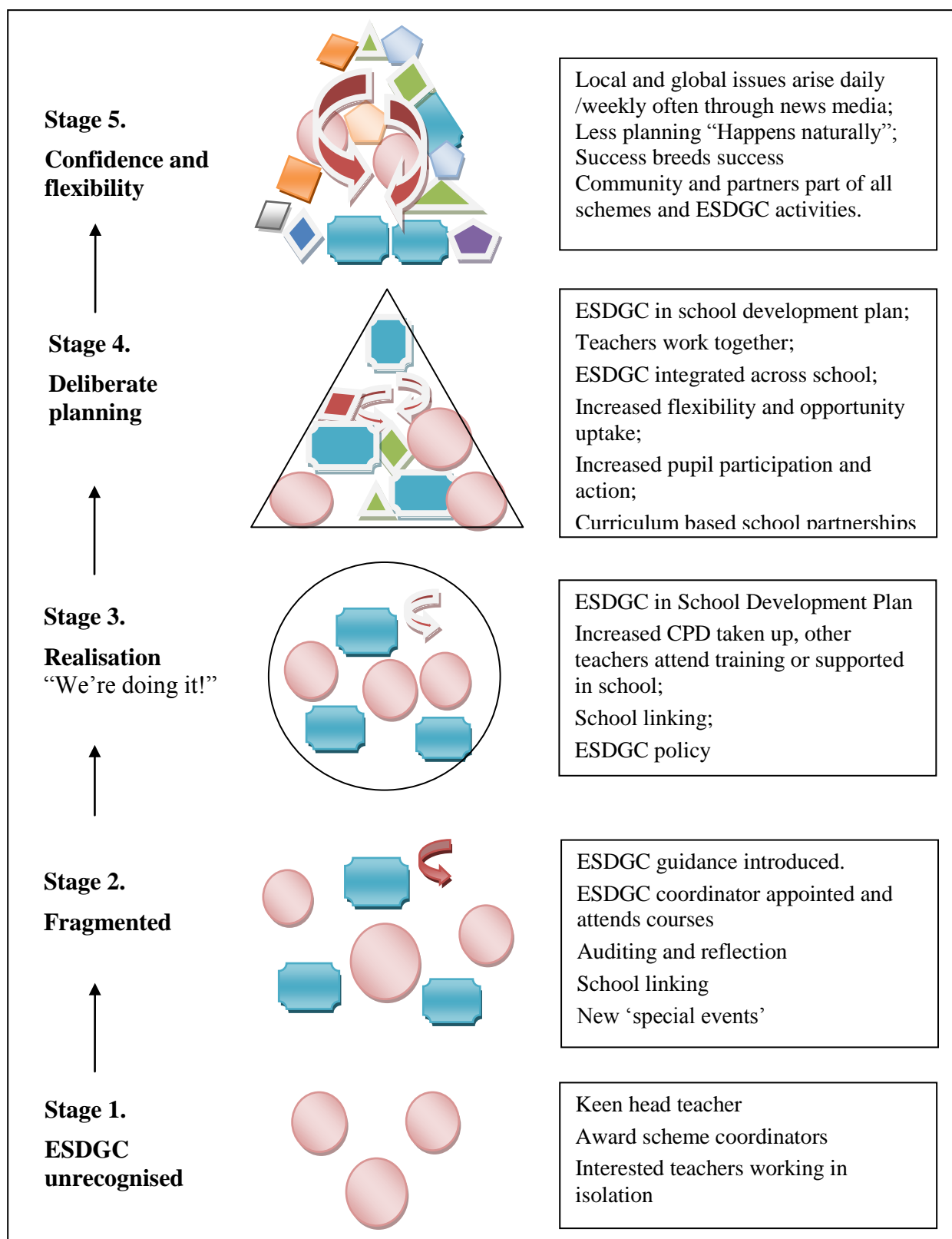
Figure 9.2 A model of actions taken by schools in response to initial and continuing opportunities and stimuli



The model in Figure 9.3 below describes more visually the stages of ESDGC development through which schools move over a number of years. The reflective spiral of development is assumed, but not illustrated here in order to preserve clarity of presentation. At Stage 1 ‘ESDGC unrecognised’, and often before the introduction of the ESDGC guidance, a school is carrying out a number of activities related to ESDGC. These include school award schemes. At Stage 2 ‘Fragmented’, when formal ESDGC guidance is noted a head teacher would perhaps appoint an ESDGC coordinator who would receive training and audit their provision. They also introduce more events such as special days on other countries, fair trade events, and would perhaps take part in another school scheme such as an international partnership. At Stage 3 ‘Realisation’ after auditing provision teachers realise that they are indeed already doing elements of ESDGC and add more activities, some spontaneously, noting at the end of each year what they have done that fitted with ESDGC. Other teachers begin to receive support in school.

At Stage 4 ‘Deliberate planning’, as confidence increased, and in the light of their ESDGC audits, a school would begin to address areas which were lacking in their ESDGC provision, deliberately planning ahead for these and other activities. ESDGC actions appear in the School Development Plan and there might be a whole school plan of activities. However, teachers are by now also increasingly alert to opportunities that could enrich the curriculum and working together on topics. There is also increasing pupil participation at this stage, for example in their contribution to actions in school award schemes and in the school council. At Stage 5 ‘Confidence and flexibility’ the school is confident that it understands how to do ESDGC and that it is part of everyday activities. It has many established links with the community and actively seeks opportunities. The head teacher and ESDGC coordinator are confident that teachers in all classes know how to introduce ESDGC naturally. Only a very small plan is used and teachers follow their pupil’s interests regularly. School award schemes, international partnerships and working with the local community have become a natural way of working and permeate all school activities. Pupils play a large role in suggesting and implementing activities at whole school and classroom level.

Figure 9.3 A model of five stages of school ESDGC development, Each shape is a type of ESDGC initiative, for example a school award scheme or international opportunity. Arrows denote reflection.



From the evidence collected it is estimated that Llefyn was at Stage 5; Faban and Gyrn at Stage 4, Bera somewhere between Stages 3 and 4, and Drosogl approaching Stage 3. This perhaps reflects the fact that the former three schools had been giving more attention to a range of ESDGC aspects for longer than the other schools. The latter schools did not give it detailed attention until 2008 or later and were thus at an earlier stage of their ESDGC journey.

Although the model in Figure 9.2 builds on an action research model (McTaggart, 1996) it also demonstrates certain similarities to Anderson's (1993) continuum of system change which notes several reflective stages in the process of change. Anderson uses 'maintenance of old system', 'awareness', 'exploration', 'transition', 'emergence of new infrastructure' and 'predominance of new system'. The first five of these stages could equate to the five stages described in Figure 9.3 above. 'Predominance of new system' may occur even later. The stages in the model also display similarities to those in Scott's (2010) capital-based levels of leadership characteristics and to the stages of progression described in the ESDGC Common Understanding (Welsh Assembly Government, 2008b) and Estyn (2010). However, the move away from detailed planning towards increasing flexibility in Stage 5 is much more in tune with the flexible, pupil-centred nature of the Revised Curriculum for Wales (Welsh Assembly Government 2008a), than the characteristics of the highest levels suggested in the other three documents.

9.8 CHAPTER SUMMARY

This chapter has contained a detailed discussion of possible factors affecting ESDGC development. Certain factors, such as the formalisation of ESDGC in the national curriculum appeared to have affected all schools. Although some schools had already substantially developed ESDGC before this, it was suggested that this guidance may have resulted in changes to their sense of purpose in addressing it. All schools appeared to have strong proactive head teachers. Four schools had taken similar measures to developing ESDGC. These involved giving it special attention, for example by including it in development plans, appointing a coordinator and auditing provision. Most noticeable in their approaches was an increase over time in the flexibility of their planning and the ways

in which they took advantage of opportunities. This flexibility and a skills-based, pupil centred approach was encouraged by the nature of the Revised National Curriculum (Welsh Assembly Government, 2008a) and was very much appreciated by teachers. Strong similarities were found with other similar studies but a key difference was this flexible approach. Two models have been proposed for ways in which schools respond to stimuli to develop ESDGC.

The next chapter continues to look at factors in ESDGC development by exploring how schools developed an informed, continuing learning community. In doing so it first looks at the perceived understanding and competence of teachers. It then examines how the key factors of professional development, teachers working together, and schools working with partners and community contribute to continued learning and reflection in the development of ESDGC.

CHAPTER 10 CASE STUDY SCHOOLS PART 5

DEVELOPING A KNOWLEDGEABLE LEARNING COMMUNITY

This chapter continues the analysis of factors affecting ESDGC in schools. Key factors addressed here include those associated closely with the teachers themselves, for example, the impact of personal interest, levels of teachers' knowledge, understanding and competence, access to professional development and how teachers worked together and supported one another. These were all noted as important factors by teachers.

Evidence from teachers' interviews and surveys are examined to assess the nature of professional learning communities within the schools. The discussion of internal collaboration is followed by an examination of teachers' wider networks and of the ways in which they and their schools worked with other organisations, schools and the local education authority.

10.1 TEACHERS' INTEREST, KNOWLEDGE AND UNDERSTANDING AND COMPETENCE IN ESDGC

As Levin (2008) suggests, school change would be unlikely to be successful without knowledgeable and competent teachers. Many of factors discussed in the previous case study chapters depend on having competent, committed and knowledgeable teachers both leading the developments, and planning appropriate activities in the classroom. For a holistic topic such as ESDGC, teachers' understanding of the nature of ESDGC and what it encompasses, the reasons they give for its importance and how they see its role within education are all important issues to consider (Pike and Selby, 1988, 1998, Orr, 1992; Sterling, 2001, 2004; Scott and Gough, 2003). Jackson (2007) noted that in successful ESD schools leaders had a good understanding of the breadth of the topic. If teachers see ESDGC in a narrow way such as 'recycling' or 'learning about other places' or see these as separate, fragmented elements, then it may limit the way they bring the interdependent nature of ESDGC into their teaching and thus limit their pupils' holistic understanding of the way the world works. Also, the interest levels of teachers may determine how they go

about their work and whether they take advantage of opportunities and “*go the extra mile*” as mentioned by the ESDGC adviser in Chapter 5. Claxton (1999) suggests that it may also help them to persevere when difficulties arise. These points pose several questions about the teachers in the case study schools:

- how interested were they in ESDGC and what had stimulated their interest;
- how knowledgeable and competent were they in relation to ESDGC;
- how many had been on specialist ESDGC courses or had similar professional development experiences;
- how many had received support in school and of what standard was this support;
- how many had entered schools already prepared for ESDGC by their initial teacher education and training courses?

This section again draws on the case study teachers’ questionnaire and interview responses. It looks first at the level of teachers’ interest and their own perceived levels of understanding and competence in ESDGC. On the latter topic it also examines their answers to certain questions which were designed to find out more about their actual understanding of the nature of ESDGC. For example they were asked to describe what they believed ESDGC is about, if and why it is important, and whether they made connections between ESDGC themes. It also examines how confident teachers felt about introducing ESDGC. Then it examines the kinds of influences that teachers felt had been most important, first in inspiring them, and then in developing their competence. It also looks at their perceptions of obstacles to their personal ESDGC development. The extent, and types, of professional development received by teachers are then examined.

10.1.1 How interested were teachers in ESDGC?

It has already been shown that in each school there were some teachers with exceptional enthusiasm for ESDGC and its associated topics. Across the schools these variously included the head teacher and the ESDGC coordinator and others with responsibility for aspects of ESDGC such as Green, Healthy and Eco-School. In Bera both teachers, and in Gyrn half of the six teachers, were ‘very interested’ in ESDGC, with the remaining three being ‘quite interested’.

It is particularly interesting to compare the two larger schools, Llefñ and Faban, where ESDGC had been being developed for a similar length of time and where there were particularly strong coordinators who supported teachers in their development of ESDGC. In Llefñ, four out of the nine teachers were ‘very interested’ and four others were ‘quite interested’. In contrast, in Faban, the largest school studied, with eleven teachers, only two, the head teacher and ESDGC coordinator, Teacher 2F, said they were ‘very’ interested; eight were ‘quite interested’. As discussed above, it may be that in this latter school teachers relied a little too much on the coordinator and assumed that ESDGC was her domain rather than theirs; the high proportion of young teachers may have made this more likely. Alternatively, the frequency of ESDGC conversations may have played a role; this is discussed later in the chapter. In both Faban and Llefñ there was one teacher who was ‘not very interested’; in both cases this was the Foundation Phase coordinator. This contrasts with Bera where the Foundation Phase coordinator was the ESDGC expert. This may reflect the amount of support and professional development received by these teachers; this will be revisited below. In these two schools all of ‘very interested’ classroom teachers said they gave ‘high priority’ to ESDGC in their teaching.

In contrast to the other four schools, in Drosgl no teachers said they were ‘very interested’, although all did say they were ‘quite interested’. No teachers said they gave high priority to ESDGC; four gave it medium, and one, low priority. These findings may reflect the comments in Chapter 9 on leadership and the lesser degree to which teachers work together. Drosgl was the only school without an ESDGC coordinator and although one teacher there, 6D, was clearly engaged with ESDGC through Eco and Fairtrade school activities, even she did not express a high interest in ESDGC. The contrasting higher level of interest in Gyrn, which is of similar size to Drosgl, may reflect the priority given to ESDGC by the head teacher, the shared responsibility for ESDGC and the number of teachers who had visited other countries as part of school partnerships.

Views of the importance of ESDGC

Despite these differences in levels of interest and priority, all teachers thought that ESDGC was important. Only one teacher, 3F, qualified this by adding that although he thought it *was* important, he felt that other areas of learning were more important.

In summary, certainly not *all* teachers in the schools were ‘very interested’ in ESDGC, although there were many who were ‘quite interested’. This is likely to be a common situation in schools given that all teachers have unique backgrounds, a point noted by Feiman-Nemser and Floden (1986). The section below examines what had sparked teachers’ interest.

10.1.2 What had sparked teachers’ interest in ESDGC?

The information on teachers’ interest in ESDGC was gained from responses to a question in their survey and follow-up questions in their interviews. Figure 10.1 is a graph, derived from the survey responses, of the factors that teachers felt had influenced their interest in ESDGC. The numbers of teachers saying that they were very interested, i.e. eleven out of 34, and the differences between schools discussed above, should be borne in mind when interpreting the graph.

Generally most factors were mentioned by at least one teacher in each school. The most common factor overall was ‘current school practice’. This was followed by holidays and travel to different countries, family background, cultural, own school experiences and media. However, the influence of friends and experiences on their university degrees and teacher training had also affected about a third of teachers. Experiences which occurred out of school will be considered first.

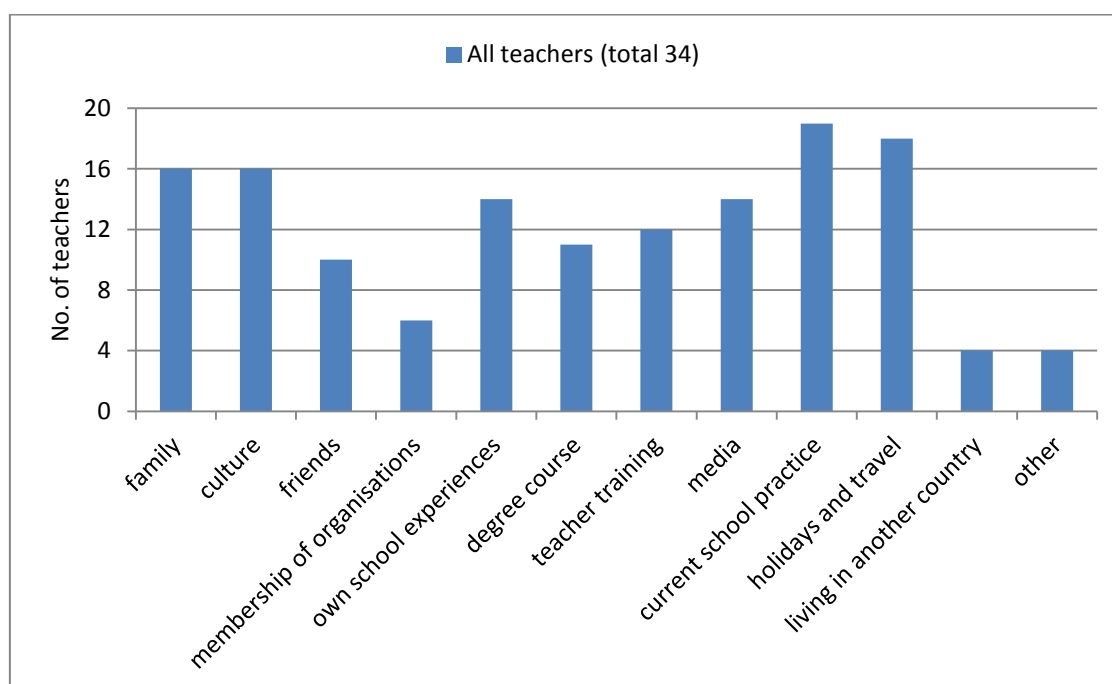
Influences on interest stemming from outside of school

A large number of teachers also said their interest had been influenced by events outside of school. Factors stimulating their interest included environmental factors such as being brought up on a farm, having parents who encouraged their interest in nature (Teachers 2B, 3G, 6L) and politics (Teacher 2L, 3L). In Llefyn seven of the nine teachers who responded gave family and/or friends as a factor in sparking their interest. The Bera ESDGC coordinator, 2B described her early family influences,

“I’ve always had an interest in the world and everything around me – that probably comes from my upbringing. I was brought up in South Wales, and my parents liked to be outside, the outdoor life in the fresh air, and we were always learning about

the world as it was in the past. And I've tried to do the same with my own children as it were, and now I really thoroughly enjoy doing it with the kids in the class."

Figure 10.1 Case study teachers' responses to the question 'If you have an interest in ESDGC what do you think may have sparked this interest?'



Interestingly, Welsh cultural upbringing was mentioned by sixteen teachers from across the schools including the head teachers of Gyrn, Llefyn and Bera. International influences were also mentioned. Corresponding with friends living in other countries was mentioned by Teacher 7L. In Bera the head teacher had studied Religious Studies with religions of the world and was now reviewing her interest as her own son studied similar subjects. The Llefyn head teacher had also been inspired by hearing a talk by George Alagiah, a newscaster with roots in India and Africa. Although only four teachers mentioned living in another country, this was particularly influential for some key players in schools' development. For example, Llefyn's ESDGC coordinator, Teacher 2L, said she had been strongly influenced by coming from a Welsh family that was also outward looking and cosmopolitan, and where she had been taught to respect different cultures. She had then lived and worked in other countries for many years. Faban's head teacher said her interest came from being brought up in a different culture in south-east Asia. Her relative in Drosgl made similar comments, mentioning her negative experiences of returning

to Wales as a spur to wanting to help children understand diversity. Teacher 3D's experience of living in Turkey was also behind Drosogl's new link with a school in that country.

'Holidays and travel' was the second most commonly mentioned factor. However, on closer questioning in their interviews this often turned out to be from a mix of personal travel experiences and those associated with school international linking. This latter finding is reflected in the graph where the two schools without international partnerships (Bera and Drosogl) both had proportionally lower numbers for this factor compared to the other schools which did have partnerships.

Teacher 2F, the Faban ESDGC coordinator had also gained an interest before teaching through her study of geography at university; it is likely that the decision to study this subject came from an interest initially gained even earlier, such as her own school experiences. Eleven teachers mentioned teacher training for stimulating their interest but none said that it had influenced them 'a lot'. On closer questioning this seemed to be a real influence for only three teachers. This will be discussed further in the section on competence below.

Many of these teachers were key players in their school's ESDGC development. In total, seven of the eight key ESDGC players from Faban, Llefni, Gyrn and Bera all had a strong personal interest in aspects of ESDGC which stemmed from their pre-teaching years. This was also the case for two teachers in Drosogl. This chimes with some of the characteristics of teachers noted by Inman and Burke (2002) and Griffin et al. (undated).

Impact of experiences in school

Eighteen teachers mentioned current school practice as a factor in raising their interest in ESDGC; in Drosogl this was the most commonly mentioned influence. In Faban, the stimulus of the children from many cultures in the school was mentioned,

"just that the children from abroad are in the classroom and also having the chance to talk to them" (Teacher 7F)

"I enjoy talking with the children about where they have been or come from." (Teacher 8F)

This stimulus from the children did not just occur in a multicultural school. In Bera teacher 2B noted that she had also been inspired by the reactions of the children,

“And we’ve had fun you know! And that enjoyment is infectious. It is fantastic.”
(Teacher 2B)

Hearing about the southern Asian school link had affected four teachers in Faban. International visits and links had also affected four teachers in Llefyn (head teacher, 2L, 4L, 5L) and four teachers in Gyrn (the head teacher and Teachers 2G, 3G and 4G). In the latter school the opportunities for three of these teachers arose well into their lives. Although Teacher 3G first went to southern Africa as a young teacher, Teachers 2G and 5G had been teaching for many years before these opportunities arose. It is interesting to consider just why they went to the countries – was it just the encouragement of the head teacher or an existing curiosity?

In Llefyn teachers also mentioned working with, or being supported by the ESDGC coordinator (2L), school events and the impact of visitors. Researching for their teaching was mentioned by teachers in Faban and Drosgl and teachers who had been given responsibility for developing certain aspects of ESDGC often mentioned this for raising their interest, e.g. Teachers 2F, 3F, 8F, 4L, 2G and 6D. For example Teacher 2B said she had become better acquainted with ESDGC when she had to mentor some other schools. This was a very positive outcome of distribution of leadership, also noted by Apple and Beane (1995) and Jackson (2007).

The fact that teachers can have their interest in ESDGC stimulated by in-school experiences is very useful as it means that a school need not be completely dependent on recruiting extremely interested teachers, a point noted as desirable by Levin (2008). However, it may be reasonable to assume that many of these teachers might not have overtly introduced ESDGC topics without some encouragement. This makes the presence of key interested and enthusiastic ESDGC teachers in the school even more important.

Transformative experiences

Some of the teachers’ experiences described above could be described as transformative experiences (Mezirow, 2000; O’Sullivan, 2003). The experiences of some teachers of

travelling to a very different country, for example, may have fallen into this category. For example Teacher 2G, the ESDGC coordinator in Gyrn, became much more interested in ESDGC as a whole after visiting China. The negative experiences of Teacher 7D on returning to live in the UK may also fall into this category. Teachers exposed to a number of influences at an early age, such as Teacher 2L, may only have experienced a gradual change in their perspectives that they may not even have noticed, rather than having a life crisis or major life transition as suggested by Mezirow (2000). This is more akin to Mezirow's (1995) earlier suggestion that transformation may result from an accumulation of transformations in meaning schemes over a period of time.

10.1.3 Teachers' perceived understanding, competence and confidence in ESDGC

An overview of teachers' understanding, competence and confidence was gleaned from their responses to survey questions, from their description of what ESDGC entails and from their views of why ESDGC is important.

The head teachers in Faban, Llefñ, Gyrn and Bera, the ESDGC coordinators in Faban and Llefñ and Teacher 7L in Llefñ, all felt they understood ESDGC and all its themes 'very well' and they were 'very confident' about introducing it in teaching. However, the replies from other teachers in these schools were more mixed. Generally, the other teachers in Llefñ, Gyrn and Bera felt they had at least 'quite a good understanding' of ESDGC and were 'quite confident' about teaching about it. In Gyrn, the ESDGC coordinator, although very aware of ESDGC and despite having been on courses, still felt she lacked a little confidence in teaching it. Most teachers in these schools were also at least quite familiar with the ESDGC Common Understanding; in Gyrn all teachers knew a fair amount about this. The exception was Teacher 3L in Llefñ who said she had not seen this document and did not know about the themes, even although she had taken over responsibility for PSE. This was hotly disputed by her head teacher. It is suspected that this may have been a case of Teacher 3L resisting change as suggested by Hargreaves (2003) and Scott and Gough (2003). In these three schools the teachers' definitions of ESDGC went well beyond simple understanding and comparisons (Appendix 4) confirming that they did understand it, perhaps even better than they themselves realised. They showed that they understood that ESDGC was about a range of issues from environmental and global issues, respecting

other peoples and seeing similarities and differences, for example,

“Well, I think it means everything that’s to do with the world – the world and the people and the climate, and the future of the world, and the world’s past as well – and how that is going to affect children especially, and how it does affect them at the moment. And try to pass the best values on to them about the world as it is at the moment, and what kind of world it will be for them in the future.” (Teacher 2B, ESDGC coordinator)

The emphasis within definitions did differ a little. Some, like Teacher 2L, emphasised the multicultural aspects, widening horizons and the future, whilst others such as Teachers 6L, 3L and 3G stressed the environmental aspects a little more. On its importance within education many said it was core, or natural to education (Teachers 2L, 4L, 6L and 7L, 1G, 2G, 1B, 2B). This belief was summed up in the following comments,

“because in the end, that’s where we live, in the world, so every aspect of education contributes towards this. So, that’s how I see the subject – as a subject that is overarching, where the other subjects feed into the children’s understanding of where they are today and where they were in the past” (Teacher 2L)

“Well it’s completely core to it, the most important to be honest. It’s got to come through everything and if we don’t respect the world, respect the person next door, we won’t respect anyone.” (Teacher 7L)

“perhaps I shouldn’t call it a subject because it’s part of the ethos of the school, it’s part of the school life” (Teacher 2G)

Also, many of these teachers made connections between ESDGC topics regularly. This emphasis on the holistic nature of ESDGC and its place in the school ethos in these schools reflects the findings of Jackson (2007) on ESD/GC schools and supports the views of Rowe (1996), Pike and Selby (1988, 1998), Sterling (2001), Scott and Gough (2003).

In contrast, in Faban, although the head teacher and ESDGC coordinator were very confident and knowledgeable about the full range of ESDGC, the replies for the remaining teachers were mixed. Although all knew about the term ‘ESDGC’ and knew they were doing it, the majority of the teachers were still only ‘quite’ (3 teachers) or ‘a little’ (6 teachers) confident about teaching it. Although six teachers felt they understood it ‘quite well’ and that their teaching competence had moved on ‘quite well’, several said they did not fully understand what ESDGC entails. For example, Teacher 11F said,

“I do what I know; I do what I think I should be doing but I think the restraint to me is that I don’t know well what exactly I’m supposed to be doing. That’s what’s the restraint for me. I have a need to know more. (11F)

Another indication that ESDGC was not fully understood also came from these teachers’ definitions of ESDGC and the reasons they gave for its importance (Appendix 4). These showed a definite preponderance of ‘knowing about’ other children/people and how people live in other parts of the world and that there were similarities and differences between them; all teachers in Faban said that ESDGC involved this. This was likely to be because of the emphasis on diversity within the school. However, surprisingly, in a school with pupils from many countries the theme of ‘Identity and culture’ did not appear to be very well understood, with only three teachers understanding it ‘very’ or ‘quite well’. Perhaps this is because they were more aware of what they don’t know. Four teachers did show a greater awareness of ESDGC’s breadth, saying that ESDGC was also about action they could take, for example to look after their world, for the future and to help others.

One explanation for this lack of full understanding could be the school’s earlier concentration on global citizenship rather than ESDGC. It was notable that, apart from the head and coordinator, teachers were either just a ‘little aware’ of the ESDGC guidance documents (7 teachers) or ‘not at all aware’ (2 teachers). This reflects what the ESDGC coordinator said earlier about not yet having shared the documents and new audit with other teachers.

In Droschl, teachers said they understood ESDGC either ‘quite well’ (3 teachers) or a ‘little’ (2 teachers); but none said ‘very well’. Most were a little aware of the ESDGC guidance but none were ‘very aware’ of it, nor ‘very confident’ about introducing it in their teaching; three were however ‘quite confident’. Teachers 2D and 3D appeared to have the better understanding across the ESDGC themes than the other teachers. This again reflects the lower level of priority given to ESDGC in the preceding few years. Like Faban, teachers’ definitions of ESDGC confirmed this lack of understanding. They placed a similar emphasis on knowledge and awareness of the world outside, learning about others, diversity and dealing with children’s stereotypes. None mentioned connections between their own lives and the wider world apart from what is implicit in Fair trade.

On the whole, across all schools, there was little difference in confidence about teaching the seven ESDGC themes, although in each school there were some who felt less confident all round.

In summary, although at least four of the schools had some teachers who were very up-to-date, confident about, and had a good understanding of ESDGC, there were some teachers in each school who still had an incomplete understanding and who were not yet fully confident about introducing it their teaching. This lack of full ESDGC understanding in some teachers could mean that they were not giving pupils a range of ESDGC activities across its entire scope. It was notable that although teachers said they were appreciative of having a supportive ESDGC coordinator and/or an enthusiastic, supportive head teacher, this did not necessarily seem to guarantee that they in turn would gain high levels of understanding and confidence. The head teachers of Gyrn, Faban and Drosogl all recognised that there was some way to go, especially in terms of teachers' full understanding of sustainable development. The next section looks at *how* teachers had been gaining competence and whether the quality of their experiences can shed any light on their levels of understanding.

10.1.4 Factors influencing teachers' understanding and competence in introducing ESDGC

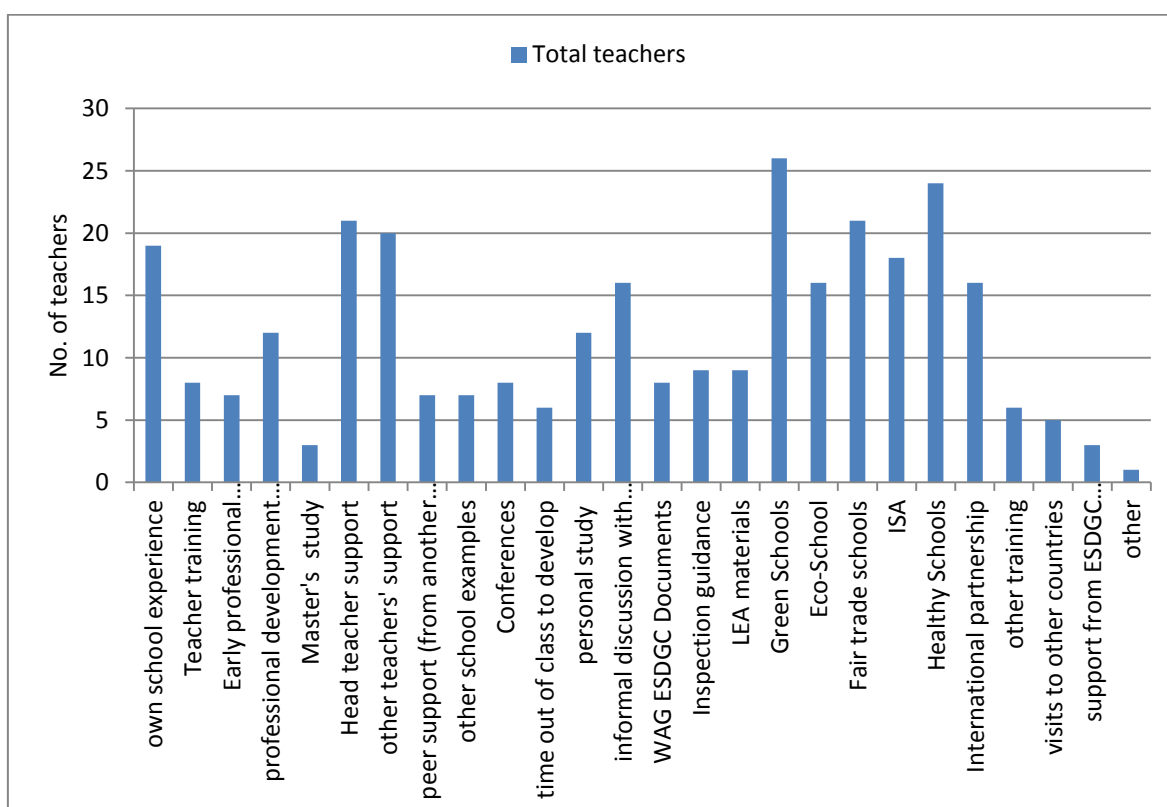
Professional learning for ESDGC can encompass many aspects. Teachers may, for example, attend a specialist ESDGC conference or courses or other courses where ESDGC-related topics are discussed. They may study in their own time or be given time out of the classroom to study it. They may receive the support of other teachers within, or from outside the school; they may visit partnership schools in other countries; or they may learn 'on the job' through having to research and introduce a topic, or being given responsibility for an area of learning, for example Eco-School development. It is known that all of these opportunities were available to the case study schools. This section again draws on teachers' survey responses and on follow-up information from their interviews to find out what teachers felt had helped them gain competence in ESDGC. Figure 10.2

shows the results for all teachers. Appendix 5 shows graphs for each individual school.

Overall, factors which stood out were:

- school award schemes such as Green, Eco, Healthy and Fairtrade schools (all schools, and especially notable in Drosgl);
- a supportive head teacher (all schools);
- own school experiences (as a child);
- other teachers' support (particularly in Llefyn and Gyrn),
- informal discussion with other teachers (Llefyn and Gyrn),
- international partnerships for the three schools, Faban Llefyn and Gyrn, which had these;
- professional development courses in Llefyn and Gyrn.

Figure 10.2 Case study teachers' responses to the question: 'Have any of the following helped the development of your ESDGC teaching competence?'

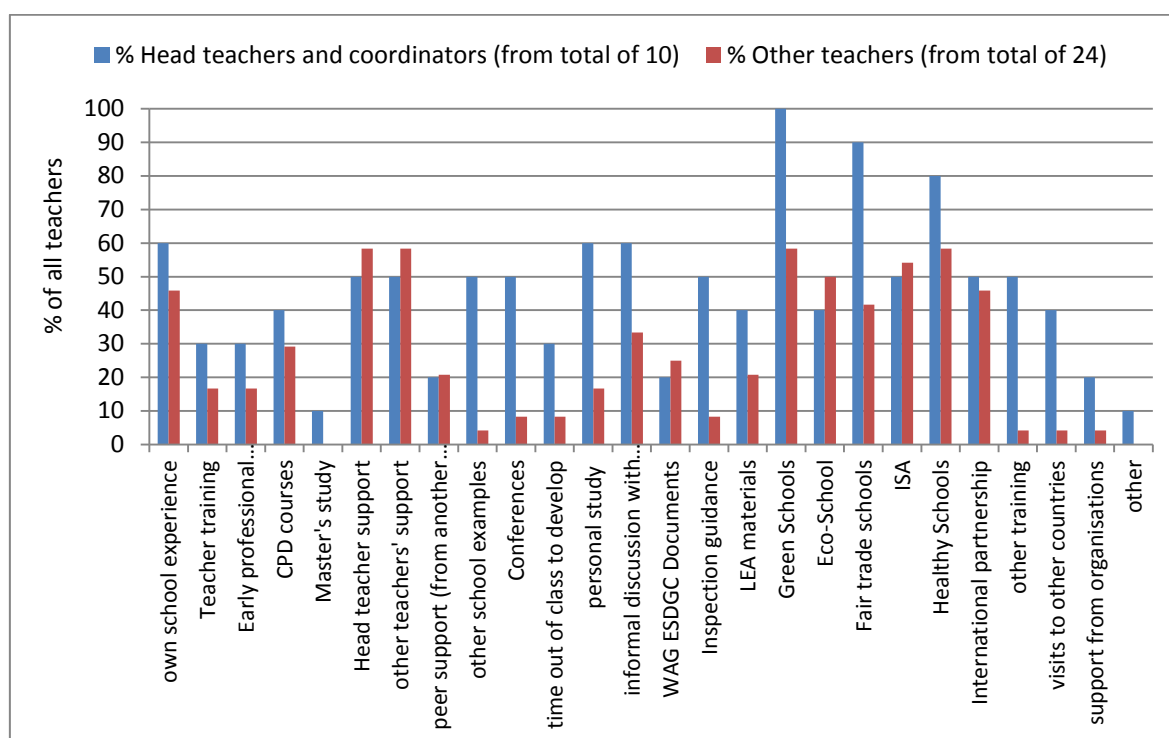


From both their survey responses and their interviews it was apparent that there was quite a difference between factors that seemed to have affected the competence of the head teachers and ESDGC coordinators and those which had affected the other class teachers.

Therefore these are discussed separately below. Figure 10.3 shows the breakdown for each

group and Figures 10.4 and 10.5 illustrate the key differences more pictorially.

Figure 10.3 A comparison of class teachers' and head teachers'/coordinators' responses to the question: 'Have any of the following helped the development of your ESDGC teaching competence?'



Note: It is recognised that using percentages of small numbers can be confusing, however they have been used here to enable a more meaningful comparison. Also, the categories 'Support of the head teacher' and 'Other teachers' support are difficult to compare as head teachers and coordinators may not have suggested these themselves.

Influences on class teachers (excluding ESDGC coordinators and head teachers)

Class teachers tended to place emphasis on experiences received within their schools. They mentioned influences such as: a supportive head teacher, the support of other teachers, work with their partnership schools, and Green school, Healthy school, fair trade activities and international partnerships. Just over a fifth noted continuing professional development courses. The Foundation Phase, with its seven aspects and pupil-centred learning had also helped some of the infants' teachers in all schools.

Figure 10.4 Summary of influences on ESDGC development of head teachers and ESDGC coordinators

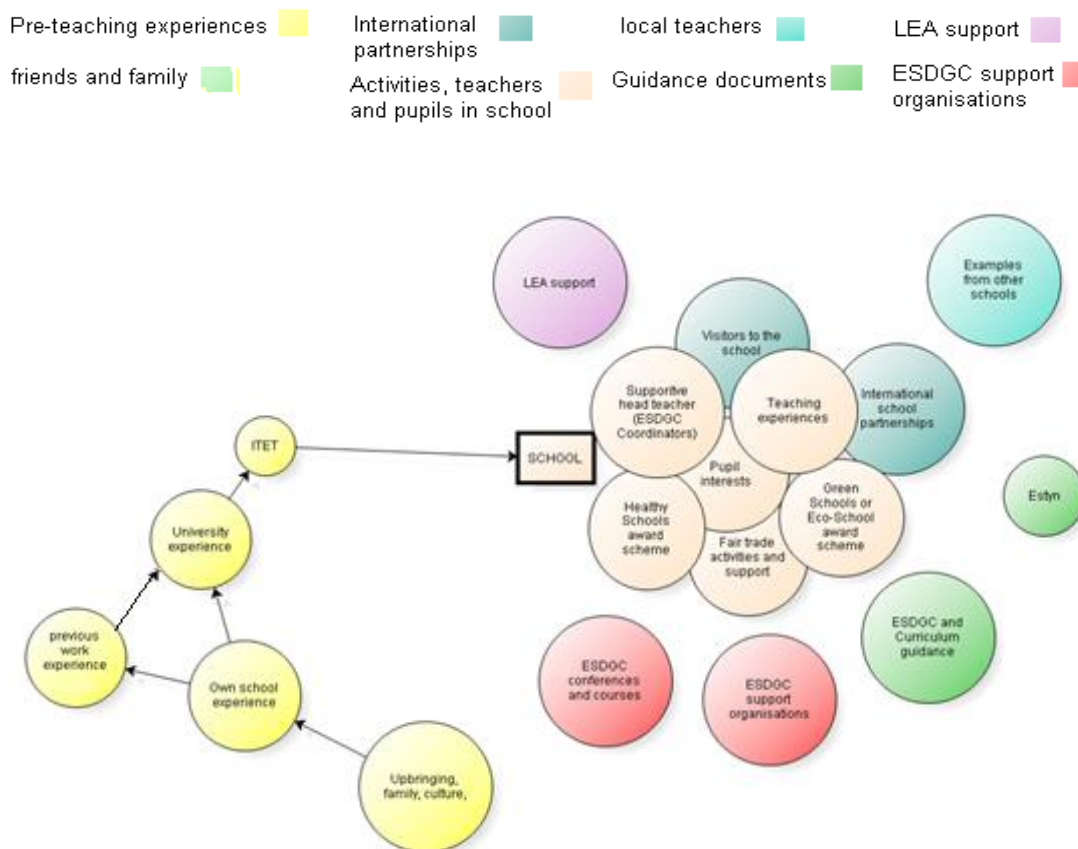
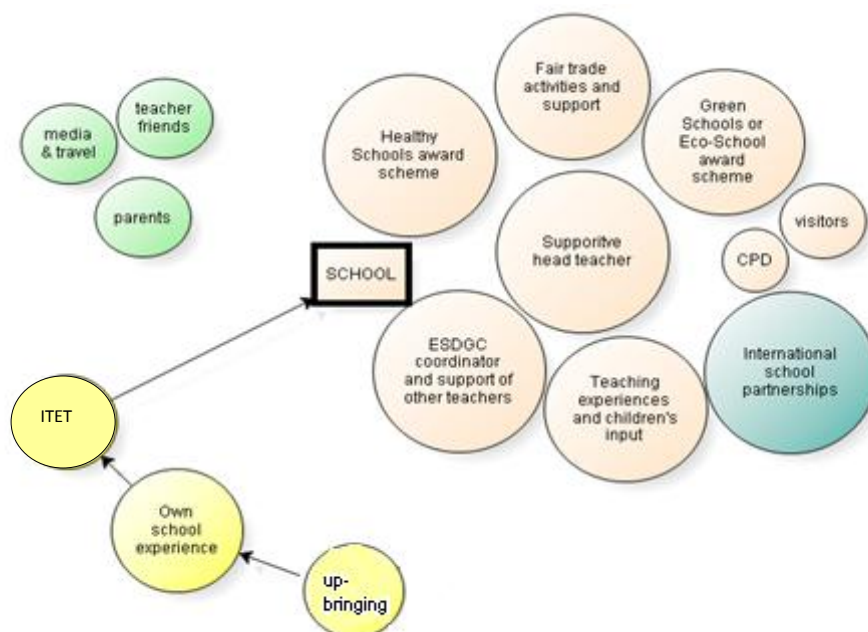


Figure 10.5 Influences on ESDGC development of other classroom teachers



Influences on head teachers and coordinators

The head teachers and ESDGC coordinators generally answered ‘a great deal’ to many of the factors. Like the other teachers, they mentioned the influence of Green School, Healthy School and Fairtrade school and professional development courses; all ESDGC coordinators did so. However, they also added: conferences and other training, informal discussion with other teachers, examples from other schools; working with other organisations (e.g. the local Development Education Centre); LEA support; inspection guidance; visits to other countries; and time out of class for development and personal study. This indicated that these key teachers had had much more access to professional development opportunities outside of their school than the other teachers; this not only included courses but local and global interactions with other schools from which they felt they were learning. Some of their experiences were particularly notable. Faban’s head teacher, Drosogl’s teacher 7D (a relation of Faban’s head teacher) and Llefn’s Teacher 2L said they had learned about cultures from their own family backgrounds. The latter teacher had also had many other experiences, for example she had taught abroad, taken part in a special global education teaching project during her ITET course, studied a masters module on Global Education, attended many other courses, and learned from developing international partnerships, including specialist global school partnership courses. Faban’s ESDGC coordinator also said she had been on many courses.

The frequent mention of school award schemes could raise some concerns; if schools had relied on the school award schemes alone then there could have been a danger of a fragmented approach (Scott, 2010). However, four schools, Faban, Llefn, Gyrn and Bera appeared to be complementing these with many other experiences and only in Drosogl did teachers appear to be influenced mostly by these award schemes. This is returned to below when the types of courses attended are discussed.

The key categories of issues which appeared to be affecting teachers’ competence are now discussed below. These are ITET experiences, access to, and types of, professional development, in-school teaching experiences and support, teacher collaboration within schools and collaboration with others outside of the school.

10.2 INITIAL TEACHER EDUCATION AND TRAINING (ITET)

There had been several major efforts to embed ESDGC in ITET courses in Bangor University since 2001. One of these was a major project funded by DFID's Development Awareness Fund from 2001-04 (Bennell, 2004). This reached 1500 teachers and incorporated the Wales-Caribbean links project mentioned earlier. It was hoped that this project would permanently embed ESDGC in Bangor University courses. The vast majority of case study teachers studied there and twelve of the thirty-five teachers had graduated since the period of the project so it was also reasonable to expect to see some of its influences in schools. It was interesting then to find that although ITET had raised some teachers' interest it did not appear to have had a great effect on their competence. In their survey responses only eight teachers felt they had gained experience from their ITET course and only one of these, the very new teacher 5L said it had helped his competence 'a lot'.

When queried further on this topic in their interviews twenty-six teachers said they had *not* done anything on it in their courses. Unsurprisingly, no teachers who graduated before 2001 felt they had learned much about ESDGC topics on their course except perhaps a little on environmental education. Of six who said they had done a little work on ESDGC, two (Teachers 2L and 4F) had taken part a project on the Wales-Caribbean project 2003-4 and had experience of introducing that topic on teaching practice. Three others, all of whom had graduated during the previous two years, said they had been introduced to ESDGC and the guidance documents a little in college. There were some revealing comments on this from these young teachers. Teacher 5L said, *"I was aware of it but I didn't know it played such a central role in education."*

Teacher 3D had a lot to say and it was not all positive. Two of her remarks included,

"They linked it together so it was handy in a way, no matter what subject you did it comes in whatever, local history, things a bit wider, it comes in to everything."

"What happened to us, we had a group of us, we were sitting there, watching the Powerpoint, listening..... I feel it was just information, not a help to how to put it across" (Teacher 3D)

She felt her interest had really begun during her experiences on school practice in three different schools. Interestingly, one of these schools was Llefyn, one of the other case studies in this research study. Other teachers commented that their courses, especially the postgraduate qualification courses, were just too full to concentrate on any topic and little or nothing was practising teaching methodology. In summary, ITET experience appeared to have played little part in developing teachers' ESDGC competence.

10.3 FORMAL PROFESSIONAL DEVELOPMENT EXPERIENCES

10.3.1 Desire for professional development

A number of previous studies cited in Chapter 2 e.g. Jackson (2007) Anderson (2008), and Symons (2008), noted that professional development courses are useful for ESD/GC development. In this current study, twenty-four of the thirty-five teachers said they actively sought ESDGC learning experiences although this desire had not always been fulfilled. Some teachers in Faban who clearly had a desire to go on courses, attributed their lack of understanding of ESDGC to a lack of courses, for example,

“If we were to have had HMS [in-service professional development] to get more understanding of the area and also how to develop it with children so young [it would be helpful]. Yes.” (Teacher 10F)

“Ehmm, I think it's... I'm not sure how to explain this. There are no.. we haven't got any training courses in the school. I haven't been on any course. I haven't seen anything that's specific and says 'This is what it is'. Do you understand? I'm not sure if I'm explaining it well? The course I did go on was PSE and Citizenship and I hadn't realised [until then] – oh these are two things that go together.” (Teacher 7F)

10.3.2 Access to professional development courses

Whether teachers can access professional development of any kind depends very much on their head teachers. All head teachers in the case study schools were certainly positive about teachers gaining professional development in ESDGC and this was confirmed by

teachers' responses; twenty-seven of the thirty-five teachers said that their school encouraged them to have professional learning experiences in ESDGC. However, this was not so easy to fulfil. The head teacher in Faban gave some reasons for why this happened in her school. Whilst she agreed that ideally it would be beneficial for more teachers to go on courses, she explained,

“But it’s hard though isn’t it, because if the coordinator is supposed to coordinate, and things change and they haven’t been on the course, [that is] someone else has been on the course, [then] the information doesn’t always [come back to teachers]. There’s only so much money as well isn’t there?”

This situation may also have arisen because the school is fairly large, with the head teacher trying to run as efficient an operation as possible. In Llefyn the head teacher said that they deliberately sent teachers on courses, however, again this seemed to refer mostly to the ESDGC coordinator,

“We are a school that goes on the local authority courses, but [it’s also] it’s part of the ethos of the school that I also send teachers on courses outside of the school as well.”

In Gyrn, the head teacher had also sent their ESDGC coordinator on courses and had asked her to report back to the staff. He regretted there had not been many LEA courses, explaining that,

“What’s happened in the infants is, with the Foundation Phase coming in, the courses have mostly been on the [general] Foundation Phase.” (Gyrn head teacher)

To overcome this he had enrolled the school on the World Education Centre’s ESDGC mentoring project in a deliberate move to develop ESDGC in the Foundation Phase,

“The mentor project was good because it gave us the opportunity for everyone to work together and to concentrate on this area.”

Neither of the other head teachers, Bera and Drosogl, mentioned a specific policy of sending teachers on ESDGC courses although, as will be seen below, Bera had received considerable ESDGC support. There were also signs that Drosogl was beginning to realise the worth of training and shortly after the teachers’ interviews two teachers attended courses.

10.3.3 What kind of courses had teachers attended?

The ESDGC coordinators in Faban and Llefyn had been on very many ESDGC professional development courses and both their head teachers had attended some. These included LEA courses, other courses and conferences run by the local ESDGC forum and those run on behalf of the DFID Global Schools Partnership scheme by the local Development Education Centre, the World Education Centre; these were described earlier. They had also attended other courses run by the British Council further afield. As noted earlier, the Llefyn coordinator had also studied a full master's module on Global Education at Bangor University. From their comments it appears that these two coordinators, with their head teacher's permission, had taken advantage of as many opportunities for training as possible. One other teacher in each school had attended a course. In Faban Teacher 7F attended and Local Education Authority PSE/ESDGC training day and in Llefyn Teacher 6L had attended a Kenyan art event.

In Gyrn, since 2008, Teacher 2G, the ESDGC coordinator had been on several courses associated with the World Education Centre's mentor support project and she had attended the ESDGC schools' conference in Bangor in 2009. She felt she had learned a lot from hearing specialists in the field and also from other teachers. This latter source had given her confidence that their school was moving on sufficiently well; it also had provided her with information on resources and websites. Teacher 4G felt he had learned from other teachers and education advisers through his attendance at the Wales-Lesotho Link (Dolen Cymru) schools' meetings.

In Bera the head teacher had been to a primary head teachers' meeting where the Head teacher from Llefyn had given a presentation – this was seen as useful. Teacher 2B, the infants and ESDGC coordinator, said, "*Training events? Yes, you need them*". She had received substantial help on the Foundation Phase pilot from the Foundation Phase advisory teacher with a special interest in ESDGC. Later, at the start of her mentoring on the ESDGC support project she had received further training from the same person and towards the end of the project she had attended a schools' ESDGC sharing meeting – she said these had all really helped her. She had also been on several humanities and other LEA courses. Because both teachers had been in the school for some time both had also been on courses run by the previous Humanities adviser who was emphasising ESDGC-

type learning in the 1990s, well before it was introduced formally (personal reflection). This may partly account for the teachers here, and in Gyrn where the teachers were also mature, saying they done this kind of work for a long time. In summary, all of these head teachers and coordinators in Faban, Llefñ, Gyrn and Bera had been exposed to specific, quality ESDGC training and would have seen many examples of good ESDGC practice.

In Drosogl, several teachers initially said they had not been on courses, however on closer questioning it turned out that all, except teacher 5D, a new supply teacher, had been on some kind of course with connections to ESDGC. Teacher 2D had been on an LEA course on ESDGC in 2006. Teacher 6D who was responsible for Eco School, Green and Healthy School had been on a Healthy Schools course where it is known, from the Anglesey Healthy School coordinator's interview, that ESDGC activities were mapped against those for Healthy schools. This teacher had also been to France on a French learning course. Also, several years before, Teacher 4D had attended a Foundation Phase course on which ESDGC was mentioned. These experiences would have been contributing to some understanding of ESDGC; they had not, however, as evidenced by teachers' comments, given them a full overview of ESDGC as a whole.

Impact of the research study

Interestingly, this research study appeared to have influenced teacher 7D to attend a Foundation Phase ESDGC course, and Teacher 6D to attend an ESDGC sharing practice day, both organised by the project on which the author was working. A similar thing happened in Llefñ. After the first bout of interviews a short report was sent to the school in preparation for their school inspection; it mentioned that Teacher 3L had shown limited understanding of the ESDGC documents. A few months later this teacher attended a Foundation Phase ESDGC course.

In summary, in all schools some teachers had attended courses and some teachers had been to a substantial number of these, thus gaining access to extensive intellectual capital (Hargreaves, 2003). Although some of these had been LEA courses many others had been provided by other ESDGC support organisations. Attendance at all of these courses would have led to a gaining of new ideas which could be relayed back to their schools, possibly widening horizons (e.g. Sterling, 2001; Scott and Gough, 2003). However, in every

school there was a majority of teachers who had not been on any specialist ESDGC-related course, and also some who really wished to do so. Other ways in which these teachers were receiving professional development in ESDGC are now discussed.

10.3.4 Professional development experiences in school

Many teachers mentioned in-school experiences as the main influences on both their ESDGC interest and competence. This was particularly noticeable for those who were not leading or coordinating ESDGC. This kind of learning can be described as situated learning (Lave and Wenger, 1991). That teachers mentioned learning in this way was positive in that it showed that schools could interest teachers even if they had not been interested before arriving in the school; it was heartening that nearly all teachers did believe they were moving on with ESDGC development through these experiences. However, in some schools the teachers' often partial definitions of ESDGC, their comments and their continuing lack of confidence in introducing it, suggested that many had been receiving only a fragmented understanding of, and competence in, ESDGC. This may have affected by, for example, the kind of support they received, particular responsibilities they held within a school and how often they talked to, and worked together with other teachers. The nature of teachers' in-school professional development experiences is now discussed.

Gaining experience through teaching and having a responsibility

Teaching experiences and designated responsibilities were mentioned by several teachers for helping them to understand ESDGC better. For example, Teacher 6D mentioned her role as Healthy School coordinator; Teacher 4F, the influence of being involved with the school council; Teacher 4L, his coordination of Green School and school council; and Teachers 2L and 2B, their roles as ESDGC coordinator and, for the latter, Foundation Phase coordinator. These roles did not, on their own, guarantee a full understanding of ESDGC. For example, a Healthy School coordinator might gain experience in aspects such as food procurement and fair-trade whilst a Green School coordinator might learn more about recycling. Further support might be needed for a full understanding.

In most schools there was evidence of teachers gaining information from books, the internet, newspapers and watching the news; almost every teacher mentioned one of these. Teacher 6D summed up their approaches,

“I think, especially in the primary school you would do this, there are some things you are not sure about, because you can’t be an expert at everything. Well I do a lot of reading up, looking on the web to be sure and also asking, if it’s science, the science coordinator ‘how do you do this’, and so on.” (Teacher 6D)

Asking the children and researching *with* them was mentioned in Bera, Faban and Llefñ. However, Teacher 2L, the Llefñ ESDGC coordinator added,

“They [the children] have become very aware of the fact that it isn’t possible to research everything on the internet, and in books, and that there are some things you can’t do, like taste food, listening to accents, dancing, things like that – they are very aware that there are things that are limited without [actually] talking to people.” (Teacher 2L)

Bera’s teacher 2B explained her proactive approach. She would first ask the children what *they* already knew, and then,

“From there then, there is always someone in the community that can come in. We are very good at getting people to come in here, to talk about things. That’s very important – that we don’t think ‘Oh it’s us that’s teaching, and only us’.” No!

This open mindedness about seeking information and working with the community again reflects the characteristics of leaders of democratic schools (Inman and Burke, 2002) and Shallcross and Robinson’s communities of action (2007). This aspect is discussed in detail towards the end of this chapter.

Support in school

Without access to dedicated ESDGC courses, teachers would be much more dependent on receiving comprehensive ESDGC support in school. In turn, the quality of this support would be very dependent on the level of understanding, competence and availability of those in the school with expertise, i.e. usually the head teacher or ESDGC coordinator. Although it has been shown above that most of these key ESDGC teachers had had access to good quality learning and did appear to have a very good grasp of ESDGC, the negative teachers’ comments from Faban, illustrated above, indicated that there was no guarantee that this knowledge would be fully transmitted to the other teachers, despite efforts being

made to do so. The Faban head teacher explained a difficulty associated with this,

“[2F] tends to hold staff training on a Monday night after being [on a course]. All the staff [attend], but it’s not quite the same because she’s been [on the course] for a day, and she has to report it all in an hour.” (Faban Head teacher)

This implied a dilution of ideas within the school. This cascade effect was noted by Hayes (2000) as common result of professional development and Supovitz and Turner (2000) found that dramatic changes in teaching practice emerged only when professional development experiences were deeper and more sustained than is typical.

The Faban coordinator did, however, make other efforts to support teachers and as shown in Chapter 8 many teachers made complementary comments about her support. For example, she used her portfolios of work to help teachers who were moving class to gain ideas about they could do. It is possible that with such a strong coordinator other teachers were sometimes ‘carried along’ without fully understanding the issues.

The Llefyn ESDGC coordinator described how she, too, would use portfolios of work for training in school and that they would also use these with new teachers. This was confirmed later by teacher 5L who was being shown them by the ESDGC coordinator as part of his ESDGC induction. Other teachers also mentioned the benefits of being supported by this teacher. In Gyrn materials produced by Teacher 4G following his visits to southern Africa were being used throughout the school. He had also prepared a Powerpoint presentation for teachers; this has also been used in other schools. The weekly discussion of ESDGC in this school as a means of professional development is discussed in the next section.

Impact of international visits

The Faban head teacher noted that teachers’ visits to partner schools also contributed to professional development and that they tried to send different teachers each time.

“I think it helps if maybe someone gets to go to a different country as well. Especially if they are not of the [same] culture, or don’t understand. It helps them understand – like [2F] did – that was a big help to [her]. understanding how they were different”. (Faban head teacher)

While she hoped that they would continue to access grants to send more teachers to their

partner schools, she recognised that that was just part of the professional development needed. It was also noted above that several teachers in Llefn had been on international visits. This had been used as a deliberate form of development for the newly qualified teacher, 6L. Shortly after he had received his ESDGC induction from the ESDGC coordinator he was sent on a visit to their Caribbean partner school as a learning experience. In Gyrn also, the head teacher had ensured that four of the six teachers had visited partner schools in either southern Africa or China. This may have been a way on deliberately trying to encourage transformative experiences (Mezirow, 2000) However, as discussed earlier in the thesis, the quality of these experiences must also be variable. The attendance of the Faban and Llefn coordinators on the specialist global school partnership courses, where issues of diversity, stereotyping and values were extensively discussed, may have helped these teachers; but they were the only teachers from the case study schools to attend and the others, as Martin and Griffiths (2010) suggest, may not have been gaining the full worth of their visits.

10.3.5 Obstacles to teachers gaining experience in ESDGC

Teachers mentioned several obstacles to gaining experience and competence in ESDGC such as shortage of time and not knowing about suitable resources. As noted above, in Faban lack of training was also mentioned frequently. However, in Llefn, Gyrn, Bera and Drosogl most teachers were quite happy with their achievements whilst recognising they could always learn more.

10.3.6 Summary of teachers' interest, competence and formal professional development

It has been found that teachers who were very interested in ESDGC were few in number and usually had something particular in their background which had stimulated this; they tended to give it high priority in their teaching. These were often the head teachers and ESDGC coordinators and therefore in a strong position to drive and stimulate the agenda. These teachers had often attended a substantial number of ESDGC training events and were then able to give feedback and support other teachers. Other teachers had gained

much of their interest and experience in ESDGC either from their responsibilities in the school, from support received there, or often from visiting their international partner schools, where these existed. This made them vulnerable to gaining a fragmented understanding and dependent on quality in-school support to correct this. In one school support to new teachers was substantial and this seemed to be helping them. Several teachers expressed a desire for more training but other school priorities had prevented this.

In three schools teachers' understanding of ESDGC was judged to be quite comprehensive showing that mechanisms for learning were working. However, in two schools teachers felt less confident and their patchy understanding of the range of ESDGC confirmed this. For the larger of these schools, where ESDGC *had* been given substantial attention, it was suggested that this could have been due to an over-concentration on certain aspects of ESDGC, dilution of information from courses to class teachers due to lack of time, over-dependence on a strong coordinator and insufficiently deep ESDGC discussion. This is discussed further in the next section. For the other school it may have been due to an earlier lack of attention to ESDGC.

Some resistance to change (Hargreaves, 1989; Little, 1990; Lieberman, 2000) was noted in two teachers. Lack of time for development is a commonly mentioned issue in the literature e.g. Hollins et al. (2004) and this was raised as an issue by several teachers, however, this was not seen as a major obstacle in three schools and most teachers were reasonable happy with the way their ESDGC development was going. All head teachers and ESDGC coordinators, and many other teachers were, however, aware of the need for further staff development. The extent of learning communities is explored further below.

10.4 WORKING AND LEARNING TOGETHER IN SCHOOL - TEACHERS' CONVERSATIONS ABOUT ESDGC

According to evidence discussed in the literature review, the extent to which teachers work together may influence their professional development. This was found for situations where teachers deliberately worked together (e.g. Darling-Hammond and McLaughlin; 1995, Elmore, 2000; Little, 2002; Vescio et al., 2008) and also in less formal situations (Fox and Wilson, 2008; Penuel and Riel et al., 2009). Certainly in Llef, Gyrn and Bera

where working together was said to occur frequently, a greater proportion of teachers seemed to have a high level of understanding compared to Faban and Drosgl where this occurred less frequently. The head teacher and ESDGC coordinator in Llefyn School both said that working together was a regular occurrence,

“Teachers planning and working together, especially when we have days – China day or Jamaica day, that kind of thing – but it happens on so many different levels to be honest.” (Llefyn head teacher)

There was a particularly strong ethos of collaboration within Gyrn school, with five of the six teachers mentioning ‘working together’ positively. All members of staff discussed ESDGC weekly in staff meetings. The head teacher gave an example,

“We were discussing this last week on Thursday evening to make a timetable for the DVD - discussions like that where everyone puts their ideas in. That’s a good thing.” (Gyrn head teacher)

In Bera the two teachers said they frequently discussed the work they were doing and on occasions such as Fair Trade week worked together on themes across the whole school,

“Cooperation of teachers? You definitely need that..... Oh, there needs to be [cooperation].. with the head teacher, definitely, in a small school, because you work together don’t you.” (Teacher 2B)

In Faban, where there was also considerable devolvement of responsibility, five teachers, including the Head teacher and the ESDGC coordinator mentioned the working together of the teachers as a positive factor.

“Teachers working together is important” (Teacher 6F)

and

“I’m sure co-working of the teachers, for example with the international day, things like that.” (Teacher 9F).

“With planning, the working together of the teachers is important. It’s not going to work without that.” (Teacher 3F).

In Drosgl there was little specific mention of working together for ESDGC but Teacher 5D said that she and other teachers all took part in whole school events. Teacher 3D, however, as pointed out in Chapter 8, did mention “*doing the planning together*”. Some teachers in Faban and Llefyn also mentioned talking about ESDGC in relation to being supported by, or supporting, other teachers.

10.4.1 Quantifying working together and networking

In an attempt to quantify networking, or at least conversations between teachers within the schools, teachers were asked to note with whom they discussed ESDGC, how frequently they did this and what they discussed. Figure 10.6 to 10.9 illustrate these networks. The darker lines show more frequent discussions. Two-way arrows show a discussion, one-directional arrows indicate a more supportive relationship. Since almost all teachers spoke at least yearly these arrows have been removed for ease of viewing.

In Llefyn, there was very frequent communication about ESDGC. The head teacher talked about ESDGC to most members of staff weekly. She talked to the ESDGC coordinator daily. This coordinator in turn talked daily to the other Key Stage 2 teachers i.e. Teacher 4L who taught the other year 5 and 6 classes and also coordinated the Green School and school council, and Teacher 5L, the newly qualified teacher whose ESDGC development she was supporting. She talked to others across the school monthly. The infants' teachers talked to each other at least weekly and to others mostly monthly. It was interesting that teacher 10L who had recently taken over PSE and ESDGC coordination, appeared to only talk about ESDGC to the head teacher yearly and the ESDGC coordinator monthly. This may explain her apparent ignorance of the ESDGC guidance and made her an unusual choice as coordinator; or perhaps this was a deliberate ploy to engage her with ESDGC?

In Gyrn also, most teachers said they talked to each other weekly. This confirmed the head teacher's comment that they all worked closely together and discussed ESDGC regularly in weekly staff meetings. There was also a daily flow of discussion from the head teacher through to the infants section: The head talked to teacher 5G daily and she in turn talked daily to another infants' teacher with whom she shared teaching. One of the infants' support workers was also included in discussion with the ESDGC coordinator. Some teachers viewed their frequency of discussion differently, for example teacher 2G said she spoke to teacher 6G monthly whereas teacher 6G said she spoke to teacher 2G weekly. In Bera, unsurprisingly, the two teachers talked daily.

In Faban, which is of similar size to Llefyn there was a different pattern with slightly less frequent, but perhaps more strategic, communication across the whole school. It appears that most of the conversations between the head teacher and teachers, and between the

Figure 10.6 Gyrn teachers' ESDGC networks in school

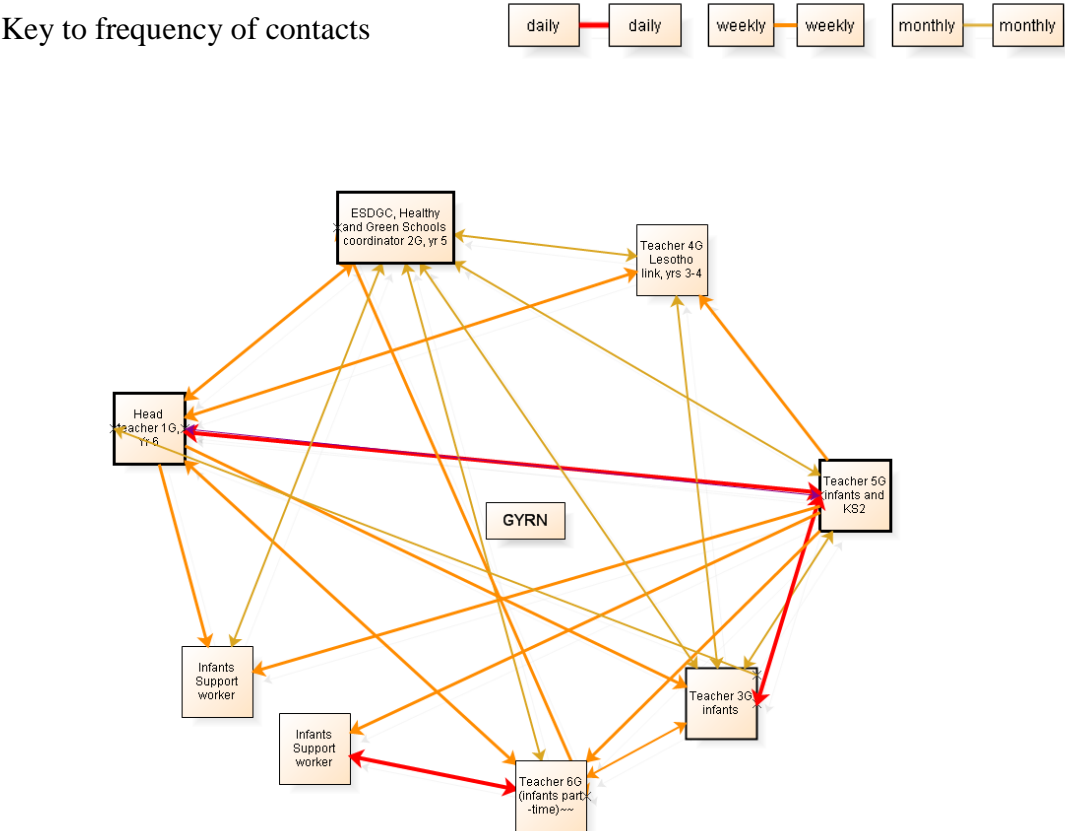


Figure 10.7 Drosogl teachers' ESDGC networks in school

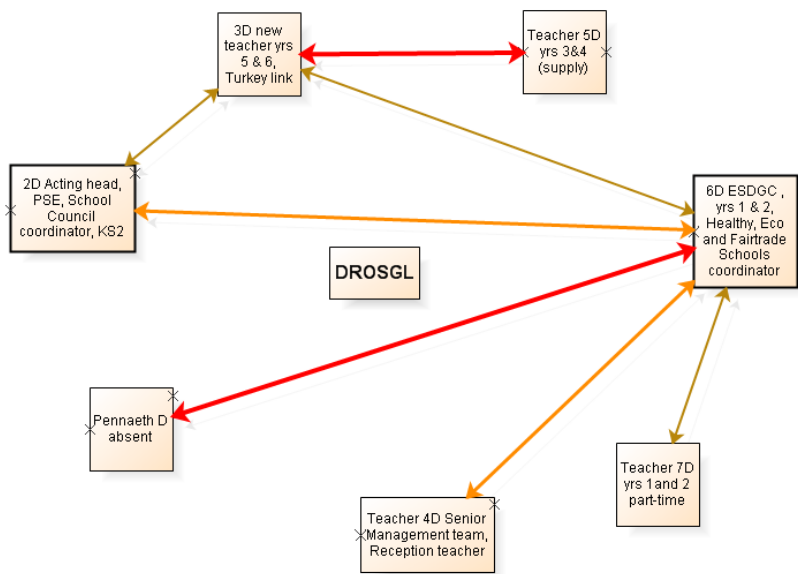


Figure 10.8 Faban teachers' ESDGC networks in school

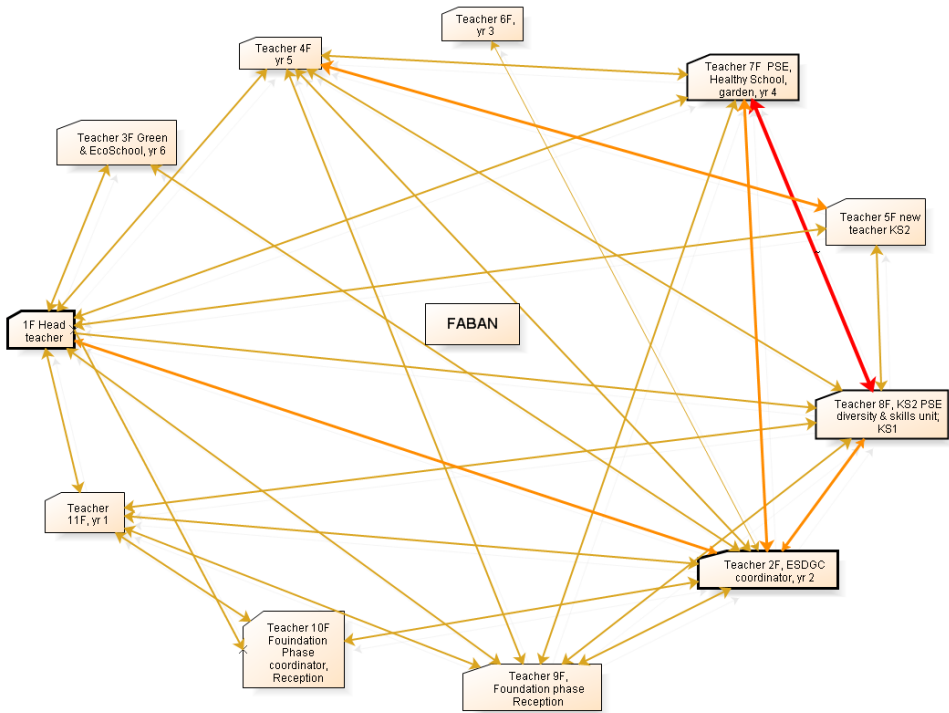
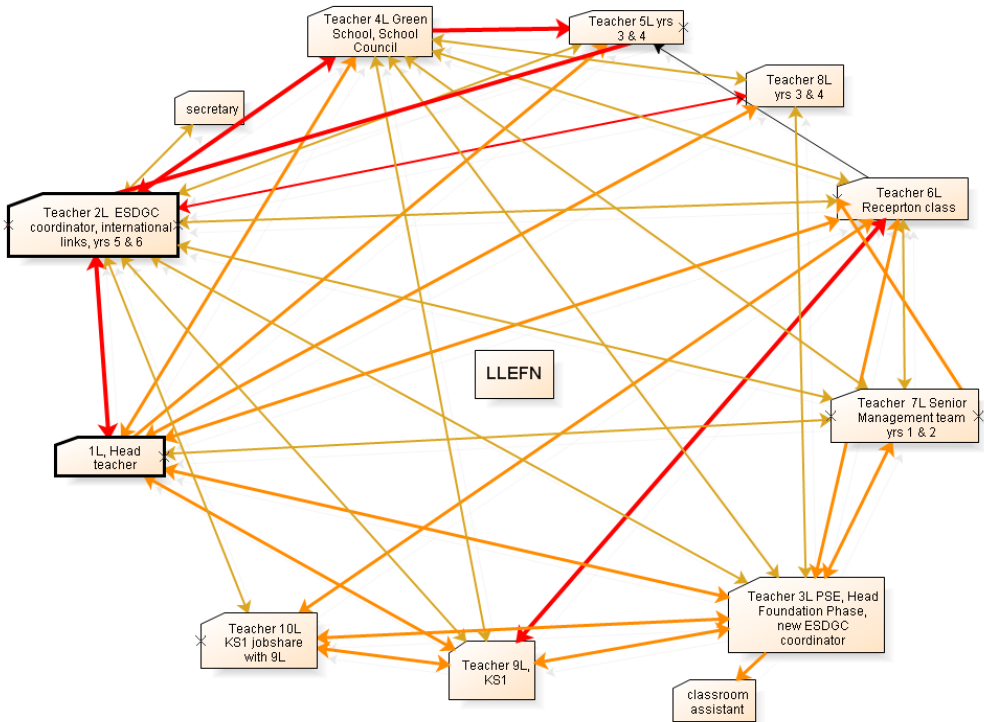
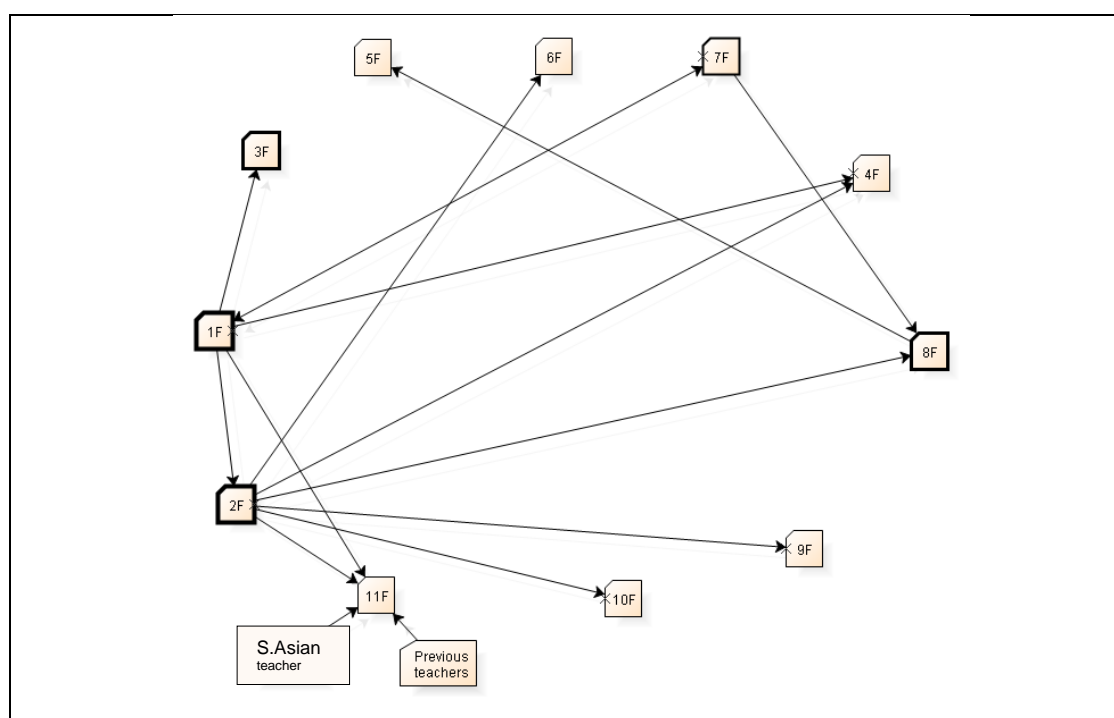


Figure 10.9 Llefñ teachers' ESDGC networks in school



ESDGC coordinator and teachers were monthly. The infants' teachers talked to each other monthly at least, but much less frequently with Key Stage 2 teachers; there was also less networking between the Key Stage 2 teachers than in Llefyn and Gyrn and Teacher 6F seemed slightly more isolated. However the situation may have been more coordinated than it appeared at first sight. Figure 10.10, which shows who supports who with ESDGC in Faban, shows an intricate web of support with the head teacher supporting the ESDGC coordinator and Teachers 2F, 3F, 4F, 7F, and 8F, all key ESDGC players. In turn Teacher 2F supported most teachers, Teacher 7F supported the less experienced Teacher 8F, and 8F and 4F supported new teacher 5F. This may have been an efficient way of providing support but, at the same time it may have diluted some intricacies and complexities of the information.

Figure 10.10 Faban school: teachers' views of who, within the school, had helped and supported them.



The teachers' interview comments certainly suggested they did work together to plan ESDGC activities, however, the lesser amount of ESDGC discussion apparent in the network diagram may explain why several teachers in this school, while very much appreciating the support of the ESDGC coordinator, still wished for more training and knowledge of ESDGC. It is also possible that the location of the ESDGC coordinator in

the infants' section of the school may explain why some Key Stage 2 teachers felt they needed more support.

In Drosogl there were daily conversations between the head teacher and the Eco-School coordinator, 6D, and between the two young teachers, 3D and 5D. Other conversations appeared to be less frequent, some monthly and the remainder yearly. However the data received in this school was not as comprehensive as that in other schools and for each relationship it relies mostly on information from one, rather than two teachers.

10.4.2 Summary of working together and networking within schools

In summary, there appeared to be more frequent discussion of ESDGC between teachers in Llefn, Gyrn and Bera than in Faban and Drosogl but there was still a flow of discussion in all schools. The findings suggest the existence of various degrees of teacher learning communities as defined by Stoll (2008) using Mitchell and Sackney's (2000) description,

A group of people who take an active, reflective, collaborative, learning-oriented, and growth-promoting approach toward the mysteries, problems and perplexities of teaching and learning (p.9)

This certainly seemed to be reflected in the earlier comments of head teachers in both Llefn and Gyrn who actively promoted this exchange of ideas. This reflected the finding of authors such as Berry et al. (2005). The active involvement of these head teachers in frequently discussing ESDGC with staff also reflects Gronn (2003) who emphasises the importance of leadership in professional learning communities.

In Drosogl, the learning community for ESDGC seemed to be less powerful with teachers mostly working together to plan whole school events. This may have been affected by the head teacher's absence and frequent change of staff. However, teachers' comments only related to ESDGC and it is possible that the situation was very different for other topics.

Achinstein (2002), Hargreaves (2003) and Scott and Gough (2003) noted the importance of conflict in collaboration. The only school in which this was obvious was Llefn, where, as will be seen below there had been debate about the value of international partnerships. It is

possible that teachers may just have failed to mention any conflict, but it is also possible the lack of its mention could have reflected an unquestioning acceptance of a knowledgeable leader's views.

10.5 WORKING WITH OTHERS OUTSIDE THE SCHOOL

In Chapter 2 it was noted that learning communities benefit when they are widened to include those outside of the school e.g. Sterling (2001), Scott and Gough (2003), Stoll et al. (2006) and Shallcross and Robinson (2007). This was said to bring in new ideas and concepts. Wider networks can include formal learning experiences but also contact with a variety of people and organisations. It has been shown above and in Chapters 8 and 9 that all the case study schools regularly involved outside organisations and members of the community in the life of the school. Visitors and international partnerships were, respectively, the third and fourth most frequently mentioned positive factors in the schools' development of ESDGC (16 out of 34 and 12 out of 34 teachers respectively). Those with whom schools worked varied from school to school and included:

- LEAs and related organisations such as the north-west schools advisory service;
- local schools, in joint projects and through giving or receiving support;
- schools in other parts of the UK;
- schools in other countries;
- ESDGC support organisations;
- community organisations;
- parents, friends and family.

10.5.1 Quantifying external networks

To find out more about their school's interaction with partners and support organisations, and also to investigate from where they may have been gaining ESDGC experience, teachers were asked to name people or organisations from outside of the school with whom they discussed ESDGC. The diagrams in Figures 10.12 to 10.16 show these connections

for each school, with Figure 10.11 showing the key to these diagrams. These diagrams should be considered in the light of the internal networks shown in Figures 10.6-10.9.

Overall, all schools had wide networks, and all except Bera had strong local and international dimensions. There were many links with support organisations, both within the local authority and outside, and also with other teachers. Gyrn and Llefn were notable for having very extensive networks. However, actual negotiations with visitors, international partners and organisations often seemed to be confined to only a few teachers in each school with the ESDGC coordinator generally having many more connections to those outside their other school than the other teachers. This situation was most noticeable in Llefn, where only three other teachers professed to talking about ESDGC with people outside of the school. The teachers with many connections could be described as Gladwell's (2000) 'Connectors'. They could also be considered, as suggested by Burt (2000), as bridges of structural holes, building social capital in order to access new sources of knowledge or intellectual capital (Hargreaves, 2003). This could then be accessed by other teachers through the internal school networks. In Llefn, the weekly staff meetings and their internal networks would have helped this. It is interesting to consider why this kind of situation arose; perhaps the Llefn coordinator was so good at this job that others left the external communications to her. In Faban the situation was similar, although most teachers said they talked to at least teacher friends and family about ESDGC. This was perhaps not surprising in a school with so many young teachers.

In contrast, in Gyrn, although the head teacher and ESDGC coordinator did have a great number of connections, all other teachers, except 5G who was part-time, *also* had several ESDGC connections, often with teachers in other countries. This reflects what was said in Chapter 9 about teachers in this school sharing responsibility for ESDGC and also what is shown about their frequent internal discussion in Figure 10.6 above. This school appeared to have not only a very strong learning community but also an expansive learning network (Stoll, 2008). In Drosogl, the new teacher, 3D, also had many links, perhaps suggesting that she might be a new spark for ESDGC development in the school. However, the infrequent discussion with other members of staff, shown in Figure 10.7 would have limited this. It should be noted Teachers 2D and 7D in Drosogl did not complete this set of questions; their links are compiled from their interview responses. The nature of the individual kinds of contacts are now discussed below.

Figure 10.11 Key to figures 10.12 to 10.16. Each box denotes a different type of contact.

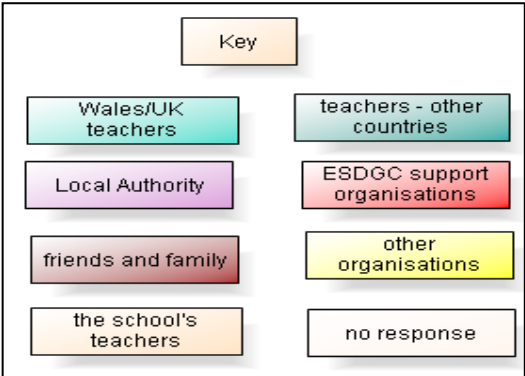


Figure 10.12 Bera teachers' internal and external networks. The red arrow shows daily conversations between the two teachers as in figures 10.6 to 10.9 above.

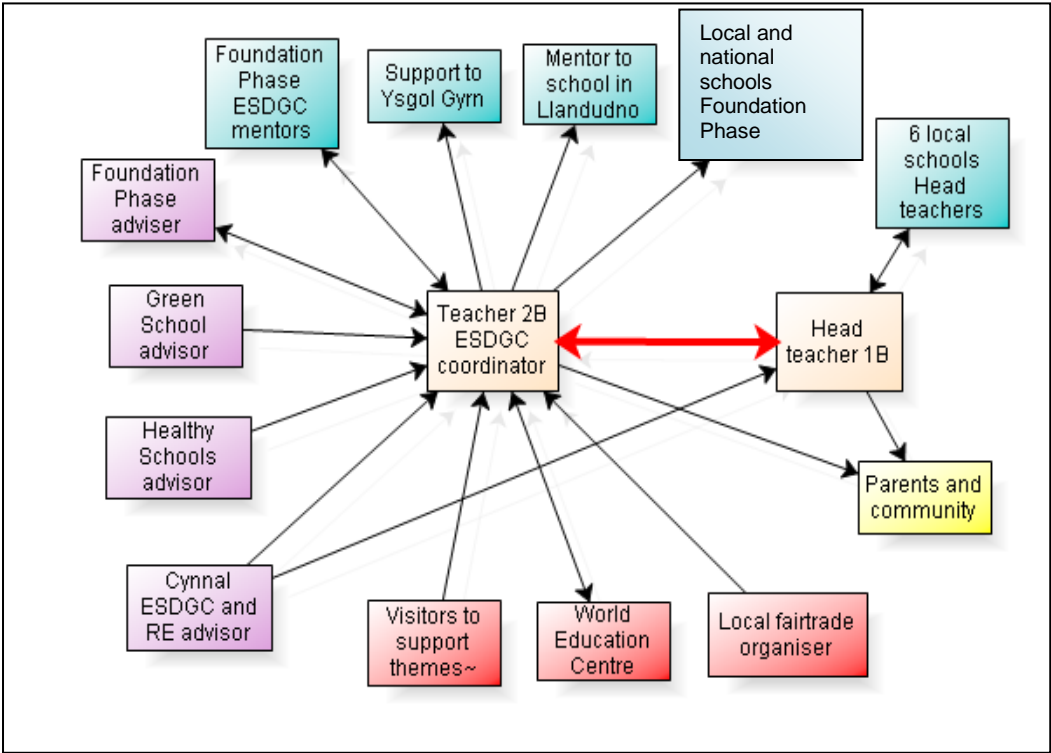


Figure 10.13 Gyrn teachers' external networks

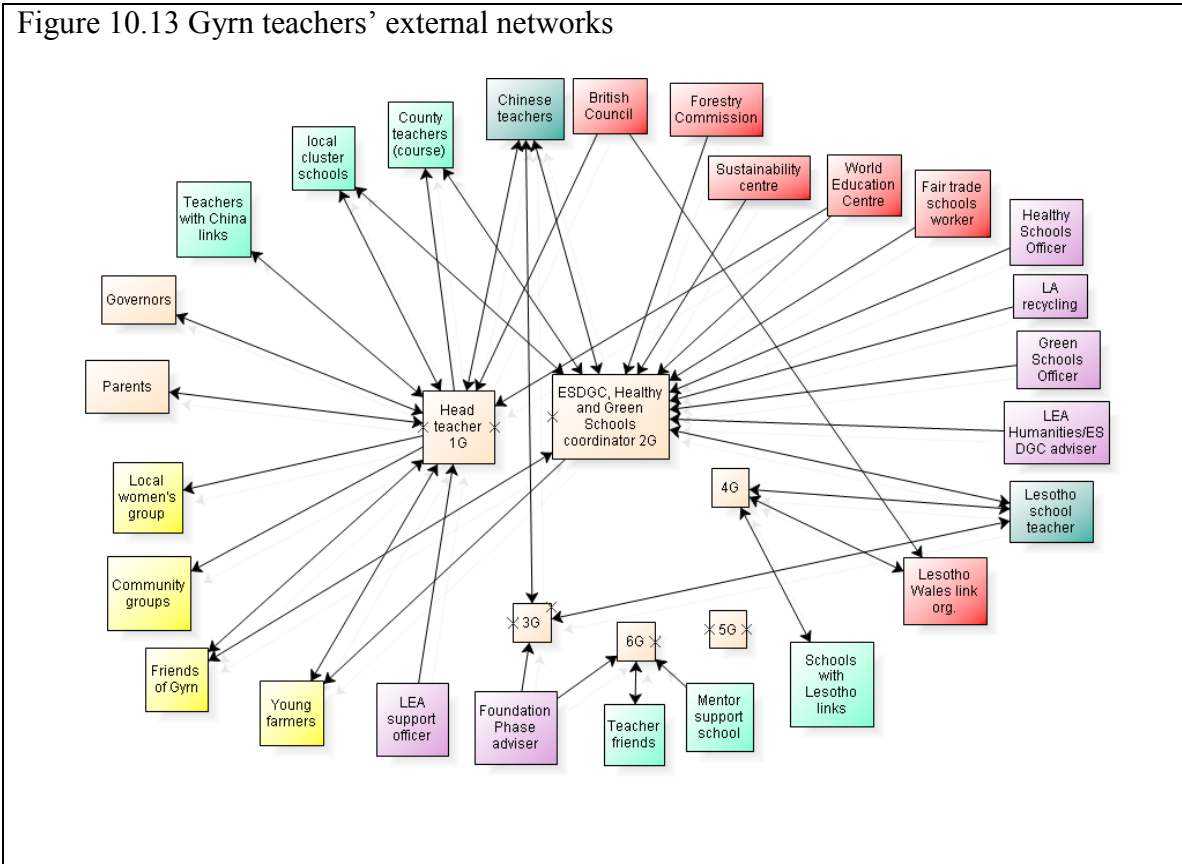


Figure 10.14 Faban teachers' external networks

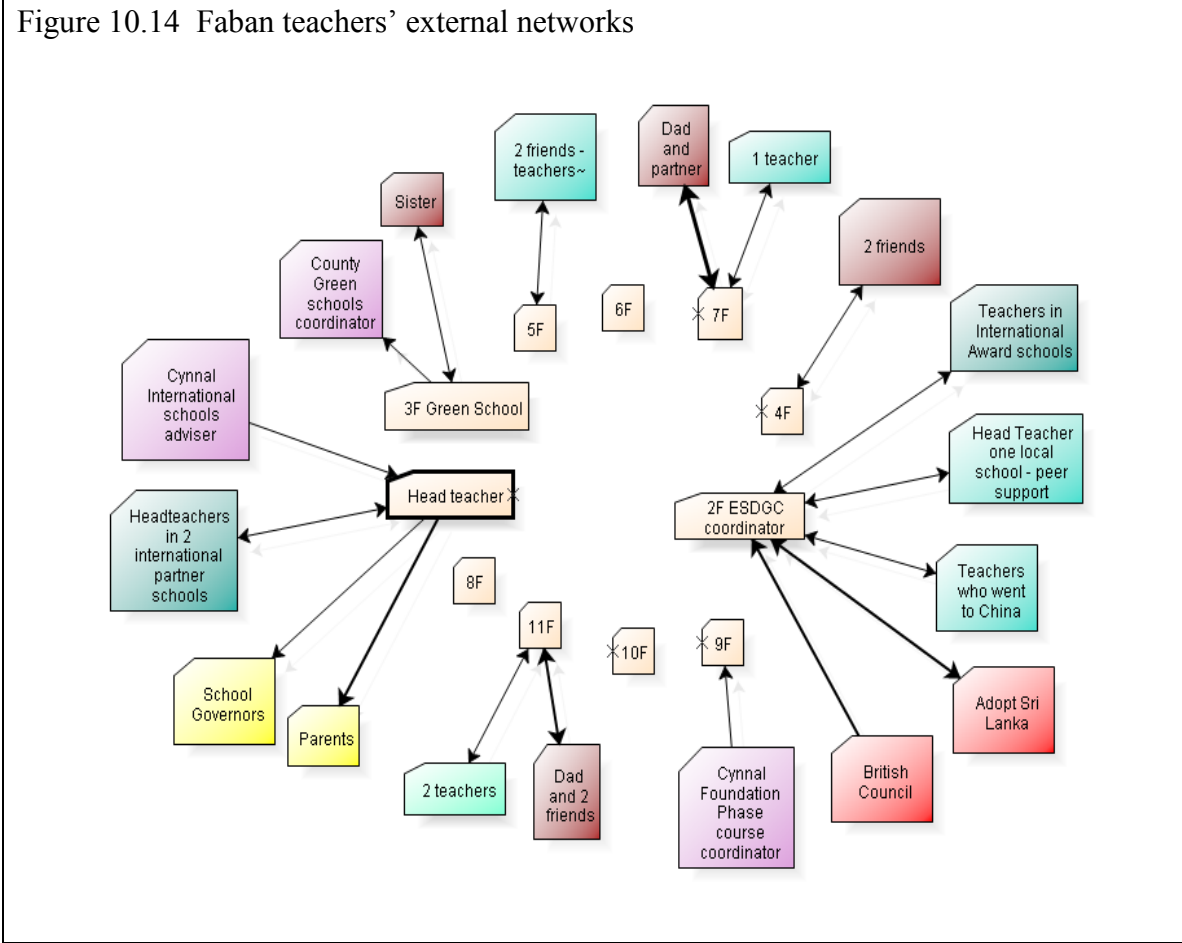


Figure 10.15 Drosogl teachers' external networks

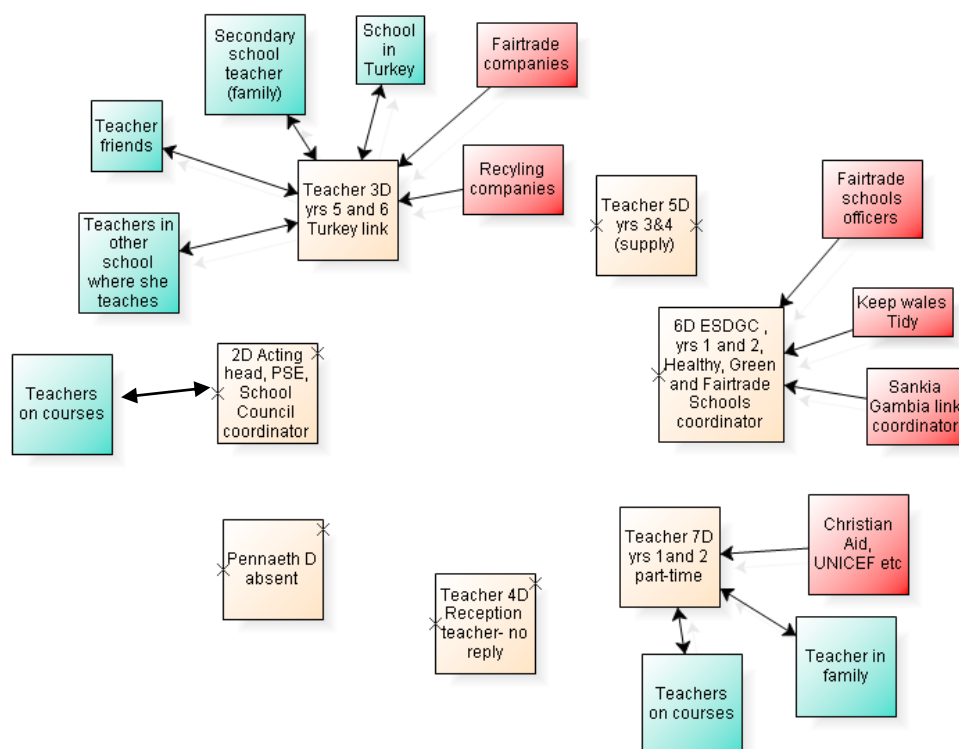
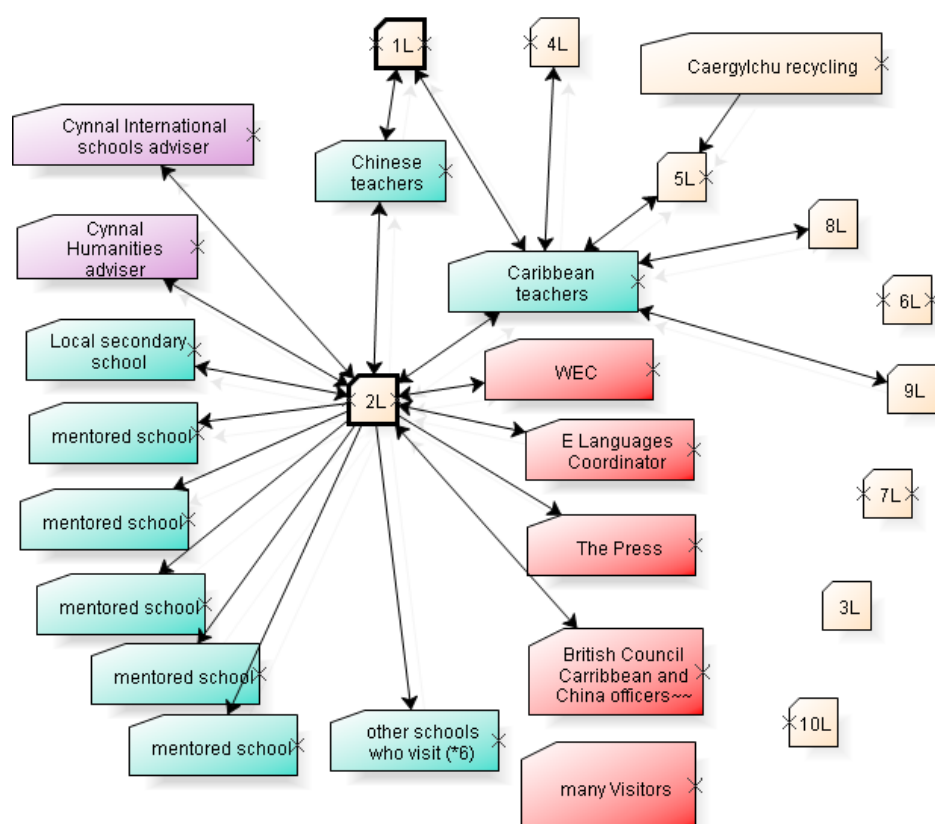


Figure 10.16 Llefyn teachers' external networks



10.5.2 Visitors, parents and community

Faban was notable for bringing in parents from different ethnic backgrounds, its strong link with a school in south-east Asia, bringing in visiting artists and for being in the process of forging a link with an inner London school. However, only two of the eleven teachers mentioned visitors as a factor in school development. This was in comparison to Llefyn where seven out of eight teachers mentioned visitors. This school was outstanding in the variety of visitors and experiences brought into the school from countries all over the world, for its links with the Caribbean and China and for working with local organisations on historical links between their local area and other countries.

Gyrn also had a very large number of community links with groups such as the Young Farmers, a strong school 'Friends' support group and flourishing partnerships with, and visitors from southern Africa and China. Bera had been a Foundation Phase pilot school and the head teacher said they had been visited by "*hundreds*" of schools from all over Wales. They too, as mentioned earlier, were very proactive in seeking visitors. Many of its community activities were also designed with parents in mind, with the aim of raising awareness. Drosogl had also had a variety of visitors including those with connections with African countries, but, as noted in Chapter 6, these appeared to be more one-off opportunist visits rather than part of an integrative strategy.

10.5.3 International links and partnerships

'International partnerships' was the fifth most commonly mentioned factor in schools' ESDGC development. As described in Chapter 6, three schools, Faban, Llefyn and Gyrn had all developed international partnerships and it was clear that work related to these was woven into all classes throughout the schools. Their head teachers and ESDGC coordinators all said that the partnerships had been a major factor in their ESDGC development. All of these schools had also gained national recognition for this work. Teacher 3F mentioned that their success had made him want to do more, a confirmation of the "success breeds success" factor mentioned by the Cynnal ESDGC and Primary advisers. However, as Teacher 2L emphasised, these partnerships had required a

considerable amount of dedication from the coordinating teachers and a substantial amount of coordination within the schools.

The quality of this international work, the way it was complemented by other methods, and its impact on pupils was discussed earlier. It was found that pupils were very enthusiastic about school partnerships in Llefñ and Gyrn, but less so in Faban. The teachers' views on how they had impacted on ESDGC development also varied. In Llefñ, five teachers had visited the partner countries and all five mentioned them as a factor. Little is known, however, about the quality of teachers' experiences on their international visits, except that they enjoyed them. In Faban, although only two teachers had already visited their partner schools, seven teachers mentioned them as a factor in their school's ESDGC development, suggesting that they were having a wide effect across the school; however, with few pupils mentioning this aspect of their education the true impact is questionable. In both these schools most of the teachers who failed to mention the partnerships were infants' teachers, perhaps because they were less involved in communicating directly with children there; this latter aspect did seem to enthuse teachers. In Gyrn all teachers and pupils were enthusiastic about the impact of their partnerships. Here, a majority, four of the six teachers, had been on an international visit; they also had very regular communication with both partner countries, an aspect that Faban had found difficult to maintain.

Concerns about international partnerships

Not all teachers thought that the international partnerships were the answer to ESDGC. In Llefñ, Teacher 7L pointed out the irony of a Green School sending teachers to other countries,

“To be honest, with [being a] Green School I personally feel that staff shouldn't be using their carbon footprint to go so very far away, do you see? It's something to think about”

This is an important point when it is considered that school actions show pupils what values are held (Rowe, 1996, Sterling, 2001; Scott, 2010; Breiting et al., 2005). If a school was serious about its carbon footprint and its impact on the pupils then it would likely discuss the impact of these visits in this light. There was some evidence of this kind of discussion occurring in Llefñ and they had moved to using the eLanguages project for much of their communication. There was no evidence of this kind of discussion in the

other schools with partnerships. While organisations like the DFID and the British Council continue to promote such visits it will take strong teachers to challenge the status quo. However, it was not just the climate change implications which were causing Teacher 7L to consider the issues. She also pointed out other advantages of having links closer to home,

“If [only the] the staff go the pupils don’t have the experience do they? [Teachers] taking holiday snaps. [If we went somewhere nearer] I would go and parents could go too, because some parents don’t get to go places do they? That side of it I think about.” (Teacher 7L)

The use of the words ‘holiday snaps’ also suggests doubt about the value of these visits for teachers. This reflects Martin’s (2008) impression that many teachers did not gain full value from their short visits to partner schools. The head teacher of Faban also made some insightful comments about the issue of equality within their partnership,

“The only thing I have learnt, from being a part of the [south-east Asian] partnership is how... I feel like a dictator.... Trying to get them to do things that we want. And I’m not sure what good comes from doing that. I’d like it if they were more confident and say ‘No, we don’t want to do that – this is what we want to do’. Because they’re quite happy to accept.”

The impact of, and difficulties with their international partnerships had influenced this head teacher to concentrate more on their own diverse pupils and may have been behind their move to develop links with other UK schools, described below. It is suspected that these kinds of issues probably also arose in other schools. In Llefyn, the ESDGC coordinator mentioned that she had spent much effort talking to the teachers in their partnership school in order to avoid this situation.

10.5.4 Links with schools in other parts of Wales and the UK

Two schools had already explored links with schools in other parts of the UK. Drosogl had an established link with a school in South Wales which involved staff exchanges visits and children writing to each other and Faban was exploring one with a school in inner London. Neither was specifically mentioned as yet being a factor in their ESDGC development by teachers.

10.5.5 Links with other schools in north-west Wales

Working with other schools was mentioned in the literature review as a way of introducing and spreading new ideas (e.g. Bell et al., 2006). In this study there were many mentions of links with teachers in other schools, some formal, some informal. Teachers in Faban, Llefyn and Bera had all acted as mentors to schools as part of a local ESDGC support project run by the World Education Centre in Bangor University. The Llefyn ESDGC coordinator, Teacher 2L had mentored over ten schools and also presented her work at LEA teacher professional development courses; the Llefyn head teacher had also presented their work at county head teachers' meetings. This school had also worked with another local school on a joint eTwinning project. The ESDGC coordinator was also an active member of the local ESDGC forum and through this had many other contacts with schools and organisations. Local schools were apt to phone this school to ask if they could visit to see their work. Exactly this kind of example was used by Wenger (2006) to illustrate the existence of communities of practice. The ESDGC coordinator had a positive view on this,

“It is good for me because for personal reasons I believe in worldwide education and sustainable development within education, and the more schools that take an interest in it, the more children in north Wales get that advantage” (Teacher 2L)

In Bera, Teacher 2B noted that her experiences as a mentor had also been good for their own development. She had attended training before becoming an ESDGC mentor and was still in contact with her fellow mentors,

“And I feel... that's one thing I have learnt we, as the teachers that were on that [mentor] course, pick up the phone on each other and ask, “do you have such a such a thing?”, or “where did you get it?” Or, you know... and that has been a new thing. And definitely a network.” (Teacher 2B)

This could be seen as another example of an emerging community of practice and it is also reminiscent of Portes and Sensenbrenner (1993) who noted that frequent interactions of people led to more sharing of ideas and resources. This school's frequent support of other local schools was also notable and during the study period many of the examples of their pupils' work had been lent to other schools. It is very likely that they in turn received support for other curriculum areas. This kind of collaborative action is being increasingly suggested as being essential for the survival of small schools in Wales. This is also the

kind of behaviour suggested by Fullan (2001) as necessary for spreading ideas about change. The use of quality teachers to spread ideas to other schools may also be an answer to Stoll's (2004) concerns about how to maintain good quality in collaborations between schools. Also, these teachers in Llefni and Gyrn could almost certainly be described as both 'Connectors' and 'Mavens', after Gladwell (2000), spreading ideas and supporting slower adopters of ESDGC.

Llefni's and Bera's continuing ESDGC networking and sharing with local schools was said, however, by teachers and LEA officers, to have become fairly uncommon. Both Gyrn and Drosgl teachers explained that, although sharing of work between schools had previously occurred in the area cluster meetings, these meetings now concentrated on transition activities to secondary school such as science, mathematics and language. This was also suggested by comments made in Faban where attempts to work with local schools on ESDGC had not been taken up, much to their disappointment. It was not clear what had initiated this change but it is likely to be related to governmental targets on standards for key subjects. It is interesting that at a time when ESDGC, flexibility in the curriculum, and collaboration between schools are being encouraged, a narrowing of the topics of networking to traditional subjects also appears to be occurring.

More informal connections

In addition to these purposeful collaborations, when teachers attended conferences and meetings there was always a substantial amount of informal networking and discussion of practice (personal reflection). Teachers also showed that they had other informal discussions about ESDGC. On the network diagrams these show up as links with 'friends', 'teacher friends', 'sister', 'dad'. It was not possible to quantify this information but it could have had an influence on teachers' ways of thinking about ESDGC. This was called social networking by Fox and Wilson (2008) who noted it as a particularly common feature in new teachers.

Some interesting connections *between* the five schools also emerged, some informal, some formal:

- the head Teacher of Bera had attended a course at which the head teacher of Llefni was speaking and was influenced by their work;

- the Foundation Phase teacher in Bera had supported a Foundation phase teacher in Gyrn through the above-mentioned mentor project in the year preceding the study;
- Teacher 7D from Drosgl was a close family relative of the Faban head teacher, and also a former colleague (in a previous job) of Teacher 2L in Llefñ. She had informally discussed their work with both of them;
- The ESDGC coordinators in Faban and Llefñ had been in the same year at college;
- Teacher 3D had done some of her teaching practice in Llefñ;
- The head teachers of Faban, Llefñ and Gyrn had all visited China on the same British Council visit. It is known that some of them had exchanged ideas for activities.

Although it is likely that these connections owed much to the close knit nature of north-west Wales, they did however offer opportunities for exchange of ideas between schools.

10.5.6 Contact with the local education authority

Drosgl was the only school of the five which appeared not to have discussed ESDGC with education advisers or local authority officers. All the other schools had spoken to more than one. These included the ESDGC/Humanities adviser, the International Dimension adviser, the Healthy Schools officer and the Green Schools coordinator. Two had also used the local authority recycling officers as visitors to the school. Bera had been part of an LEA Foundation Phase pilot and both Gyrn and Llefñ had presented their work at teachers' meetings organised by the LEA. These LEA contacts, however did not seem to be frequent or sustained. This was confirmed by the advisers themselves; they all said they had limited contact with individual schools because of time and funding constraints. In fact, the International Dimension adviser's contact with Faban had occurred several years ago and had been one of her few contacts with primary schools. The Llefñ ESDGC coordinator's attendance at the local ESDGC Forum, chaired by the ESDGC adviser and which other advisers also attended, also kept her up to date with LEA actions and other sources of funding.

In summary, these external networks would have helped schools build 'social capital' (Lin, 2001) giving them scope for the flow of new ideas into and out of each school. There was considerable evidence for local learning networks, or communities of practice, amongst

groups of teachers. The two-way learning, as described by Bera's coordinator, could also fit the description of Wenger's (2006) communities of practice as it was very informal. However, in some cases the impact of these external networks had a limited reach to teachers in the schools, making them dependent on the strengths of their internal networks.

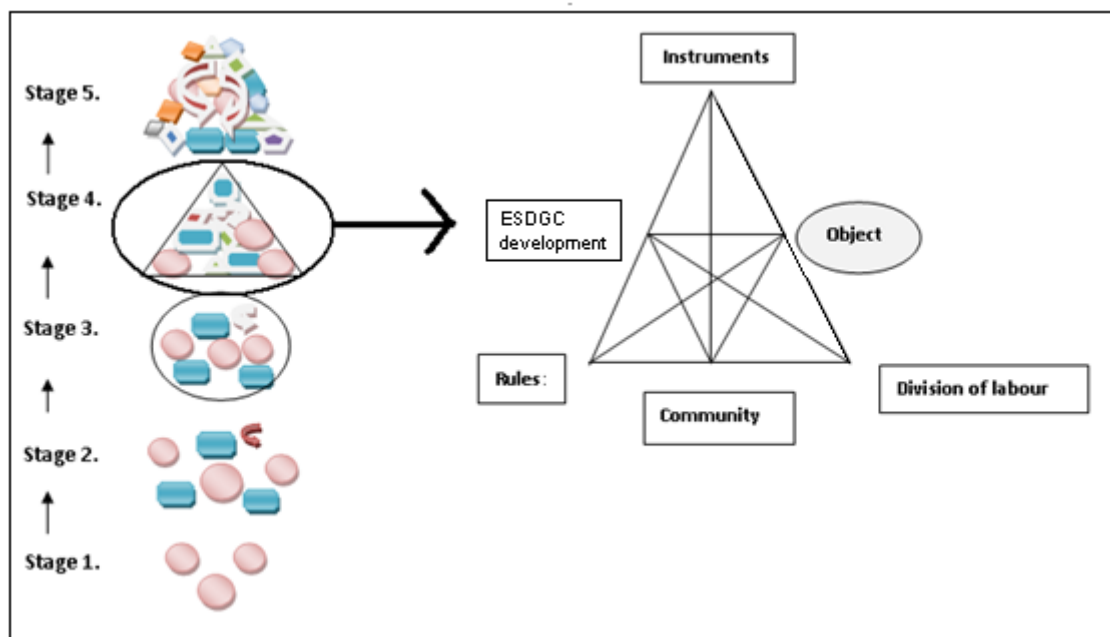
10.6 FURTHER MODELS OF SCHOOL ESDGC DEVELOPMENT

Building on the models presented in the earlier chapters this section presents two further models of schools' ESDGC development. These acknowledge the process of development over time but they look more closely at the mechanisms of development i.e. how schools went about developing ESDGC.

Figures 9.2 and 9.3 in Chapter 9 illustrated some stages in schools' development. In Figure 9.3 the first three stages showed a school's development before it began to develop ESDGC as a composite whole, indeed perhaps before they knew exactly what ESDGC fully entailed. From Stages 3 to 4 the school has begun more deliberate development of ESDGC. This stage could be described through a second generation activity system after Engeström (1987). As explained in Chapter 2, cultural-historical activity theory seems to be very appropriate in this context as it incorporates elements of time, multiple voices and multiple instruments and the possibility of transformation of ideas and the making of new meanings. It could offer clarification of how schools come to their own meanings of ESDGC and transform their practice. Figure 10.17 below illustrates this in outline and Figure 10.18 explains it in detail.

As described in Chapter 2 this activity system assumes continuing reflection and discussion. It shows the instruments, or tools, that schools have to work with; these come from a multitude of sources and include guidance documents, professional development, ESDGC support, pupil participation, local and global collaboration and inter-school networks. The rules are set by the ESDGC common understanding, inspection and curriculum guidance. It shows schools use division of labour (or distributed leadership) within the school in order to achieve their objectives of comprehensive ESDGC implementation, and ultimately critically aware and proactive, reflective pupils.

Figure 10.17 Stage 4 from Figure 9.2 illustrated as a second generation activity system (Engeström (1987)).



However, as indicated by the underlying spiral in Figure 10.18, their goals are constantly reassessed over time and modified as new information and ideas come to light, an example being the change to pupil-led learning described earlier.

Engeström (1999a and 2009) stresses that activity systems do not exist in isolation. They interact with other systems and this can stimulate even greater change due to hearing different ideas and seeing different ways of working. This was first illustrated in this study in Chapter 5 in the discussion of regional ESDGC support. Figure 10.19 presents a model of third generation activity system for schools' development set in a regional context. The network in the centre is the active school learning community described in Figure 10.18. The model emphasises the importance of interactions with other schools and regional support organisations (all of which are separate activity systems). The input of continuing professional development and the usefulness of a school being able to act flexibly, listen to their pupils and take advantage of opportunities are also highlighted. The yellow 'sparks' show inspiration for development. In this optimum system schools have built substantial social capital. This gives them continuing opportunities for receiving ideas, opportunities and stimuli (intellectual capital) for ESDGC development. The regular flow of ideas both within and between schools and also between schools and the LEA and other organisations means that feedback can be heeded and support better tailored for schools. In an optimal

situation a substantial number of teachers would receive some external ESDGC professional development at some time and this would be reinforced by continuing development for key players. Time is an important element here and the school will have allocated dedicated time to discuss and develop ESDGC. Ideally, there will also be allocated time for inter-school collaboration and sharing. This model could equally well be used as a model for development of many other aspects of a school.

Figure 10.18 A second generation activity system (Engeström, 1987) applied to a period when a school which is actively developing ESDGC.

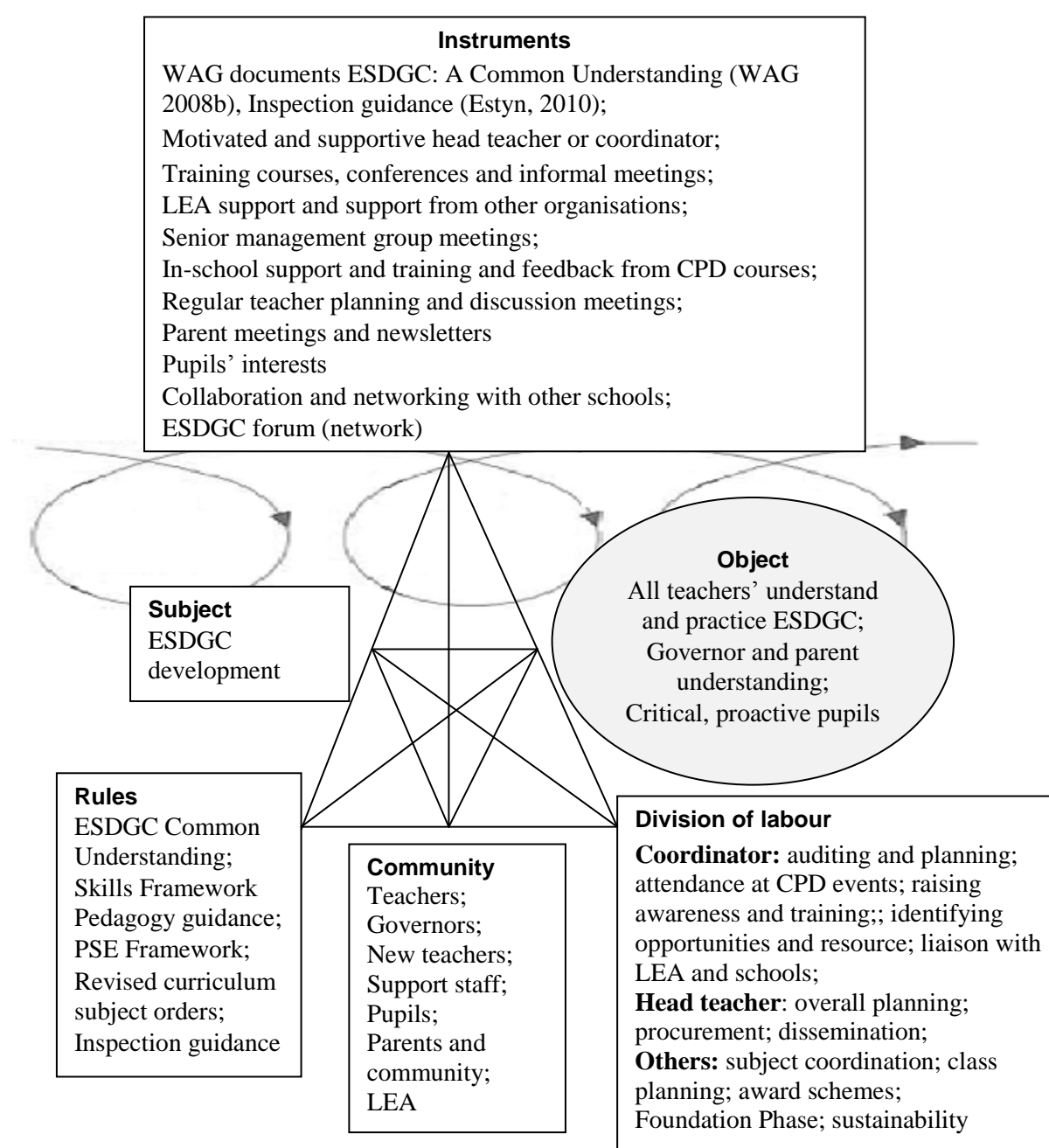
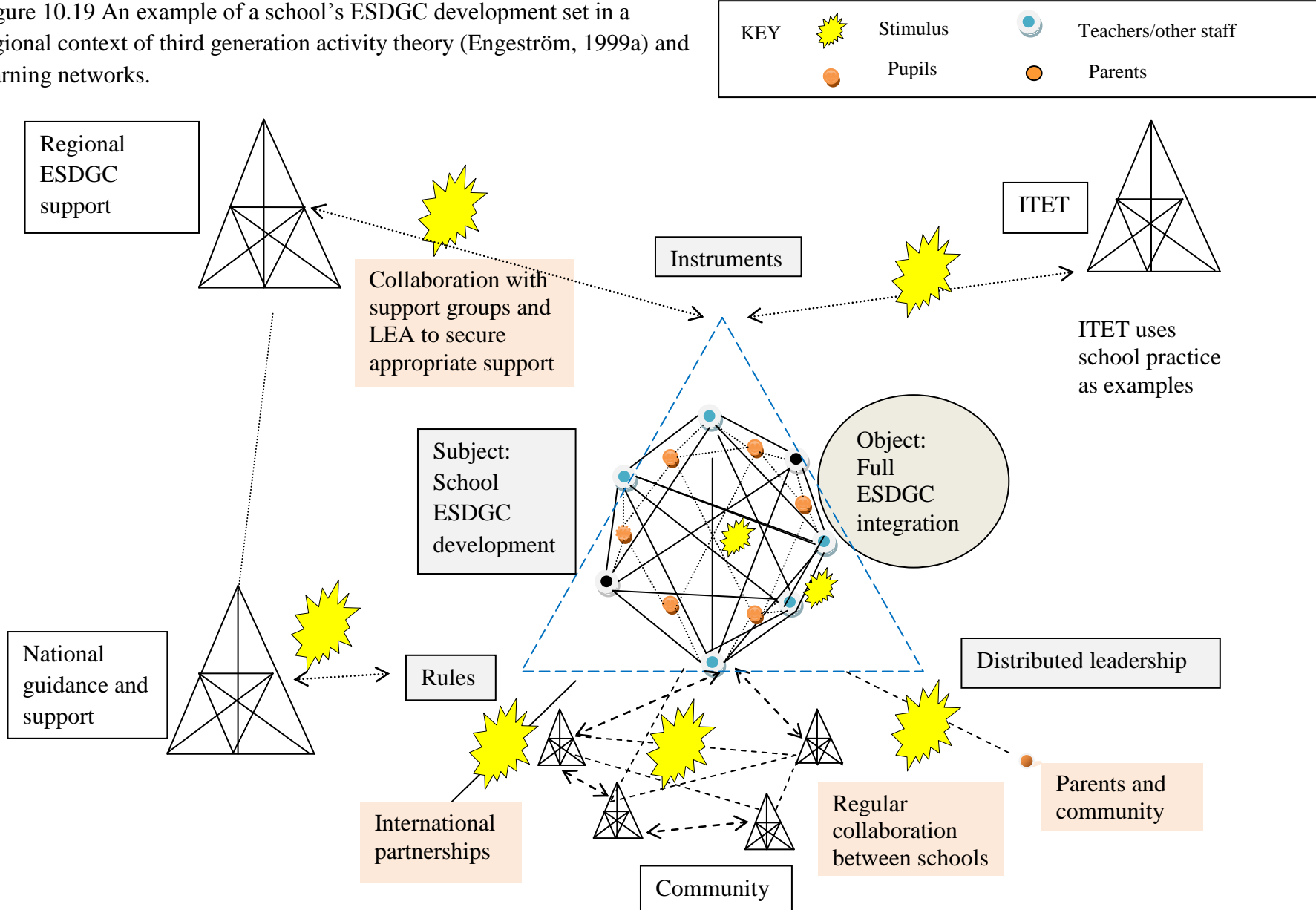


Figure 10.19 An example of a school's ESDGC development set in a regional context of third generation activity theory (Engeström, 1999a) and learning networks.



10.7 CHAPTER SUMMARY

This chapter has discussed the degree to which the case study schools were professional learning communities. Teachers' interest, understanding and perceived competence in ESDGC and their degree of access to professional development both from outside the school and within the school were examined. Levels of networking and collaboration within schools and the degree to which they worked with other organisations, other schools and the local education authority have also been explored. There were several key findings. ESDGC coordinators and head teachers generally had a strong interest, often in a particular aspect of ESDGC, that stemmed from before their current teaching post. These teachers then had access to many continuing professional development opportunities from LEA courses and other support organisations (social capital). The collaboration of these varied support organisations, listed in Chapter 5, would have helped give them a more comprehensive understanding of what ESDGC entails. They then were then in a position to bring new ideas, or intellectual capital, into the schools and to support other teachers. Other teachers relied very much on in-school experiences and support for their professional development; some of these experiences, such as overseas visits, could be described as transformative experiences, although the quality of these experiences is not known.

Most teachers felt that their competence in ESDGC had moved on, however there were still gaps in many teachers' understanding of ESDGC and some still displayed a lack of confidence in introducing it. In the school where citizenship and diversity had been given most attention this was reflected in teachers' views of what ESDGC encompassed. Initial teacher training had not contributed to many teachers' understanding and competence, even for those training in recent years.

Four schools had clear elements of ESDGC learning communities. These appeared to be particularly strong in the three schools where regular internal discussion was encouraged and planned into meetings. This was attributed to the level of priority given to it by the school leadership. In those schools understanding and confidence appeared to be higher than in the others and teachers displayed a shared vision of the importance of ESDGC. There was evidence of debate over issues in Llefni only. In the school where ESDGC coordination was less coordinated there was a less comprehensive understanding of ESDGC and many fewer conversations about it.

All schools had substantial external networks and used a combination of visitors, school linking and community opportunities to enrich their curriculum. Four schools had also worked closely with other schools, either sharing ESDGC work, supporting it, or being supported. These networks again increased social capital and provided mechanisms for the flow of new ideas from school to school and between organisations and schools, thus further increasing the schools' access to intellectual capital. They fitted the descriptions of both learning networks and communities of practice given in Chapter 2. It was suggested that the ESDGC coordinators, and sometimes the head teachers, could be described as Gladwell's (2000) 'Connectors' acting to spread information both within and between schools. Some of the coordinators, particularly from Llefyn and Gyrn had characteristics of Gladwell's 'Mavens', encouraging and supporting slower adopters. Many of these networks had relied primarily on ESDGC project funding which could put them in a vulnerable position if the funding stream ceased. There was, however, evidence of informal communities of practice being maintained after the end of more formal arrangements. There was also evidence of some more social networking through informal links between teachers.

The formal district school clusters were not being encouraged to work on ESDGC but rather on subjects such as mathematics and language. However, school advisers often used key ESDGC teachers to contribute to courses. School advisers' support was acknowledged widely for aspects of ESDGC but in-school support specifically on ESDGC was not often mentioned. Two further models of a school's ESDGC development have been presented. These take into account the importance of networking in the development of ESDGC. The next chapter summarises the overall findings, draws conclusions and discusses implications for further ESDGC development in schools.

CHAPTER 11

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

This study has provided a very detailed insight into the development of ESDGC in five primary schools. The overall findings of the research are now reviewed in order to assess how well the key questions have been answered. The outcomes are then examined in the light of the research literature and current theories. The key contributions of this study to ESDGC research are highlighted. Limitations of the research are discussed and suggestions made for future research studies. Finally, implications of the research findings for future policy and practice at national and regional levels are discussed and some recommendations made.

11.1 SUMMARY AND DISCUSSION OF THE RESEARCH OUTCOMES

The research outcomes are discussed under the headings of the two key questions.

11.1.1 Key question 1: What are the characteristics of schools recognised for their ESDGC practice?

Before exploring what had affected schools' ESDGC development it was felt worthwhile to examine the type of practice they were carrying out. There were two reasons for this. Firstly, although the schools were chosen for the study because they had all received recognition for their ESDGC work, it was suggested by Morgan (2009) and Scott (2010) that the criteria of external organisations and school award schemes may not always be comprehensive enough to cover ESDGC in its entirety. The LEA officer interviews also suggested that some schools were doing ESDGC much more completely than others. The independent analysis undertaken in this study was, therefore, a necessary first step to check how the schools' practice met some recognised criteria for the full breadth of ESDGC. Secondly, the literature suggests that the kinds of teaching approaches used can, in themselves, act as further stimuli for development. An example of this would be, as

suggested by Gayford (2009), where attention to pupil participation had encouraged pupils to take decisions which then affected the school's subsequent actions.

All of the schools were found to be carrying out a great number of ESDGC activities with global, environmental and sustainability dimensions; they had initially concentrated on different areas of ESDGC but had gradually widened their coverage. Three schools had given special attention to integrating international school partnerships into the children's work. The attention given to developing a global dimension was noted by LEA officers, and also by Estyn (2006a) and Morgan (2009), as being a characteristic of only a small number of schools. Although there was definitely a strong awareness of poverty and charitable issues, as noted in schools across Wales by Morgan (2009), schools had also looked in depth at many other complex issues. Some of these activities were being carried out within the framework of school award schemes but others were part of regular classroom activities. The methods which they used to promote learning were broadly pupil-centred and participative and learners had many opportunities for contextual and experiential learning and for critical thinking. News media were frequently used to stimulate children's discussion and school councils were very active. Much of this reflected the nature of the revised curriculum, the Skills Framework and the Foundation Phase (Welsh Assembly Government 2008a; 2008e; 2008d respectively). Teachers were generally very satisfied with the way their ESDGC development was moving on; this was helped by the fact that their schools had all received outside recognition of their achievements. However, they were not complacent and head teachers and ESDGC coordinators could still see areas which required further development.

Teachers noted many benefits for their pupils' development of knowledge and awareness, values, attitudes, dispositions and skills. Enjoyment of learning was most commonly mentioned and pupils were said to be engaged, more aware of ESDGC issues, thinking critically, making decisions, and playing a significant role in the life of the school. In Faban, the school with the high multi-ethnic intake, respect for others and increased self esteem were mentioned frequently. These were all characteristics of ESDGC learning outlined in Chapter 1. Year 5 and 6 pupils, in their focus group interviews, generally confirmed their teachers' observations. Although in general they had a wide awareness of both local and global issues, they had a greater degree of understanding of some topics than of others; this varied from school to school. In two schools pupils had gained a

substantial amount of their knowledge of other countries from charitable fund-raising campaigns, a point noted more generally for schools by Morgan (2009). In those schools they tended to have quite a stereotypical view of poverty. Also, in those schools, pupils appeared to have a greater passion for local issues than global ones, whereas in the other schools pupils' interest in global issues was just as prominent.

A comparison of pupils' knowledge, understanding and awareness, and their skills, values and attitudes with various sets of criteria (e.g. Gayford, 2009; Oxfam, 2006; Estyn, 2010), showed that in general they demonstrated fairly high levels of skills and values for ESD/GC and that some showed very high levels of critical thinking for their age. They also appeared to appreciate playing a role in their school and confirmed their teachers' views that they had affected some of the school's on-going actions. These findings suggest that ESDGC is a very useful medium for motivating learning. Also the skills and attitudes being developed were not just relevant to ESDGC but to their everyday lives and to society in general.

In summary, the case study schools showed that they had been introducing a wide variety of ESDGC topics into their teaching and learning and that they had all used methods considered appropriate in the ESDGC literature reviewed in Chapter 1. Their actions and methods reflected those encouraged in ESDGC guidance and the revised curriculum for Wales although many teachers had already favoured these ways of working. Although there was room for further development in all schools, they all met most of the criteria for teaching and learning outlined in the literature review (e.g. Scott, 2010) for schools that had been substantially developing ESDGC.

11.1.2 Key question 2: What factors influence the development of a comprehensive approach to ESDGC in primary schools?

The developments described in schools had taken place during a period in which the guidelines for ESDGC and the whole school curriculum had also been changing. Schools had thus been subject to a great amount of change and would have had to choose their priorities carefully.

Why schools began, and continued, developing ESDGC

Schools had begun developing ESDGC-related activities from the late 1990s onwards for a variety of reasons. These included personal interest, humanitarian responses to particular events, the opportunity to take part in a project, the availability of school award schemes, school linking projects, national guidance and support to develop the Foundation Phase. Three schools had begun their development with global aspects of ESDGC.

All schools had been influenced or spurred on to some extent by school inspection guidance (Estyn, 2005), the second round of ESDGC guidance (Welsh Assembly Government, 2008b) and the revised curriculum guidance which placed ESDGC as a central element in the curriculum (Welsh Assembly Government, 2008a). Up to this point schools were pursuing their own areas of ESDGC interest. The more comprehensive guidance documents had shown them the breadth of what ESDGC encompasses and encouraged them to take further measures to embed it across its whole range. To some extent this guidance could be said to have altered their sense of the purpose for ESDGC development. Some schools had developed ESDGC somewhat erratically, gradually encompassing aspects of ESDGC; others had taken a more focussed approach and found mechanisms not only for surviving but for thriving in the changing curricular atmosphere, for example by using ESDGC as a context for other areas of learning.

Common factors in development of ESDGC

Some of the most frequently mentioned factors in the schools' ESDGC development are listed below, grouped together under relevant titles (there is some overlap between categories). Some of these factors were inspirational, such as the characteristics of head teachers and coordinators; some were aspirational, such as putting ESDGC in development plans; some were organisational, such as appointing a coordinator; some were based around less organisation and more flexibility, and others around the needs of individuals. They were:

- a) Leadership, namely:
 - motivational and supportive leadership from the head teacher;
 - personal interest;

- an inspirational ESDGC coordinator who overviewed ESDGC, sought opportunities and supported others - this was most noticeable in the two larger schools;
- shared responsibility (distribution of leadership);
- b) The impact of national ESDGC guidance and curriculum priorities of promoting skills and pupil-centred learning (this was discussed above);
- c) Schools and teachers giving attention to, and being alert to, ESDGC, for example:
 - maintaining an overview of ESDGC provision including contributions from school award schemes;
 - being flexible, exploiting opportunities that arose, but also seeking these;
 - bringing relevant visitors into the school;
 - developing learning-centred international partnerships;
 - joint planning for ESDGC;
 - placing ESDGC prominently in the school's ethos;
 - using pupil-centred activities;
 - appointing a coordinator and distributed leadership;
- d) Teacher learning for ESDGC, for example:
 - time for discussion of ESDGC;
 - professional development support both out of school and in-school;
 - working with other schools and support organisations;
 - working with schools in other countries;
 - learning from visitors;
- e) ESDGC as an on-going process of development over time, where schools develop at different rates according to their circumstances and experiences.

All of these factors were also suggested by the LEA officers. Many implied a constructivist way of working, i.e. where individuals are believed to construct new knowledge from their experiences (Vygotsky, 1978). For example, they suggested extensive communication and interaction with others with resulting learning and changes in practice. They also indicated that there were internal learning communities (Stoll, 2004) and participation in wider networks and communities of action (Shallcross and Robinson, 2007). These issues are discussed below.

Leadership

All of the head teachers were found to be very enthusiastic about ESDGC; they had had an interest in ESDGC issues for some time, often from their youth. Although ESDGC coordinators were appointed in four schools, the head teachers still played a major role in the decision-making on ESDGC. Two had appointed coordinators as early as 2004, although they were first called global citizenship coordinators. Coordinators had been chosen for their interest, enthusiasm and dedication to the topic and they were much appreciated by their colleagues. One coordinator in particular was found to have many of the qualities of a transformational teacher (Giroux and McLaren, 1985), affecting many in the school as well as in other local schools. In the two larger schools, the coordinators acted as major drivers for ESDGC developments and sometimes there was a tendency for other teachers to leave certain aspects to them; this may have been due their extreme efficiency.

In all schools, apart of course from the school with only two teachers, there was evidence of further distributed leadership (Spillane et al., 2009) where teachers played key roles such as coordinating school award schemes, ESDGC subject content, and school council. All teachers were responsible for their own class planning. ‘Teachers working together’ or ‘contributions of all teachers’ were mentioned as factors in ESDGC development in four schools; this was particularly emphasised in the smallest school and in one of the middle-sized schools. In these latter schools, although ESDGC coordinators did exist, the emphasis was heavily on sharing responsibility. In the school without an ESDGC coordinator, although there was some distribution of tasks, working together on ESDGC was mentioned much less frequently.

Giving attention to ESDGC

Many of the head teachers’ actions to embed ESDGC involved giving it attention in the schools’ structures. This included: the appointment of coordinators, mentioned above; development of ESDGC policies; and maintaining an overview of ESDGC by auditing their practice. Areas that they were not yet addressing were noted and targets for these included in their school development plans thus ensuring that they would receive attention. Three schools had an ESDGC policy; a fourth had a global citizenship statement. There was little doubt that the appointment of coordinators and inclusion of ESDGC in the

development plans had been useful, however some head teachers placed little emphasis on the importance of their ESDGC policies. These appeared to have come about more as a reaction to a top-down suggestion from the local authority, rather than from a genuine desire to formalise ESDGC in this way. This was a point also noted by Fullan (1991) who suggested that schools sometimes take actions for political success rather than to achieve reform. However, Jackson (2007) and Ofsted (2008) noted formalisation as a useful factor in schools embedding ESDG/GC.

Planning, flexibility and being alert to ESDGC possibilities

Where planning was mentioned it was usually in the context of teachers working together. Flexible approaches, ESDGC ‘coming in naturally’ and ‘taking advantage of opportunities’ were much more frequently raised points. Schools had been receiving some contradictory advice regards planning and flexibility. Whilst the inspection guidelines, the ESDGC Common Understanding and the local education authorities had been promoting the development of policies and planning for ESDGC, the revised curriculum was now promoting a more flexible approach. This latter approach had been welcomed by schools with head teachers in two of the smaller schools noting that it had encouraged them to keep working in their preferred manner. In the school which had given the least attention to ESDGC the acting head teacher also suggested a resistance to the idea of further planning.

In the two larger schools where stricter planning had been used in the past in order to ensure ESDGC coverage, more flexible ways of working were also being increasingly used. One school had moved from rigid planning to a ‘one sheet plan’ for the whole school and was being increasingly led by the children’s interests. The other school had begun to make much more use of the experiences of its own multicultural pupils, bringing benefits to all pupils. The Foundation Phase with its strongly pupil centred, experiential approach was also seen to marry well with ESDGC.

All schools mentioned visitors as being important, and one of the larger schools had taken a particularly integrative approach to this, using visitors to complement on-going work. Although some visits did arise by chance, for example, when someone with expertise was visiting the area, what was often happening in this school was much more proactive; teachers were keeping a watch for such opportunities and actively exploiting them. Local

and global visitors often complemented their international partnership work. Three schools had developed such partnerships in depth and had integrated them into their classroom work. To do so they had accessed funding and quality professional development support. Although there had been some debate about how worthwhile these were for all partners concerned, they had clearly inspired many teachers and pupils.

ESDGC as part of the school ethos

All schools had also put many actions in place to introduce an ESDGC ethos across the whole school. These included attention to ethical and sustainable procurement, biodiversity in the school grounds, diversity in general, and displays of pupils' ESDGC-related work around the school. Three schools had a particularly strong international ethos, partly reflecting their involvement in school partnerships, but also their attention to other global issues, and, in one, to diversity in the school population. On the sustainability side all schools were hampered by the state of their school buildings.

Supporting teachers' professional development

Although it was heartening to find that many teachers had had their interest in ESDGC raised through their experiences in school and nearly all felt that their competence in ESDGC had been moving on, it was found that in all schools there were still some teachers who lacked confidence in ESDGC and who also had an incomplete view of what ESDGC entailed. Also noted earlier, ESDGC is a very complex topic and not one that can be immediately understood in its entirety. It was also notable that few younger teachers had gained a good understanding of ESDGC from their initial training. Two main ways of gaining competence were noted i.e. from attendance at professional development events and from in-school experiences and support.

Although head teachers were all supportive of staff development for ESDGC, practicalities, such as availability of funding and the desire to maintain an informed coordinator, meant that external ESDGC training was mostly confined to ESDGC coordinators; a large majority of other teachers noted that they gained most of their experience within the school. A few had attended training in aspects such as Healthy School, however these were only components of ESDGC and would not have given the full ESDGC picture.

It was shown in Chapter 5 that there was a good variety of ESDGC support on offer to schools. This came in the form of workshops, conferences, projects, visits to field centres and support to individual schools. The collaboration of the schools' advisory service with other service providers enabled a more comprehensive level of support to be available than would have been arisen from the advisers' support alone. The input of knowledgeable experts to these courses should also have made these events and projects very valuable (Cochran-Smith and Lytle, 1999; Young, 1998). The case study schools had taken advantage of many of these opportunities and ESDGC coordinators attended many events and took part in projects. They were thus able to gain a good grounding in ESDGC. The key challenge was then how to convey some of their new-found understanding and ideas to other teachers and to how to give them time to foster a shared vision for ESDGC (Jackson 2007; EES-SW, 2007). Engeström (2009) suggests that this would be unlikely to work well simply by giving other teachers information and expecting them act on it. Each school would have to develop ESDGC in the most appropriate way for its own changing needs, rather than in some pre-formulated way, for as Engeström (2009) suggests,

People and organizations are all the time learning something that is not stable, not even defined or understood ahead of time. In important transformations of our personal lives and organizational practices, we must learn new forms of activity which are not yet there. They are literally learned as they are being created. (p. 57)

This prompts a discussion about the extent of learning communities (Mitchell and Sackney, 2000) in the schools.

Developing learning communities

Stoll (2004) describes learning communities as having: shared values and visions; collective responsibility; reflective professional enquiry; collaboration; and collective learning as well as individual learning. Schools in this study used several ways to disseminate information and to encourage in-school collective learning. First, those attending professional development events usually gave feedback to others, often in after-school meetings. A limitation of this was, however, noted, i.e. it is difficult to condense information from a day's course into an hour. It is also unlikely that much discussion occurred in these meetings; given their short duration they are likely to have been fairly transmissive events. Secondly, in some schools new teachers, or teachers who were about

to change class, were supported by an ESDGC coordinator, shown portfolios of work and introduced to skills-based ESDGC learning. This meant that they received quality time with an experienced practitioner; teachers appreciated this.

Thirdly, some teachers felt they gained ESDGC experience through having a special responsibility (it was shown above that there was substantial distribution of leadership in some schools). Some teachers mentioned learning through their coordination of an award scheme. Others were given responsibilities outside of their comfort zone. Examples included one relatively new teacher, who was running a skills-based diversity unit and learning from the Oxfam Global Citizenship materials (Oxfam, 2006), and another less knowledgeable ESDGC teacher who was given responsibility for the ESDGC elements of Personal and Social Education. These roles had given teachers ownership of certain areas of ESDGC, an important point also noted by Apple and Beane (1995). The role of the ESDGC coordinator, or head teacher, was to ensure that all teachers knew how these experiences fitted together under the umbrella of ESDGC.

The situations described above were all examples of situated learning (Lave and Wenger, 1991) where meaning is presumed to be created by participating in social activity (Lave, 1996) and the teachers are part of a community of practice. However, according to Engeström (1999), although this ‘situated learning’ is a satisfactory starting point for novices it is not sufficient to ensure major transformations of practice. In his notion of expansive learning, wider alternative contexts are constructed through the meeting of ideas, and the ‘conflictual *questioning* of the existing standard practice’ (p. 69). This is similar to Sterling’s (2004) third level transformative response.

The opportunities within schools for reflective professional enquiry on ESDGC and collective learning varied quite considerably. This was confirmed by both the teacher interviews and the network analysis. Although collaboration, or ‘working together’ was one of the key factors mentioned in four schools, in two schools this kind of working mostly appeared to amount to teachers planning special events together. In another two schools head teachers gave staff regular, often weekly, opportunities to discuss ESDGC; in the small two-teacher school this was also a natural occurrence. This ‘giving time for development’ was also noted by Jackson (2007) as being a key factor for schools developing an aspect of education. The size of school staff did not appear to be an

indicator of this frequency of meeting; rather it seemed to be the level of priority given to ESDGC by the ESDGC coordinator or head teacher. Without actually being present in these meetings it was difficult to assess the depth of discussion that went on and whether controversial issues such as stereotyping were discussed, however, in these schools most teachers appeared to understand ESDGC quite well, and to know more about the guidance documents than in the other schools in the study. This reflects the findings of Bell et al. (2006) for schools in England. The encouragement of collaboration by some head teachers should also have gone some way to diminishing the vulnerability of initiatives promoted solely by lone enthusiastic individuals (Hargreaves, 1989; Little, 1990).

Networking between schools

There was also a considerable amount of networking with, and support for, other local schools. Teachers from four schools had contributed to Local Education Authority, or similar, training sessions, and ESDGC coordinators from three schools, and two in particular, had acted as ESDGC mentors to other schools. It was suggested that these teachers could be described as Gladwell's (2000) 'Mavens' supporting schools which had been slower to adopt ESDGC. They had also met other teachers at conferences, training events and on international visits, acting like Gladwell's 'Connectors' to spread ideas and increase the flow of ideas between schools. This could have been particularly valuable because those contributing had a good understanding of ESDGC and had also developed innovative practice.

There was also evidence of some more informal social learning between teachers, with some continuing to keep in touch even after joint projects had finished. The case study schools had a surprising number of linkages with each other, some personal and some work-based, and some teachers were found to have talked to each other about ESDGC. This familiarity could have released social capital and tacit knowledge more easily as suggested by Portes and Sensenbrenner (1993) and Carmichael et al. (2006), and Fox and Wilson (2008) for new teachers. By contrast, there were no signs that the School Effectiveness Framework's (Welsh Assembly Government, 2008g) encouragement for collaboration between schools had had any effect on ESDGC development and it was also notable that school district clusters were no longer encouraged to discuss ESDGC, rather they concentrated on more formal subjects.

More extensive networks and sources of continuing stimulation

All schools were also found to have extensive networks with people and organisations outside their schools and, as mentioned above, they frequently used these to enrich and complement teaching and learning. Their visitors and organisational links were said to be sources of stimulation for both teachers and pupils, and these should have been helping them to avoid staleness and enabling them to access new ideas, a necessity noted by Sterling (2001), Scott and Gough (2003) and Stoll (2004). Usually, certain key teachers, most often the ESDGC coordinator, were the key contacts for external links, probably due to them having time allocated for this and also due to their enthusiasm and outward looking natures.

Development as a process over time - stages of ESDGC development

It was proposed in Chapter 9 that a school's development of ESDGC could be described as a spiral of development, based on an action research model (McTaggart, 1996), in which development was initiated by a particular stimulus but gradually grew over time through reflection, modification of activities and the uptake of continuing opportunities. From an appraisal of the five schools' development a five stage progression of ESDGC development was then suggested (Figure 9.2). It included the following stages:

- Stage 1, ESDGC unrecognised, but with contributing activities taking place;
- Stage 2, Fragmented, with a set of unconnected ESDGC activities happening, acknowledgement of ESDGC as a topic, professional development for key players and introduction of some 'special' events;
- Stage 3, Realisation, after auditing, that activities relating to ESDGC are occurring in the school; attention to ESDGC in school development plans and support for teachers in school;
- Stage 4, Deliberate planning, with opportunities sought to fill the gaps; ESDGC is integrated across the school;
- Stage 5, Confidence and flexibility with less planning, and confidence that ESDGC will arise and be dealt with appropriately.

The five schools were estimated to be at different stages of this progression, with one at stage 3, one between Stages 3 and 4, two at stage 4 and one, a larger school, at stage 5. There were reasons for these differences. For example, the school at stage 3 had received a

good inspection result on ESDGC in 2006 and had then left its further development aside in order to give priority to other topics. In that period, however, with the publication of more detailed guidance, the standards expected of ESDGC had become higher making them appear further behind in its development. It did appear to be accelerating its development at the time of the study. All schools showed that they developed more rapidly at some times rather than at others, depending on their varying priorities. For example, the diagrams of individual school development in Chapter 8 demonstrated that some had been developing ESDGC elements for up to ten years, with varying attention to global and environmental aspects. The LEA officers in this study also mentioned the impact of priorities on ESDGC development and EES-SW (2007), in its study of the global dimension in schools, noted that it took at least five years on average for schools to tackle a global dimension.

With the encouragement of the flexible nature of the revised curriculum it is feasible that the schools at lower levels could miss Stage 4 of the proposed progression and move straight to Stage 5. However, there could be difficulties associated with this. In order for Stage 5 to work efficiently a head teacher or ESDGC coordinator would have to be confident that all members of staff shared a similar sense of purpose (James et al., 2006) and that all had a good all-round understanding of the intricacies and complexity of ESDGC and could recognise relevant opportunities. Without this, schools could risk returning very quickly to a Stage 2 or 3 scenario with fragmented elements of ESDGC. The process of initial auditing and planning at stages 3 and 4 may actually help teachers move towards this understanding and shared purpose. Three other measures were being used to avoid these possible problems. These were: professional development; regular opportunities for teachers to work together, share experiences and discuss issues; and opportunities to work with, and learn from other organisations and schools. However, it was found that there was still much room for development in all of these areas.

This five stage progression was compared to Anderson's (1999) continuum of system change and to Scott's (2010) five stages based on capital approaches, with the key difference being a return to flexibility at my stage 5. It is also possible to view the schools' development of ESDGC in terms of Rogers and Shoemaker's (1971) diffusion theory, with the categories of 'innovators', 'early adopters', the 'early majority', the 'late majority'. Llefyn, Gyrn and Faban could perhaps be all be described as 'innovators' who

tried out new ideas even before the introduction of ESDGC; Bera as an ‘early adopter’ and Drosogl as part of the ‘early majority’.

The nature of the changes

The nature of the schools’ ESDGC changes was discussed. Sterling (2003), Webster and Johnson (2009) and Scott (2008, 2010), suggest a top level where a complete transformation in learning at whole school level has occurred and the nature and purpose of the school is seen in a different way. It was felt that, although major changes to ethos had occurred, none of the schools in this study had been really transformed in this way. However, all of the schools displayed some of the characteristics of Sterling’s transformative education (Sterling, 2001, p. 38). For example, although there was still some ‘control kept at the centre’ all had examples of ‘local ownership’ with teacher, pupil, and parent and community involvement; they were ‘responsive and dynamic’ and saw ESDGC as an ‘on-going process’ with ‘change over time’. Emphasis was also on teacher and pupil learning rather than transmissive teaching. Several took part in ‘democratic networks’ and all used ‘language of appreciation and cooperation’. Llefni was thought to be closest to being transformative in terms of its flexible, pupil-led approaches, with Gyrn following closely. The nature of the revised curriculum for Wales seemed to be actively influencing this and the schools’ changing behaviour was a very positive endorsement of those national changes.

On an individual teacher level some teachers did appear to have changed their views substantially, although I would be reluctant to use the term ‘transformed’. Certainly many mentioned experiences that could be said to have the potential to be transformative (Mezirow, 2000; O’Sullivan, 2003). These included exposure to other cultures, to inspirational speakers and to ESDGC methodologies. Examples included the head teacher of Llefni, and Teacher 4L, Teachers 2G and 4G in Gyrn, and Teacher 7D in Drosogl. However these experiences were combined with others and none, on its own could be pinpointed as being key to change. This is not unusual; Mezirow (1995) suggested that transformative learning is the result of ‘an accumulation of transformations in meaning schemes over a period of time’ (p. 50).

Barriers to development

Barriers were mostly noted by the LEA officers for the region's schools in general. The first was a lack of understanding of ESDGC's breadth and of how it fits in with other topics. This was felt to lead to a perceived initiative overload, a lack of priority for ESDGC and a perceived lack of funding. Much of this was attributed to a lack of professional development to help understanding of the broad nature of ESDGC. Although elements of these barriers occurred in the case study schools, four appeared to have overcome most of them through being proactive, dedicated and determined and through seeing ESDGC as a context for other areas of the curriculum; the fifth was in the process of tackling them. Limited teacher networking within two schools also seemed to be limiting the flow of ESDGC development.

11.2 MODELS AND THEORETICAL CONSIDERATIONS

This research study has drawn on several different theoretical approaches, both in the design of the study and in the analysis of outcomes. All of these have a constructivist basis. Methods used in social network (Fox et al., 2007) and social capital approaches (Penuel and Riel et al., 2009) were modified for the network analysis. The analysis was not done in as much depth as in those studies but the methods were found to provide a useful way of discovering and illustrating with whom and how frequently teachers talked about ESDGC. This is turn pointed to ways in which they could access social capital.

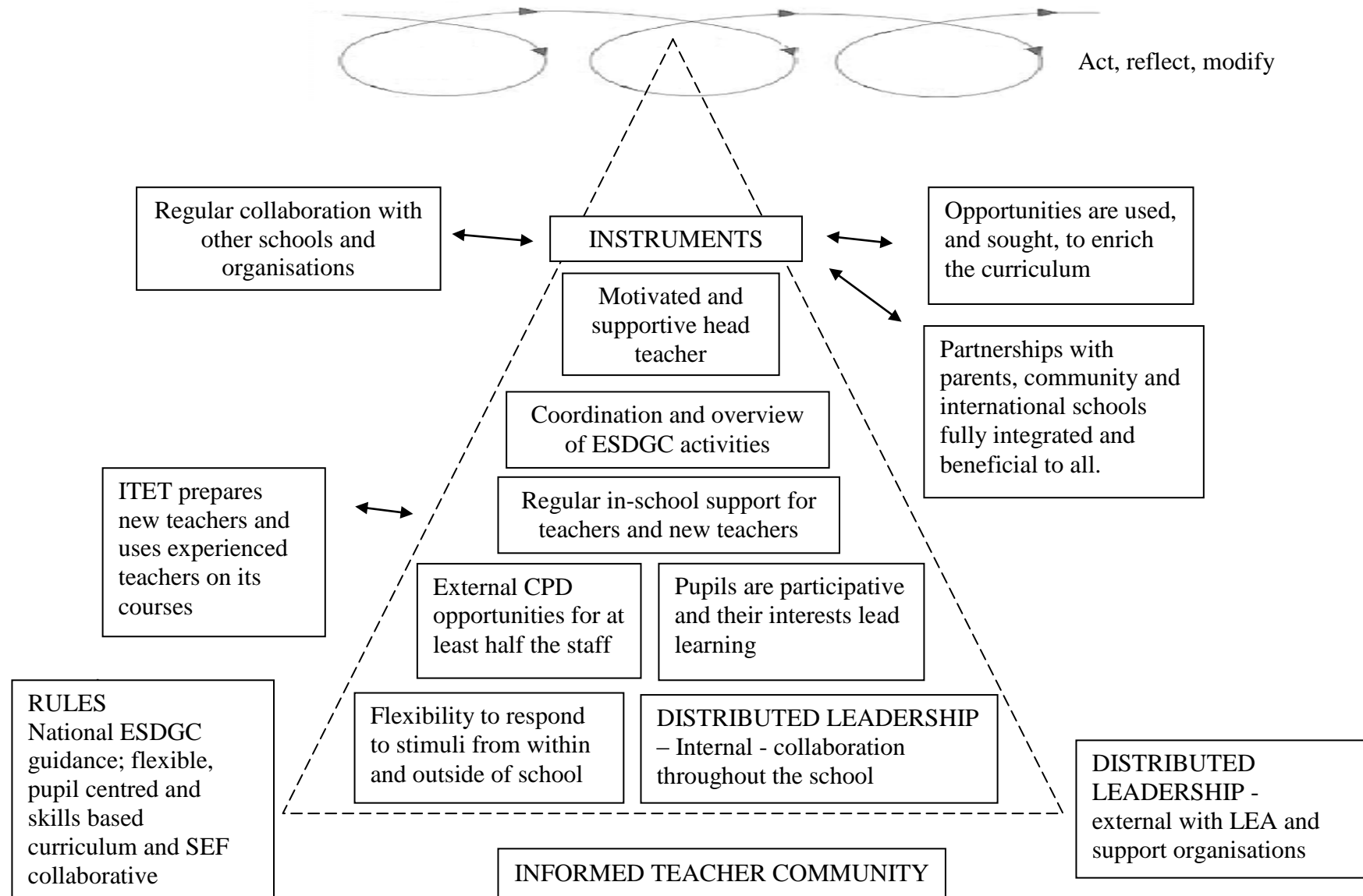
The action research spiral of McTaggart (1996) was used to show how ESDGC appeared to grow over time with reflection, modification and action. I was interested in finding a way to illustrate not only the progression of stages of ESDGC development over time as suggested by Anderson's (1993) continuum of system change but also to incorporate teachers' networking in school, the impact of the guidance documents, and actions taken to encourage ESDGC development such as distribution of leadership. A constructivist approach was chosen partly because many of the key factors suggested this kind of learning. A model based on Engeström's (1987) socio-historic second generation action theory seemed appropriate for this, especially as this also incorporated elements of time, multiple voices (e.g. teachers), the overcoming of existing traditions and contradictions,

and the possibility of transformational change. These were key issues in change suggested by: Anderson (1993); Feiman-Nemser and Floden (1986); Scott and Gough (2001) and Achinstein (2002); and Mezirow (2000), Argyris and Schön (1978) and Sterling (2004), respectively. They were also found to be relevant issues in this study. Figures 10.17 and 10.18 illustrated this model for a school which had deliberately begun to address ESDGC.

However, I wanted to illustrate a school's development in a more regional context. This was important as the schools relied on outside provision and support for some of their professional development, for funding, for stimuli to prompt new developments, and for enriching their curricula. For this, a model based on Engeström's (1999) third generation of activity theory was thought more appropriate (Figure 10.19). However, the model was modified to show the networking elements in school more clearly and to highlight external stimuli. This model was felt to be a more appropriate way of illustrating the factors affecting change in the case study schools. The model could perhaps have been modified further to place the school action systems *within* the regional one but that would have assumed that all schools were aiming for exactly the same end; they may not have been. All the head teachers were confident individuals who would be unlikely to take on a change just because it was pushed from outside. They would want to ensure their development suited their unique situation. Indeed, the whole point of using an activity theory model is that the object is assumed to be continually modified.

Figure 11.1 below shows a final attempt to design a simplified model which shows optimum conditions for the development of ESDGC. It incorporates the key factors found in this study. The school-based elements are placed *within* the activity triangle and the external collaborative elements outside. The spiral denotes development over time. This may be a simpler way to quickly envisage school ESDGC development and could be also be used to describe many other kinds of development.

Figure 11.1 Simplified ESDGC development scenario for a school



11.3 KEY CONTRIBUTIONS OF THIS STUDY TO ESDGC RESEARCH

Most of the factors influencing ESDGC development discussed above have been mentioned by other studies on aspects of ESD/GC. However this study is particularly useful in that it has obtained a detailed view of how schools work to develop ESDGC and it has uncovered some often hidden minutiae of developing a new area of the curriculum. It has listened to the views of key players in schools but also listened to the voices of many other teachers who are often not heard. It has triangulated the data with valuable information from local authority officers.

Key insights from the research

There are several particularly interesting findings from this research study. Firstly, schools appear to thrive on flexibility and exploiting opportunities to enrich ESDGC. The inclusion of ESDGC in a pupil-centred, skills-based curriculum which encourages flexibility appears have been a major step forward. Secondly, ESDGC coordinators accessed a large amount of professional development through attendance at courses and through working with other schools; this gave them access to social capital in the form of new ideas and concepts which they could then introduce to their schools. Thirdly, most other teachers were found to obtain their ESDGC interest and experience within their schools. This was useful, however even in schools where ESDGC had been addressed in great detail some teachers were still lacking in confidence and understanding. Frequent networking and discussion in school appeared to aid their understanding and helped develop a shared vision of how they wished to develop ESDGC. Fourthly, the models of ESDGC development presented here may be useful starting points for others wishing to carry out further research in this field.

Finally, these observations are not just of relevance to the development of ESDGC in primary schools. For example, the findings on professional development, networking and collaboration and the importance of support within schools could equally well be of benefit to schools aiming to develop other areas of education. Also, the more complex nature of secondary schools may mean that distributed leadership, communication and networking require particular attention. Similarly, the finding that pupil-centred, skills-based ESDGC

learning provides a motivating context for learning is relevant to all levels of education and should be of benefit to teachers introducing other topics and subjects.

11.4 LIMITATIONS OF THE STUDY

The study has provided an in-depth examination of only five primary schools. Therefore it is sensible to question how true a picture has been given of each school, the region and, also the validity of my conclusions. By their very nature, individual case studies are unique (Gillham, 2000). They provide a rich insight into how an area or a particular school works at a particular time. However, all schools are different and what works in one may not work in another. Individual schools may also work differently at different times depending on leadership, staffing changes, and so on. In addition, the situation in secondary schools may be very different to that in primary schools.

Measures were, however, taken to make the study as robust as possible. Five schools of different size and location were chosen. Within each school, data and method triangulation was used, for example, by collecting information from teachers, through survey and interview, from pupils, and from documents and evidence around the school. In order to ensure their unique voices were heard as many teachers as possible were interviewed. Many of the common trends from the study were also confirmed by information from the LEA interviews. In each case study school, more information could have been gathered and more pupils interviewed, however, I believe that a reasonably accurate picture has been drawn of each school.

Again, more schools could have been studied but this would have been difficult in terms of the capacity of the study, with only one researcher involved; a study of further schools would have inevitably led to less data being collected per school. One criticism that could be made is that none of the schools was very large and only one was urban, and that was only in a small town; the maximum number of teachers was eleven. There are, however, no significantly larger primary schools in the study area.

It is also possible that the unique characteristics of north-west Wales in terms of language and culture and the close-knit nature of the community may limit full transferability of

results to some more populated areas. However, there are many areas in the UK, which, although without the same language issues, may also have similar communities where teachers have mostly studied and worked close to home. The level of support will also differ from place to place, but Symons' (2008) review, showed that there are similar types of support available in many areas.

Reactivity to me, as researcher, may also be an issue to consider. As noted in Chapter 4, I had worked with some schools and the local authority over a period of many years and this may have affected the way some teachers responded, perhaps expecting me to know certain things or wanting to make a good impression. I was not aware of any instance of the latter issues; teachers appeared to be very open in their answers. It should be reiterated here that I had only previously met some of the head teachers and coordinators and very few class teachers. There were some elements of reactivity in terms of teachers wanting to find out about resources. This topic came up several times in interviews and I was happy to volunteer information about where resources could be obtained. I kept a record in an NVivo file of all such instances. Also there were two instances of changes appearing to occur as a result of the project. This happened in two schools where the data collection was spread over a longer period. In Llefyn, a teacher who was interviewed early in the schedule was then encouraged by her head teacher to attend an ESDGC course. A teacher from Drosogl attended a course in the period between her school agreeing to take part in the study and the time of her interview. Also teachers' interviews in this school showed that they had begun to discuss further development of ESDGC during this intervening period.

Overall the study has also confirmed many of the findings from other less intensive studies whilst at the same time throwing up some key differences. Despite the limitations noted above I believe that it has provided some legitimate insights into how primary schools develop ESDGC and has set the scene for further investigations.

11.5 FURTHER RESEARCH

It is suggested that further research could encompass studies of larger and more urban schools. This would shed more light on how practice develops in a more complex situation. It would also be worthwhile to carry out a study of schools which have not

developed ESDGC to any major extent and to follow them over a number of years. This would help to more clearly identify barriers and enablers to their development. A large scale survey of teachers across Wales, based on the questionnaire used in this study, could also shed light on regional differences.

Also, this study has only touched on network analysis. There is a need for more detailed studies of both internal and external networks relating to ESDGC. A study of internal networks in which the topics of conversation are analysed in more detail could help head teachers better understand how they can support teachers in school by showing them how information currently moves through the school. Penuel and Reil (2009) and McCormick et al. (2009) both point to the worth of carrying out numerical analysis of networks especially in studies of large schools. This is another possible area for research. Also, an analysis of external networks could be carried out across a much larger number of schools. This could show local authorities how and from where schools are accessing ESDGC information and help them to work with appropriate organisations to ensure comprehensive support.

It would also be interesting to find out in more detail about the impact of ITET courses on new teachers. A longitudinal study of teachers, beginning during their training years and following them through the first few years of their careers could provide valuable information on how young teachers develop, or perhaps do not develop, ESDGC expertise.

11.6 IMPLICATIONS OF THE RESEARCH FOR PRACTICE AND POLICY

The findings of this study suggest some implications for future policy and practice. Firstly, it was noted that only a few teachers were able to access external ESDGC professional development. Other teachers in the schools depended on in-school experiences. They did not always have a full understanding of ESDGC and time for support in school, although provided, was not always sufficient. Ideally it would be useful if all teachers could attend at least one quality ESDGC course, but of course this brings funding implications. However, regular time for discussion within school also appeared to increase teachers' understanding and give them a sense of ownership of ESDGC. This can, in turn, introduce issues of conflicting priorities where head teachers have to decide which areas of learning

to address. However, this study has shown that ESDGC can be approached in many creative ways without it becoming a burden e.g. within allocated subject discussion time. Professional development and guidance can help teachers see these possibilities more clearly.

Secondly, many of the professional development opportunities, projects and networking events that these schools took advantage of were funded from sources which may not be maintained in the future. For example, the UK government's DFID Development Awareness Fund which supported many of these events has already been discontinued. Also, since the start of this research, local authority cuts and the formation of education consortia, which cover much larger areas than the existing counties, have seen education advisers being given an increasing number of responsibilities and being drawn away from ESDGC and international dimension support roles. The fact that local school clusters are not discussing ESDGC is another sign of decreasing attention to ESDGC. Without this support and these sharing mechanisms schools will not receive the same flow of new ideas about ESDGC to stimulate their development. The LEA officers interviewed in this study believed the schools studied to be in a minority of those developing ESDGC well. What will happen to the development of other, less developed schools if these sources of support disappear?

Thirdly, although the revised curriculum for Wales' emphasis on flexibility has helped some the schools studied here to address ESDGC, schools with less understanding and competence in ESDGC may find that this encourages them to pick and choose areas to study and to miss out on some more 'difficult' areas of ESDGC. There is a danger that they could return to relying too much on school award schemes to cover ESDGC. If so, they would require more explicit guidance on how these schemes can contribute fully to ESDGC.

Finally, it was noticeable that very few new teachers had been strongly influenced in their ESDGC development by their teacher training (ITET) courses. One observant new teacher also mentioned that they had done little on her ITET course on *how* to introduce ESDGC in the classroom. This implies that further time should be found on ITET courses for addressing, and practising, ESDGC pedagogy.

11.7 RECOMMENDATIONS FOR FUTURE POLICY AND PRACTICE

The recommendations below are divided into those requiring attention at national level in Wales and at regional/school level. There is some crossover in these, for example, some local actions may require national-level funding.

11.7.1 Recommendations for action at national level in Wales

National actions should:

- encourage continuing ESDGC networking between schools, for example, the School Effectiveness Framework could encourage teachers to consider ESDGC as a topic within networks on core subjects such as mathematics, Welsh, English and science;
- continue to promote pupil-centred, skills-based learning and flexibility;
- map school award schemes against ESDGC criteria;
- maintain a variety of ways of sharing practice e.g. websites, and funding for ESDGC fora, newsletters and inter-school networks;
- address ESDGC in professional development and early professional development guidelines;
- supply funding to provide at least two good quality workshops in each county each year; one of these should be for teachers less familiar with ESDGC.

11.7.2 Recommendations for action at a regional/school level

Schools should be encouraged to:

- consider appointing an enthusiastic, dedicated and determined ESDGC coordinator;
- include ESDGC in school development plans but not in so rigid a way that it causes over-work and inflexibility;
- share responsibility for ESDGC, with various teachers overseeing different aspects but all recognising that these aspects come under the umbrella of ESDGC;

- take a flexible approach, and be alert to opportunities to enrich ESDGC such as inviting visitors, working with the community, funding streams, training events and projects;
- follow pupils' interests, developing skills-based approaches to learning and encouraging pupil participation and decision-making;
- if developing learning-centred international partnerships, ideally use online methods, enhance with appropriate visitors and ensure professional development for teachers;
- send a wider range of staff on professional development courses;
- provide in-school support for new teachers, and others requiring support;
- allocate dedicated time for sharing of practice, collaboration on across-school projects and discussion of issues arising from ESDGC practice;
- develop formal and informal links with other schools with time built in for sharing practice and visiting each others' schools and; less experienced teachers should be included in these visits;
- develop links with ESDGC support organisations and local authority advisers;
- allow time for development over several years.

Local Education Authorities should work with other support organisations to pool their resources for ESDGC support. Initial teacher education and training providers (ITET) providers should be encouraged to include study and practice of ESDGC methodologies and to utilise input from experienced teachers on their courses.

11.8 FINAL COMMENT

This study has provided some clear insights into the issues of developing ESDGC in primary schools. It has shown that many opportunities do exist to enhance this area of learning and to bring it into the day to day curriculum. Schools need to be able to recognise these opportunities and to be flexible enough to take advantage of them. The revised curriculum for Wales certainly encourages a flexible approach. Good quality professional development can raise teachers' awareness and build expertise which can enable them to introduce ESDGC appropriately. Appointing a motivating teacher to guide

developments and building time for formal and informal networking within schools and between schools can help disseminate this expertise and provide the potential for all teachers and pupils to benefit from ESDGC's motivating context for learning. Many of the findings are not only relevant to the implementation of ESDGC but also to many other areas of school change.

REFERENCES

- ACCAC 2002, *Education for Sustainable Development and Global Citizenship: why? what? how?*, Qualifications, Curriculum and Assessment Authority for Wales, Cardiff.
- ACCAC 2001, *Equal Opportunities and Diversity in the School Curriculum in Wales*, Qualifications, Curriculum and Assessment Authority for Wales, Cardiff.
- ACCAC 2000, *Personal and Social Education Framework: Key Stages 1- 4 in Wales*, Qualifications, Curriculum and Assessment Authority for Wales, Cardiff.
- Achinstein, B. 2002, "Conflict Amid Community: The Micropolitics of Teacher Collaboration", *Teachers College Record*, vol. 104, no. 3, pp. 421-455.
- Adams, W. 1991, *Green Development: environment and sustainability in the Third World*, Routledge, London.
- Anderson, B. 2008, *Supporting Sustainable Schools in the South East*, Government Office for the South East.
- Anderson, B.L. 1993, "The Stages of Systemic Change", *Educational Leadership*, vol. 51, no. 1. Inventing New Systems, pp. 14-17.
- Andreotti, V. 2006, *Critical Literacy in Global Citizenship Education*, Global Education, Derby.
- Andrews, D. & Lewis, M. 2002, "The experiences of a professional community: teachers developing a new image of themselves and their workplace", *Educational Research*, vol. 44, no. 3, pp. 237-254.
- Apple, M.W. & Beane, J.A. 1995, *Democratic Schools*, 2nd edn, Open University Press, Buckingham.
- Argyris, C. & Schön, D. 1996, *Organisational Learning II: Theory, Method and Practice*, Addison-Wesley, MA.
- Argyris, C. & Schön, D. 1978, *Organisational Learning in Action*, Addison-Wesley, Boston, MA.
- Bazeley, P. 2007, *Qualitative Data Analysis with NVivo*, Sage Publications Ltd., London.
- Beard, R.M. 1969, *An Outline of Piaget's Development Psychology*, Routledge and Keegan Paul, London.
- Beck, U. 1997, "Democratization of the Family", *Childhood: A Global Journal of Child Research*, vol. 4, no. 2, pp. 151-168.

- Bell, M., Jopling, M., Cordingley, P., Firth, A., King E. & Mitchell, H. 2006, *What is the impact on pupils of networks that include at least three schools? What additional benefits are there for practitioners, organisations and the communities they serve? The impact of networks on pupils, practitioners, organisations and the communities they serve*, National College for School Leadership, Nottingham.
- Bennell, S. 2011, *Developing a sustainable network of ESDGC teachers*, World Education Centre, College of Education and Lifelong Learning, Bangor University, Bangor.
- Bennell, S. 2005, *Towards an Integrated Approach to Global Citizenship in North Wales: Final Project Report*, World Education Centre, Bangor University, Bangor.
- Bennell, S. 2004, *Embedding Education for Global Citizenship and Sustainable Development in Initial Teacher Education and Training*, World Education Centre, University of Wales Bangor, Bangor.
- Bennell, S. & Norcliffe, D. 2011, "Education for Sustainable Development and Global Citizenship: a case study in policy formation", *Education Transactions*, vol. Citizenship Education in Wales, pp. 1-28.
- Berry, B., Johnson, D. & Montgomery, D. 2005, "The power of teacher leadership", *Educational Leadership*, vol. 62, no. 5, pp. p.56.
- Bibbings, J. 2003, *Consumption in Wales: Encouraging the Sustainable Lifestyle*, Welsh Consumer Council, Cardiff.
- Birney, A. & Reed, J. 2009, *Sustainability and Renewal: Findings from the Leading Sustainable Schools research project*, National College for School Leadership, Nottingham.
- Blenkin, G.V., Edwards, G. & Kelly, A.V. 1997, "Perspectives on Educational Change" in *Organisational Effectiveness and Improvement in Education*, eds. A. Harris, N. Bennett & M. Preedy, Buckingham, Open University Press, pp. 216-230.
- BMRB 2000, *Sustainable Development Education Surveys*, Sustainable Development Education Panel, London.
- Bolam, R. & Weindling, D. 2006, *Synthesis of Research and Evaluation Projects Concerned with Capacity-Building through Teachers' Professional Development*, General Teaching Council for England, London.
- Borko, H. 2004, "Professional Development and Teacher Learning: mapping the terrain ", *Educational Researcher*, vol. 33, no. 8, pp. 3-15.
- Bourn, D. 2008, "Education for Sustainable Development in the UK: Making the Connections between the Environment and Development Agendas", *Theory and Research in Education*, vol. 6, no. 2, pp. 193-206.
- Boyd, R.D. & Myers, J.G. 1988, "Transformative Education", *International Journal of Lifelong Education*, vol. 7, no. 4, pp. 261-284.

- Brandes, D. & Guinness, P. 1990, *The Student Centred School*, Simon and Schuster Education, London.
- Breiting, S., Mayer, M. & Mogensen, F. 2005, *Quality Criteria for ESD-Schools. Guidelines to enhance the quality of Education for Sustainable Development.*, Vienna, Austria, Austrian Federal Ministry of Education, Science and Culture.
- Briggs & Peat 1985, *Looking Glass Universe. The emerging science of wholeness*, Fontana, New York.
- Burr, M. 2008, *Thinking about linking? DEA Thinkpiece* [Homepage of Think Global], [Online]. Available: www.think-global.org.uk/resources/item.asp?d=910 [2012, 16th March].
- Burt, R.S. 2000, "The network structure of social capital" in *Research in Organizational Behavior*, eds. R.I. Sutton & B.M. Staw, Vol. 22 edn, Elsevier, San Diego, CA, pp. 345-423.
- Camburn, E., Rowan, B. & Taylor, J.E. 2003, "Distributed leadership in schools: The case of elementary schools adopting comprehensive school reform models", *Educational Evaluation and Policy Analysis*, vol. 25, no. 4, pp. 347-373.
- Carmichael, P., Fox, A., McCormick, R., Procter, R. & Honour, L. 2006, "Teachers' Networks in and out of School", *Research Papers in Education*, vol. 21, no. 2, pp. 217-234.
- Carr, W. and Kemmis, S. 1986, *Becoming Critical, Knowledge and Action Research*, Falmer, Lewes.
- Cheadle C., Symons, G. & Pitt J. 2004 (unpublished), *Education for Sustainable Development: A needs analysis of teachers in Citizenship, Geography, Science, Design and Technology and School Managers*, GA/DfES, London.
- Clark, C.M. 1991, *The restructuring of meaning: An analysis of the impact of context on transformational learning*, University of Georgia, Athens, Georgia.
- Claxton, G. 1999, *Wise Up: the challenge of lifelong learning*, Bloomsbury, London.
- Coburn, C.E. 2003, "Rethinking scale: Moving beyond numbers to deep and lasting change", *Educational Researcher*, vol. 32, no. 6, pp. 3-12.
- Coburn, C.E. & Russell, J.L. 2008, "District Policy and Teachers' Social Networks", *Educational Evaluation and Policy Analysis*, vol. 30, no. 3, pp. 203-235.
- Cochran-Smith, M. & Lytle, S.L. 1999, "Relationships of knowledge and practice: Teacher learning in communities." in *Review of Research in Education*, eds. A. Iran-Nejar & P.D. Pearson, AERA., Washington, D.C., pp. 249-305.
- Cogan, J. & Derricott, R. 1999, *Citizenship for the 21st Century*, Kogan Page, London.

- Cohen, L., Manion, L. & Morrison, K. *Research Methods in Education*, 6th edn, Routledge 2007, London and New York.
- Coleman, J.S. 1998, "Social capital and the creation of human capital", *American Journal of Sociology*, vol. 94, pp. 95-112.
- Cranton, P.A. 2002, "Teaching for Transformation", *New Directions for Adult and Continuing Education*, no. 93, pp. 63-71.
- Critchley, M. & Unwin, R. 2008, *Whole School Development and the Global Dimension: Capturing models of practice across the UK*, Development Education Centre, South Yorkshire, Sheffield.
- Cynnal 2000, *Anglesey and Gwynedd Green Schools Scheme*, Cynnal, Caernarfon, Wales.
- Daly, A.J. & Finnigan, K.S. 2010, "Understanding network structure to understand change strategy", *Journal of Educational Change*, vol. 11, pp. 118-138.
- Daly, H.E. 1973, *Towards a Steady-State Economy*, W.H. Freeman, San Francisco.
- Darling-Hammond, L. & McLaughlin, M.W. 1995, April, "Policies that support professional development in an era of reform", *Phi Delta Kappan*, vol. 76, no. 8, pp. no pp. (electronic).
- Darling-Hammond, L., (Ed.) & Bransford, J., (Ed.) 2005, *Preparing Teachers for a Changing World: What Teachers Should Learn and Be Able to Do*, Jossey-Bass, Indianapolis, IN.
- DCSF 2008, *s3: sustainable school self-evaluation: Driving school improvement through sustainable development*, Department for Children, Schools and Families, London.
- DEA 2008, *Global Matters: Case studies of education for a just and sustainable world*, Development Education Association, London.
- DEC 1999, *Essential Learning for Everyone*. Development Education Commission, Birmingham.
- Dewey, J. 1916, *Democracy and Education*, Macmillan Press, New York.
- DfEE 2000, *Developing a Global Dimension in the School Curriculum*. Department for Education and Employment, London.
- DFES 2005, *Developing a global dimension in the school curriculum. DFES 1409-2005DOV-EN*, Department for Education and Skills, London.
- DFID 2003, *Enabling Effective Support: Responding to the challenges of the global society: A strategy of support for the global dimension in education*. Department for International Development, London.

- DFID 1999, *Building Support For Development: DFID Strategy paper* [Homepage of DFID], [Online]. Available: [www.dfid.gov.uk/Documents/publications/building support development.pdf](http://www.dfid.gov.uk/Documents/publications/building_support_development.pdf) [2010, 14th September].
- DFID 1997, *Eliminating World Poverty: a challenge for the 21st Century*. CM 3789, The Stationery Office, London.
- DGSP 2008, *Building Effective Partnerships*, DFID Global School Partnerships, London.
- DuFour, R. 2004, "What is a "Professional Learning Community"?", *Educational Leadership*, vol. 61, no. 8, pp. 6.
- Eckersly, R. 2004, *The Green State: Rethinking Democracy and Sovereignty*. Cambridge: MIT Press. pp. 347, MIT Press, Cambridge, MA.
- EES-SW 2007, *A Global Dimension: Change your school for good.*, Enabling Effective Support South West, Crewkerne, Available: www.glean.org.uk/pdfs/Change_your_school.pdf [2012, 26th April].
- Elmore, R. 2000, *Building a new structure for school leadership*, The Albert Shanker Institute, Washington DC.
- Engeström, Y. 2008, *From teams to knots: Activity-theoretical studies of collaboration and learning at work*, Cambridge University Press, Cambridge.
- Engeström, Y. 1999b, "Innovative learning in work teams: analysing cycles of knowledge creation in practice" in *Perspectives on Activity Theory*, eds. Y. Engeström, R. Miettinen & R.-. Punamäki, Cambridge University Press, Cambridge, pp. 377-406.
- Engeström, Y. 1999a, "Activity theory and individual and social transformation (Eds.), *Perspectives on activity theory*" in , eds. Y. Engeström, R. Miettinen & R. R.-L.Punamäki, Cambridge University Press, Cambridge, UK.
- Engeström, Y. 1987, *Learning by expanding: An activity-theoretical approach to developmental research*, Orienta-Konsultit, Helsinki.
- Engeström, Y. , *Engestrom Expansive Learning* [Homepage of Educação & Tecnologia 2-2009], [Online]. Available: <http://pagi.wikidot.com/engestrom-expansive-learning> [2012, 17th January].
- Engeström, Y. & Young, M. 2001, "Expansive Learning at Work: Toward an Activity Theoretical Reconceptualization. Contextualising a New Approach To Learning: Some Comments on Yrjo Engestrom's Theory of Expansive Learning", *Journal of Education and Work*, vol. 14, no. 1, pp. 133-56,157-61.
- Englert, C.S. & Tarrant, K.L. 1995, "Creating collaborative cultures for educational change", *Remedial and Special Education*, vol. 16, no. 6, pp. 325-336, 353.
- Environmental Audit Committee 2005, *Environmental education: follow-up to learning the sustainability lesson:* , House of Commons, Stationery Office, London.

- Environmental Audit Committee 2003, *Tenth report of session 2002-03, learning the sustainability lesson.* , House of Commons, Stationery Office, London.
- Estyn 2010, *Supplementary guidance for inspectors Education for Sustainable Development and Global Citizenship in Schools - September 2010*, Estyn, Cardiff.
- Estyn 2006b, *Update on Inspecting Education for Sustainable Development and Global Citizenship*, Estyn, Cardiff.
- Estyn 2006a, *Establishing a position statement on Education for Sustainable Development and Global Citizenship in Wales*, Estyn, Cardiff.
- Estyn 2005, *Update on Inspecting Education for Sustainable Development and Global Citizenship in Wales*, Estyn, Cardiff.
- Feger, S. & Arruda, E. 2008, *Professional Learning Communities: Key Themes from the Literature*, The Education Alliance, Brown University, Providence, RI.
- Feiman-Nemser, S. & Floden, R.E. 1986, "The cultures of teaching" in *Handbook of research on teaching*, ed. M.C. Wittrock, 3rd edn, Macmillan, New York, pp. 505-526.
- Fennema, E., T.P., Carpenter, M.L., Jacobs, V. & Empson, S. 1996, "Learning to Use Children's Thinking in Mathematics Instruction: A Longitudinal Study", *Journal for Research in Mathematics Education*, vol. 27, no. 4, pp. 403-434.
- Fien, J. 1993, *Education for the Environment: critical curriculum theorising and environmental education*, Deakin University Press, Geelong.
- Fisher, S. & Hicks, D. 1985, *World Studies 8-13, a teacher's handbook*, Oliver and Boyd, Edinburgh.
- Foster, J. 2001, "Education as Sustainability", *Environmental Education Research*, vol. 7, no. 2, pp. 153-165.
- Fox, A., McCormick, R., Procter, R. & Carmichael, P. 2007, "The Design and Use of a Mapping Tool as a Baseline Means of Identifying an Organization's Active Networks", *International Journal of Research & Method in Education*, vol. 30, no. 2, pp. 127-147.
- Fox, A. & Wilson, E. 2008, "Viewing Recently Qualified Teachers and Their Networks as a Resource for a School", *Teacher Development*, vol. 12, no. 1, pp. 97-99.
- Freire, P. 1972, *Education: The Pedagogy of the Oppressed*, Penguin, London.
- Fricke, H. 2010, *Education for Sustainable Development and Global Citizenship Schools Networks: Enabling Effective Support programme in Wales: Report on the 2009-10 activities. Report for DFID.*, Harm-Jan Fricke, Oxford.

- Fullan, M.G. 2001, *The New Meaning of Educational Change*, 3rd edn, Routledge Falmer, London.
- Fullan, M.G. 1992, *Successful School Improvement: the implementation perspective and beyond*, Open University Press, Bristol.
- Fullan, M.G. & Miles, M.B. 1992, "Getting Reform Right: what works and what doesn't.", *Phi Delta Kappan*, vol. 73, no. 10, pp. 744-752.
- Fullan, M. 1991, *The new meaning of educational change*, Teachers College Press, New York.
- Gayford, C. 2009, *Learning for sustainability: from the pupils' perspective*, WWF-UK, Godalming.
- Gayford, C.G. 2003, "Participatory methods and reflective practice applied to research in education for sustainability", *Canadian Journal of Environmental Education*, vol. 8, pp. 129-142.
- Gillham, B. 2000, *Case study research methods*, Continuum International Publishing Group, London.
- Giroux, H. & McClaren, P. 1986, "Teacher Education and the Politics of Engagement", *Harvard Educational Review*, vol. 56, no. 3, pp. 213-238.
- Gladwell, M. 2000, *The Tipping Point: How Little Things Can Make a Big Difference*, Little Brown and Co., New York.
- Global Action Plan 2007, *Creating sustainable schools in London: a case study guide*, Government Office for London, London.
- Gorard, S., & Taylor, C. 2004, *Combining Methods on Educational and Social Research*, Open University Press, London.
- Gough, N. 1987, "Learning with Environments: towards an ecological paradigm for education." in *Environment Education: Practice and Possibility*, ed. R. I. Deakin University, Victoria, Australia, pp. 49-67.
- Gough, S.R. and Scott, W.A.H. 2001, "Curriculum development and sustainable development: practices, institutions and literacies", *Educational Philosophy and Theory*, vol. 33, no. 2, pp. 137-152.
- Gough, S.R., Walker, K.E. & Scott, W.A.H. 2001, "Lifelong learning towards a theory of practice for formal and non-formal environmental education and training", *Canadian Journal of Environmental Education*, vol. 6, pp. 178-196.
- Griffin, D., Inman, S., Meadows, J., Norman, A., Rogers, M. & Wade, R. undated, *Teaching for a Sustainable Future: embedding sustainable development education in the initial teacher training curriculum*, CCCI, Faculty of Humanities and Social Science, South Bank University, London.

- Griffith, R. 1998, *Educational Citizenship and Independent Learning*, Jessica Kingsley Publishers, London.
- Gronn, P. 2002, "Distributed leadership as a unit of analysis", *Leadership Quarterly*, vol. 13, no. 4, pp. 423-451.
- Grossman, P., Wineburg, S. & Woolworth, S. 2000, *What Makes Teacher Community Different from a Gathering of Teachers? An Occasional Paper*, National Research Center on English Learning and Achievement, University at Albany, State University of New York, Albany, NY.
- Grossman, P., Wineburg, S. & Woolworth, S. 2001, "Toward a Theory of Teacher Community", *Teachers College Record*, vol. 103, no. 6, pp. 942-1012.
- Grundy, S. 1997, *Curriculum: Product or Praxis*, Falmer Press, Lewes.
- Habermas, J. 1978, *Knowledge and Human Interests*, 2nd edn, Heinemann, London.
- Habermas, J. 1981, *The Theory of Communicative Action*, Beacon Press, London.
- Hakkarainen, K., Palonen, T., Paavola, S. & Lehtinen, E. 2004, *Communities of Networked Expertise: Professional and Educational Perspectives*, Elsevier, Amsterdam.
- Hargreaves, A. & Dawe, R. 1989, *Coaching as unreflective practice: Contrived collegiality or collaborative culture*, American Educational Association, San Francisco, CA.
- Hargreaves, A. 2007, "Five Flaws of Staff Development: and the future that beckons beyond them", *Journal of Staff Development, North Carolina Teacher Academy*, vol. 29, no. 3, pp. 37-38.
- Hargreaves, A. (ed) 1998, *International Handbook of Educational Leadership and Administration*, Kluwer Academic Publishers, Boston.
- Hargreaves, A. 1989, "Cultures of teaching", *OPSTF News*, vol. February, pp. 5-10.
- Hargreaves, A. & Harris, A. 2010, *Performance Beyond Expectations*, National College for School Leadership, Nottingham.
- Hargreaves, D. 2003, *Education Epidemic: Transforming Secondary Schools through Innovation Networks*, DEMOS, London.
- Harris, A. 2010, 9th July, 6 April, 2011-last update, *Wales knows a thing or two about reform* [Homepage of Times Educational Supplement], [Online]. Available: www.tes.co.uk/article.aspx?storycode=6049870 [2011, 20th August].
- Harris, A. 2009, "Big change question: does politics help or hinder education change?", *Journal of Educational Change*, vol. 10, pp. 63-67.

- Harris, A. 2008b, *Leading sustainable schools*, Specialist Schools and Academies Trust, London.
- Harris, A. 2008a, *Distributed School Leadership: developing tomorrow's leaders*, Routledge, Abingdon.
- Hayes, D. 2000, "Cascade training and teachers' professional development", *Oxford Journals Humanities ELT Journal*, vol. 54, no. 2, pp. 135-145.
- Henderson, K. & Tilbury, D. 2004, *Whole-School Approaches to Sustainability: An International Review of Sustainable School Programs*, Australian Research Institute in Education for Sustainability, Canberra.
- Hicks, D. 2004, "Teaching for Tomorrow: how can futures studies contribute to peace education", *Journal of Peace Education*, vol. 1, no. 2, pp. 165-178.
- Hicks, D. 2003, "Thirty years of global education: a reminder of key principles and precedents", *Educational Review*, vol. 55, no. 3, pp. 265-275.
- Hicks, D. 2001, *Citizenship for the Future. A Practical Classroom Guide*, WWF UK, Reading.
- Hicks, D. & Holden, C. 2007, *Teaching the global dimension: key principles and effective practice*, Routledge, London.
- Hicks, D. & Holden, C. 1995, *Visions of the future, why we need to teach for tomorrow*, Trentham Books, Stoke on Trent.
- Hicks, D. & Steiner, M. 1989, *Making Global Connections: A World Studies Handbook*, Trentham, Stoke on Trent.
- Hlebowitsh, P. 1992, "Critical Theory versus Curriculum Theory: Reconsidering the Dialogue on Dewey", *Educational Theory*, vol. 42, no. 1, pp. 69-82.
- HMSO 1998, *Government of Wales Act (1998) section 121*, Act edn, UK Government, London.
- Holden, C. & Clough, N. (eds) 1998, *Children as citizens: education for participation*, Jessica Kingsley Publishers, London.
- Hollins, E.R., McIntyre, L.R., DeBose, C., Hollins, K.S. & Towner, A. 2004, "Promoting a self-sustaining learning community: Investigating an internal model for teacher development.", *International Journal of Qualitative Studies in Education*, vol. 17, no. 2, pp. 247-264.
- Hren, B., Jackson, L. & Duggan, C. (eds) 2004, *One School at a Time: a decade of learning for sustainability*, WWF-UK, Godalming, Surrey.

- Huberman, A.M. & Miles, M.B. 1984, "Rethinking the Quest for School Improvement: some findings from the DESSI study", *Teachers College Record*, vol. 86, no. 1, pp. 34-54.
- Huberman, M. 1989, "On teachers' careers: Once over lightly with a broad brush", *International Journal of Educational Research*, vol. 13, pp. 347-361.
- Huckle, J. 1996, "Realizing Sustainability in Changing Times." in *Education for Sustainability*, eds. J. Huckle & S. S, Earthscan, London, pp. 3-17.
- Huckle, J. 1988, *What we Consume: Teachers Handbook*, WWF/ Richmond Publishing, Richmond.
- Huckle, J. & Sterling, S. (eds) 1996, *Education for Sustainability*, Earthscan Publications Ltd, London.
- IBM 2009, *SPSS Statistics*, 15th edn, IBM.
- Inman, S.A.B. 2002, *School Councils: an apprenticeship in democracy?*, Association of Teachers and Lecturers, London.
- Inman, S. & Buck, M. *Adding Value*, Trentham Books, Stoke on Trent.
- Inman, S. & Stiasny, M. *Good Practice in Teacher Education*, Goldsmiths Publications, Goldsmiths College, London.
- Ireland, E. 2006, *Active citizenship and young people: Opportunities, experiences and challenges in and beyond school*, NFER on behalf of DfES, London.
- Ireson, J. 1997, "Comparing the Process of Curriculum Development in Two Schools: Evidence from Interviews", *Studies in Educational Evaluation*, vol. 23, no. 1, pp. 49-63.
- Jackson, L. 2007, *Leading Sustainable Schools: what the research tells us*, National College for School Leadership, Nottingham.
- James, C., Connolly, M., Dunning, G. & Elliott, T. 2006, *How Very Effective Primary Schools Work*, Paul Chapman Publishing, London.
- Jemmott, H. 2002, *Employability skills formation in the service sector in Barbados: implications for education and training*, PhD, University of Bath, Bath.
- Jickling, B. 1992, "Why I don't want my children to be educated for sustainable development", *Journal of Environmental Education*, vol. 23, no. 4, pp. 163-178.
- Karsten, S., Voncken, E. & Voorthuis, M. (2000). "Dutch primary schools and the concept of the learning organization". *The Learning Organization*, vol 7, no. 3, pp. 145-155.
- Kindon, S.L., Pain, R. & Kesby, M. 2007, *Participatory action research: Approaches and methods*, Routledge, London.

- Knapp, N.P. & Peterson, P.L. 1995, "Teachers implementation of "CGI" after four years: Meanings and practices", *Journal for Research in Mathematics Education*, vol. 26, no. 1, pp. 40-48.
- Kolb, D. 1984, *Experiential Learning: experience as the source of learning and development*, Prentice Hall, Englewood Cliffs, New Jersey.
- Lash, S. & Urry, J. 1994, "Economies of signs and space", *British Journal of Industrial Relations*, vol. 32, no. 4, pp. 618-619.
- Lave, J. 1996, "Teaching, as Learning, in Practice", *Mind, Culture, and Activity*, vol. 3, no. 3, pp. 149-164.
- Lave, J. 1993, "The practice of learning" in *Understanding Practice: Perspectives on activity and context*, eds. S. Chaiklin & J. Lave, Cambridge University Press, Cambridge, pp. 3-32.
- Lave, J. & Wenger, E. 1991, *Situated Learning: Legitimate Peripheral Participation*, Cambridge University Press, Cambridge.
- Lehtonen, T. 1998, *Adventure for life. Perspectives on issues in experiential education*, Atena Kustannus, Finland.
- Leithwood, K., Day, C., Sammons, P., Harris, A. & Hopkins, D. 2007, *Leadership and Student Learning Outcomes*, DCSF, London.
- Leithwood, K., Leonard, L. & Sharratt, L. 1998, "Conditions fostering organizational learning in schools", *Educational Administration Quarterly*, vol. 34, no. 2, pp. 243-276.
- Levin, B. 2008, *How to change 5000 schools: a practical and positive approach for leading change at every level*, Harvard Education Press, Cambridge MA.
- Levin B. 2009, "Does politics help or hinder education change?", *Journal of Educational Change*, vol. 10, pp. 69-72.
- Lewin, K. 1946, "Action research and minority problems", *Journal of Social Issues*, vol. 2, no. 3, pp 34-46.
- Lieberman, A. 2000, "Networks as learning communities: shaping the future of teacher development", *Journal of Teacher Education*, vol. 51, pp. 221-227.
- Lin, N. 2001, *Social capital: a theory of social structure and action*. Cambridge, Cambridge University Press, Cambridge.
- Lipman, M., Sharp, A. and Oscanyan, F. 1980, *Philosophy in the Classroom*, Temple University Press, Princeton.
- Little, J. 1993, "Teachers' professional development in a climate of educational reform", *Education Evaluation and Policy Analysis*, vol. 15, no. 2, pp. 129-159.

- Little, J.W. 2002, "Locating Learning in Teachers' Communities of Practice: Opening Up Problems of Analysis in Records of Everyday Work", *Teaching and Teacher Education*, vol. 18, no. 8, pp. 917-946.
- Little, J.W. 1990, "The Persistence of Privacy: Autonomy and Initiative in Teachers' Professional Relations", *Teachers College Record*, vol. 91, no. 4, Summer, pp. 509-536.
- Lortie, D. 1975, *School teacher: A Sociological Study*, University of Chicago Press, Chicago.
- Lundgren, U.P. 1991, *Between Education and schooling: outlines of a diachronic curriculum theory*, Deakin University Press, Geelong.
- Lyle, S. & Salmon, C. 2003, "The Global Dimension in Initial Teacher Education: a case study of twelve mentors and twelve ITE students following a BA(Education) degree programme", *UNESCO conference, Sustainable Development and Global Citizenship*, June 2003.
- MacIntyre, A. 1981, *After Virtue: A Study in Moral Theory*, Duckworth, London.
- Maroulis, S. & Gomez, L.M. 2008, "Does "Connectedness" Matter? Evidence from a Social Network Analysis within a Small-School Reform", *Teachers College Record*, vol. 110, no. 9, pp. 1901-1929.
- Marris, P. 1974, *Loss and Change*, Routledge and Kegan Paul, London.
- Martin, F. 2008, "Mutual Learning: The impact of a study visit course on teachers' knowledge and understanding of global partnerships." *Critical Literacy: Theories and Practice*, vol. 2, no. 1, pp. 60-75.
- Martin, F. & Griffiths, H. 2012, "Power and representation: A postcolonial reading of global partnerships and teacher development through North-South study visits", *British Education Research Journal*, [Online]. Available from: www.tandfonline.com/doi/abs/10.1080/01411926.2011.600438 [2012, 3rd January]
- Martin, P. 1981, "A WWF View of Education and the Role of NGO's" in *Education for Sustainability*, eds. S. Sterling & J. Huckle, Earthscan Publications Ltd, London, pp. 40-51.
- McCarthy, C. 1981, *The 4 MAT System. Teaching to Learning Styles with Right/Left Mode Techniques*, Excel Inc, Barrington, Illinois.
- McCormick, R., Fox, A., Carmichael, P. & Proctor, R. 2011, *Researching and Understanding Educational Networks*, 1st edn, Routledge, London.
- McKeown, R. 2002, Education for Sustainable Development Toolkit. Version 2, July 2002, Available: www.esdtoolkit.org/ [2012, 11th May].

- McLaughlin, M.W. & Talbert, J.E. 2001, *Professional Communities and the Work of High School Teaching*, University of Chicago Press, Chicago, IL.
- McTaggart, R. 1996, "Issues for participatory action researchers" in *New Directions in Action Research*, ed. O. Zuber-Skerritt, Falmer, London, pp. 243-55.
- Meadows, D. 1998, *Indicators and Information Systems for Sustainable Development. Report to the Balaton group*, The Sustainability Institute, Hartland Four Corners.
- Meadows, D. 1994, "Envisioning a Sustainable World", *Third Biennial Meeting of the International Society for Ecological Economics*, October 24-28, 1994, San Jose, Costa Rica, pp. 1.
- Mezirow, J. (ed) 2000, *Learning as Transformation: Critical Perspectives on a Theory in Progress. The Jossey-Bass Higher and Adult Education Series*, Jossey-Bass Publishers, San Francisco, CA.
- Mezirow, J. 1995, "Transformation Theory of Adult Learning " in *In Defense of the Lifeworld*, ed. M.R. Welton, SUNY Press, New York, pp. 39-70.
- Mezirow, J. 1981, "A Critical Theory of Adult Learning and Education", *Adult Education*, vol. 32, no. 1, pp. 3-24.
- Miles, M. & Huberman, A.M. 1984, *Qualitative data analysis: a sourcebook of new methods*, Sage Publications, Beverly Hills, CA.
- Mitchell, C., & Sackney, L. 2000, *Profound improvement: Building capacity for a learning community*, Swets & Zeitlinger, Lisse, NL.
- Montessori, M. 1949, *The Absorbent Mind*, 1967th edn, Dell, New York.
- Morgan, A. 2009, *Global Citizenship Inspection Findings*, Estyn, Cardiff.
- Mortimore, P. 1991, "School Effectiveness Research: Which way at the Crossroads?", *School Effectiveness and School Improvement*, vol. 2, no. 3, pp. 213-229.
- National Assembly for Wales 2003, *The Learning Country: Foundation Phase 3-7. Consultation document*, National Assembly for Wales, Cardiff.
- National Assembly for Wales 2000, *Children and Young People*, National Assembly for Wales, Cardiff.
- NESPSS, 2. 2006, *Draft Strategy Document*, North East Strategic Partnership for Sustainable Schools, Durham.
- Newsbridge 2012, *First News* [Homepage of magazine.co.uk], [Online]. Available: <http://info.firstnews.co.uk> [2012, 1st April].
- Nias, J., Southworth, G. & Yeomans, R. 1989, *Staff relationships in the primary school*, Cassell, London.

- Nonaka, I. & Takeuchi, H. 1995, *The knowledge-creating company*, Oxford University Press, New York.
- Norcliffe, D. 2006, *An all-Wales Approach to Embedding Education for Sustainable Development and Global Citizenship into Initial Teacher Education and Training. Final Report to WAG's ESDGC Panel*, University of Wales, Newport, Newport.
- Norcliffe, D. & Bennell, S. 2010, "Analysis of Views on the Development of Education for Sustainable Development and Global Citizenship in Wales", *The International Journal of Development Education and Global Learning*, vol. 3, no. 1, pp. 39-58.
- North-West Wales ESDGC Forum 2010, *Annual Report 2010*, North-West Wales ESDGC Forum, Bangor, Wales. Available from: Cyfanfyd, Temple of Peace, Cathays Park, Cardiff, CF10 3AP.
- North-West Wales ESDGC Forum 2009, *Annual Report 2009*, North-West Wales ESDGC Forum, Bangor, Wales. Available from: Cyfanfyd, Temple of Peace, Cathays Park, Cardiff, CF10 3AP.
- North-West Wales ESDGC Forum 2008, *Annual Report 2008*, North-West Wales ESDGC Forum, Bangor, Wales. Available from: Cyfanfyd, Temple of Peace, Cathays Park, Cardiff, CF10 3AP.
- North-West Wales ESDGC Forum 2007, *Annual Report 2007*, North-West Wales ESDGC Forum, Bangor, Wales. Available from: Cyfanfyd, Temple of Peace, Cathays Park, Cardiff, CF10 3AP.
- North-West Wales ESDGC Forum 2006, *Annual Report 2006*, North-West Wales ESDGC Forum, Bangor, Wales. Available from: Cyfanfyd, Temple of Peace, Cathays Park, Cardiff, CF10 3AP.
- O'Sullivan, E. 2003, "Bringing a perspective of transformative learning to globalized consumption", *International Journal of Consumer Studies*, vol. 27, no. 4, pp. 326-330.
- OECD Programme for International Student Assessment (PISA) 2010, *PISA 2009 Results: Volume I, What Students Know and Can Do: Student Performance in Reading, Mathematics and Science*, OECD, Paris, Available: www.pisa.oecd.org [2012, 25th January].
- Ofsted 2008, *Schools and sustainability: A climate for change?*, Ofsted, London.
- Ofsted 2003, *Taking the first step forward ... towards an education for sustainable development: Good practice in primary and secondary schools*, Ofsted, London.
- O'Riordan, T. 1988, "The Politics of Sustainability" in *Environmental Management: principles and practice*, ed. R.K. Turner, Belhaven Press, London, pp. 29-50.
- Orr, D. 1994, *Earth in Mind: On Education, Environment and the Human Prospect*, Island Press, Washington DC.

- Orr, D. 1991, *Ecological Literacy: education and the transition to a postmodern world*, University of New York Press, New York.
- Osborn -Jones, T. "Education for Sustainability", *The Development Education Journal*, vol. 2, pp. 9-12.
- Osler, A. & Vincent, K. 2002, *Citizenship and the Challenge of Global Education*, Trentham Books, Stoke on Trent.
- Osler, A. & Starkey, J. 1996, *Teacher Education and Human Rights*, David Fulton, London.
- Oxfam 2007, *Building Successful School Partnerships*, Oxfam United Kingdom and Ireland, Oxford.
- Oxfam 2006, *Curriculum for Global Citizenship*, Oxfam United Kingdom and Ireland, Oxford.
- Oxfam 2003, *Let's Eat*, Oxfam UK, Oxford.
- Oxfam 1997, *Curriculum for Global Citizenship*, Oxfam UK, Oxford.
- Palonen, T., Hakkarainen, K., Talvitie, J. & Lehtinen, E. 2004, "The strength of network ties: Cognitive centrality and team interaction" in *Professional development: Gaps and transitions on the way from novice to expert*, eds. H. Gruber, E. Boshuizen & R. Bromme, Kluwer Academic Press, Dordrecht, pp. 273-294.
- Penuel, W.R. & Riel, M. 2007, "The "New" Science of Networks and the Challenge of School Change", *Phi Delta Kappan*, vol. 88, no. 8, pp. 611-615.
- Phillips, J. 2003, "Powerful learning: Creating learning communities in urban school reform", *Journal of Curriculum and Supervision*, vol. 18, no. 3, pp. 240-258.
- Pike, G. & Selby, D. 1998, *In the Global Classroom I*, Pippin Publishing Corporation, Toronto.
- Pike, G. & Selby, D. 1988, *Global Teacher, Global Learner*, Hodder and Stoughton, Sevenoaks.
- Pitts, C. 2009, *Enabling Effective Support Wales: Monitoring and Evaluation Report*, Enabling Effective Support Wales, Cardiff.
- Polyani, M. 1983, *The Tacit Dimension*, Peter Smith Publisher Inc, Gloucester, Massachusetts.
- Portes, A. 1998, "Social Capital: Its Origins and Applications in Modern Sociology", *Annual Review of Sociology*, vol. 24, pp. 1-24.

- Portes, A. & Sensenbrenner, J. 1993, "Embeddedness and Immigration: Notes on the Social Determinants of Economic Action", *American Journal of Sociology*, vol. 98, no. 6, pp. 1320-1349.
- Potter, J. & Wetherall, M. 1987, *Discourse and Social Psychology: Beyond Attitudes and Behavior*, Sage, Newbury Park CA.
- Putnam, R.D. 2000, *Bowling Alone: The Collapse and Revival of American Community*, Simon & Schuster, New York.
- QCA 1998, *Education for Citizenship and the Teaching of Democracy (The Crick Report)*, DfEE/QCA, London.
- QSR International 2008, *NVivo*, 8th edn, QSR International, Cambridge, MA.
- Reason, P. & Bradbury, H. 2001, *Handbook of Action Research: Participatory inquiry and practice*, Sage, London.
- Reynolds, D., Teddlie C., Stringfield, S. & Creemers, B. (eds) 2002, *World Class Schools: International perspectives on school effectiveness*, RoutledgeFalmer, London.
- Richardson, R. 1976b, *Learning for Change in World Society*, World Studies Project, One World Trust, London.
- Richardson, R. 1976a, "A small project for a small planet – a personal account, World Studies Bulletin No. 39", *The New Era*, vol. 57, no. 5.
- Rychen, D.S. & Salganik, L.H. (Eds.) 2003, *Key Competences for a Successful Life and a Well-Functioning Society*. Hogrefe & Huber, Cambridge (State of Washington) and Göttingen.
- Robson, C. 2002, *Real World Research: a resource for social scientists and practitioner-researchers*, 2nd edn, Blackwell Publishing, Oxford UK.
- Rogers, C. 1983, *Freedom to learn for the 80s*, Charles E. Merrill, Columbus, OH.
- Rogers, E.M. 1995, *Diffusion of innovations*, 4th edn, The Free Press., New York.
- Rogers, E.M. & Shoemaker, F.F. 1971, *Communication of Innovations; A Cross-Cultural Approach*. The Free Press, New York, N. Y.
- Rosenholtz, S.J. 1989, *Teachers' Workplace: the Social Organization of Schools*, Longman, New York.
- Rowe, D. 1996, *The Business of School Councils*, The Citizenship Foundation, London.
- Rudduck, J., Chaplain, R. & Wallace, G. 1996, *School Improvement: What can pupils tell us?* David Fulton Publishers, London.

- Russell, D.R. 2002, "Looking beyond the interface. Activity theory and distributed learning," in *Distributed Learning. Social and cultural approaches to practice*, ed. Lea, M.R. and Nicoll, K., Routledge Falmer, London.
- Ryan, B. & Gross, M.B. 1943, "The Diffusion of Hybrid Seed Corn in Two Iowa Communities", *Rural Sociology*, vol. 8, pp. 15-24.
- Saldaña, J. 2009, *The Coding Manual for Qualitative Researchers*, Sage Publications Ltd, London.
- Schwab, J.J. 1978, "The "impossible" role of the teacher in progressive education" in *Science, Curriculum and Liberal Education*, eds. I. Westbury & N.J. Wilkof, University of Chicago Press, Illinois, pp. 170-171.
- Scott, W. 2010, *Developing the Sustainable School: thinking the issues through*, South-West Learning for Sustainability Coalition, Bath.
- Scott, W. & Gough, S. 2004, *Key Issues in Sustainable Development and Learning: A critical review*, RoutledgeFalmer, London.
- Scott, W. & Gough, S. 2003, *Sustainable Development and Learning: Framing the Issues*, Routledge, London.
- Scott, W. & Vare, P. 2008, *Education for Sustainable Development: Two sides and an edge, DEA Thinkpiece* [Homepage of DEA], [Online]. Available: <http://www.think-global.org.uk/resources/item.asp?d=884> [2012, 1st April].
- Scott, W.A.H. 2008, *Raising Standards: making sense of the sustainable school*, Specialist Schools and Academies Trust, London.
- Scott, W.A.H. & Gough, S.R. 2001, "Curriculum Development and Sustainable Development: Practices, Institutions and Literacies", *Educational Philosophy and Theory*, vol. 33, no. 2, pp. 137-152.
- Senge, P. 1990, *The Fifth Discipline*, Doubleday/Currency, New York.
- Shallcross, T.J. & Robinson, J. 2007, "Sustainability education, whole school approaches and communities of action" in *Participation and learning: perspectives on education and the environment, health and sustainability*, eds. A. Reid, B.B. Jensen, J. Nikel & V. Simovska, Springer, Dordrecht, pp. 299-320.
- Sleurs, W. (Ed.) 2004, *Competencies for ESD (Education for Sustainable Development) teachers. A framework to integrate ESD in the curriculum of teacher training institutes*. Comenius 2.1 project 118277-CP-1-2004-BE-Comenius-C2.1
- Smyth, R. 2004, "Exploring the Usefulness of a Conceptual Framework as a Research Tool: A Researcher's Reflections", *Issues in Educational Research*, vol. 14, no. 2, pp. 167-180.
- Spillane, J. 2006, *Distributed Leadership*, Jossey-Bass, San Francisco, CA.

- Spillane, J.P., Halverson, R. & Diamond, J.B. 2009, "Towards a theory of leadership practice: a distributed perspective", *Journal of Curriculum Studies*, vol. 36, no. 1, pp. 3-34.
- Stacey, R. 1996, *Strategic Management and Organisational Dynamics*, Pitman, London.
- Stacey, R. 1997, *Creativity in Organisations - The importance of Mess, Complexity in Management Papers, No. 1*, Complexity in Management Centre, University of Hertfordshire, Hatfield.
- Steiner, M. & Hicks, D. 1993, *Learning from Experience. World Studies in the Primary Classroom*, World Studies Trust, Stoke on Trent.
- Sterling, S. 2004, "The Learning of Ecology, or the ecology of learning?" in *Key issues in Sustainable Development and Learning: a critical review*, eds. W. Scott & S. Gough, RoutledgeFalmer, London, pp. 68-70.
- Sterling, S. 2003, *Whole Systems Thinking as a Basis for Paradigm Change in Education: Explorations in the Context of Sustainability*, PhD edn, University of Bath, Bath.
- Sterling, S. 2001, *Sustainable Education: re-visioning learning and change*, Green Books, Totnes.
- Sterling, S. 2000, "The significance of systems thinking in environmental education, health education, and beyond." in *Critical Environmental and Health Education*, eds. B. Jensen, K. Schnack & V. Simovska, The Danish University of Education, Copenhagen.
- Stoll, L. 2004, "Networked Learning Communities as Professional Learning Communities", *Background paper commissioned by Aporia Consulting Ltd for Phase 1 of Evaluation of Networked Learning Communities Program Network Learning Communities Seminar, San Diego*, 14th April, 2004, pp. 1-24.
- Stoll, L., Bolam, R., McMahon, A., Wallace, M. & Thomas, S. 2006, "Professional Learning Communities: A review of the literature", *Journal of Educational Change*, vol. 7, pp. 221-258.
- Strahan, D. 2003, "Promoting a collaborative professional culture in three elementary schools that have beaten the odds", *The Elementary School Journal*, vol. 104, no. 2, pp. 127-146.
- Supovitz, J.A. 2002, "Developing communities of instructional practice", *Teachers College Record*, vol. 104, no. 8, pp. 1591-1626.
- Supovitz, J.A. & Christman, J.B. 2003, *Developing communities of instructional practice: Lessons for Cincinnati and Philadelphia*, CPRE Policy Briefs, University of Pennsylvania, Philadelphia.

- Supovitz, J.A. & Turner, H.M. 2000, "The effects of professional development on science teaching practices and classroom culture", *Journal of Research in Science Teaching*, vol. 37, no. 2, pp. 936-980.
- Symons, G. 2008, *Practice, barriers and Enablers in ESD and EE: A Review of the Research. A report for Sustainability and Environmental Education (SEEd)*, SEEd (Sustainability and Environmental Education), Shrewsbury.
- Tarde, G. 1903, *The laws of imitation*, translated by Elsie Clews Parsons, Reprinted 1969 edn, University of Chicago Press., Chicago.
- Teddlie, C., Kirby, P. & Stringfield, S. 1989, *Effective vs. ineffective schools: Observable differences in the classroom*, Teachers College Press, New York.
- Teddlie, C. & Reynolds, D. 2000, *The International Handbook of School Effectiveness Research*, Falmer Press, London.
- Tennant, M. 1997, *Psychology and Adult Learning*, Routledge, London.
- Thoonen, E., Slegers, P., Oort, F.P., T & Geijsel, F. 2011, "How to Improve Teaching Practices: The Role of Teacher Motivation, Organizational Factors, and Leadership Practices", *Educational Administration Quarterly*, vol. 47, no. 3, pp. 496-536.
- Thorpe, M. 2002, "From independent learning to collaborative learning. New communities of practice in open, distance and distributed learning." in *Distributed Learning. Social and cultural approaches to practice*, ed. Lea, M.R. and Nicoll, K., Routledge Falmer, New York.
- Tilbury, D. & Wortman, D. 2004, *Engaging People in Sustainability* [Homepage of Gland, Switzerland and Cambridge: Commission on Education and Communication, IUCN], [Online]. Available: www.unece.org/env/esd/information/Publications%01IUCN/engaging%20people.pdf [2010, 11th September].
- Tilbury, D. & Turner, K. 1997, "Environmental Education for Sustainability in Europe: Philosophy into Practice", *International Journal of Environmental Education and Information*, vol. 16, no. 2, pp. 123-140.
- Torney-Purta, J. 1989, "Issues of evaluation" in *Making Global Connections: A World Studies Handbook*, eds. D. Hicks & M. Steiner, Trentham, Stoke on Trent, pp. 163-169.
- Towndrow, P.A., Silver, R.E. & Albright, J. 2009, "Setting expectations for educational innovations", *Journal of Educational Change*, [Online], vol. online publication, no. DOI 10.1007/s10833-009-9119-9, pp. 16/10/2009.
- Trafford, B. 1997, *Participation, Power - sharing and School Improvement*, Heretics Press, Nottingham.
- UNCED 1992, "Agenda 21" in *Agenda 21* Regency Press, London, pp. Chapter 25.

- UNDESD 2009, *Training_Guideline on incorporating Education for Sustainable Development ESD*. Available:
http://www.unescobkk.org/fileadmin/user_upload/apeid/workshops/MTT_09/Training_Guideline_on_incorporating_Education_for_Sustainable_Development_ESD_.pdf
 [2009, 30th August].
- UNESCO 2005, *Guidelines and Recommendations for Reorienting Teacher Education to Address Sustainability*, Education for Sustainable Development in Action, UNESCO, Paris.
- UNESCO 2002, *Education for Sustainability. From Rio to Johannesburg: Lessons learnt from a decade of commitment*, World Summit on Sustainable Development , Johannesburg, UNESCO, Paris.
- UNESCO 2000, *Global Synthesis: Education for all 2000 assessment*, UNESCO, Paris.
- UNESCO 1997, *Education for a Sustainable Future: A Transdisciplinary Vision for a Concerted Action*, UNESCO, Geneva.
- UNESCO 1995, *Integrated Framework for Action on Education for Peace, Human Rights and Democracy*, UNESCO.
- Vescio, V., Ross, D. & Adams, A. 2008, "A review of research on the impact of professional learning communities on teaching practice and student learning", *Teaching and Teacher Education*, vol. 24, pp. 80-91.
- von Glaserfeld, E. 1995, "A constructivist approach to teaching." in *Constructivism in Education*, eds. L. Steffe & J. Gale, Harvard University Press, Cambridge, MA, pp. 3-16.
- Von Krogh, G., Ichijo, K. & Nonaka, I. 2002, *Enabling Knowledge Creation*, Oxford University Press, New York.
- Vygotsky, L.S. 1978, "Mind in Society" in *Development of Higher Psychological Processes*, eds. M. Cole, V. John-Steiner, S. Scribner & E. Souberman, Harvard University Press, Cambridge, MA.
- Vygotsky, L.S. 1962, *Thought and Language*, MIT Press, Cambridge, MA.
- Webster, K. & Johnson, C. 2009, *Sense and Sensibility: educating for a low carbon world*, TerraPreta, No information.
- Wells, C. & Feun, L. 2007, "Implementation of learning community principles: A study of six high schools", *NASSP Bulletin*, vol. 91, no. 2, pp. 141-160.
- Welsh Assembly Government 2011, *School Effectiveness Framework – Moving Forward: written statement by the Minister for Children, Education, Lifelong Learning and Skills on the future direction of the School Effectiveness Framework* [Homepage of Welsh Assembly Government], [Online]. Available:

- <http://wales.gov.uk/publications/accessinfo/drnewhomepage/educationdrs2/educationdrs2009/sefmf/?lang=en> [2011, 15th October].
- Welsh Assembly Government 2009c, *Effective Practice in Learning and Teaching - A Focus on Pedagogy*, Welsh Assembly Government, Cardiff.
- Welsh Assembly Government 2009b, *Proposed Statutory Guidance on Pupil Participation*, Welsh Assembly Government, Cardiff.
- Welsh Assembly Government 2009a, *Becoming a Qualified Teacher: handbook of guidance*, Welsh Assembly Government, Cardiff.
- Welsh Assembly Government 2008h, *Education for Sustainable Development and Global Citizenship: A Strategy for Action - Updates (January 2008)*, Welsh Assembly Government, Cardiff.
- Welsh Assembly Government 2008g, *School Effectiveness Framework: building effective learning communities together*, Welsh Assembly Government, Cardiff.
- Welsh Assembly Government 2008f, *Personal and Social Education Framework for 7 to 19-year-olds in Wales*, Welsh Assembly Government, Cardiff.
- Welsh Assembly Government 2008e, *Skills Framework for 3 to 19-year-olds in Wales*, Welsh Assembly Government, Cardiff.
- Welsh Assembly Government 2008d, *Foundation Phase Framework for Children's Learning for 3 to 7-year-olds in Wales*, Welsh Assembly Government, Cardiff.
- Welsh Assembly Government 2008c, *Education for Sustainable Development and Global Citizenship; information for teacher trainees and new teachers in Wales*, Welsh Assembly Government, Cardiff.
- Welsh Assembly Government 2008b, *Education for Sustainable Development and Global Citizenship: A Common Understanding for Schools*, Welsh Assembly Government, Cardiff.
- Welsh Assembly Government 2008a, *Making the Most of Learning: implementing the revised curriculum*, Welsh Assembly Government, Cardiff.
- Welsh Assembly Government 2007, *Why develop thinking and assessment for learning in the classroom, Version 2, 2007*, Welsh Assembly Government, Cardiff.
- Welsh Assembly Government 2006, *Education for Sustainable Development and Global Citizenship - A Strategy for Action*, DELLS, Cardiff.
- Welsh Assembly Government 2000, *The Learning Country*, Welsh Assembly Government, Cardiff.
- Wenger, E. 2006, *Communities of Practice: a brief introduction*. Available: www.ewenger.com/theory/ [2011, 6th September]

- Whitford, B.L.&.F.,H. 2003, *Lucent learning communities in Albuquerque. National Center for Restructuring Education, Schools and Teaching.* , National Center for Restructuring Education, Schools and Teaching, Teachers College and the University of Southern Maine, Columbia, OH.
- William R. Penuel, Margaret Riel, Ann E. Krause & Kenneth A. Frank 2009, "Analyzing Teachers' Professional Interactions in a School as Social Capital: A Social Network Approach", *Teachers College Record*, vol. 111, no. 1, pp. 124-163.
- WJEC 2010, *The Welsh Baccalaureate*, Welsh Joint Education Committee, Cardiff.
- Woolcock, M. 1998, "Social capital and economic development: Toward a theoretical synthesis and policy framework", *Theory and Society*, vol. 27, no. 2, pp. 151-208.
- World Education Centre 2009, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.
- World Education Centre 2008, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.
- World Education Centre 2007, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.
- World Education Centre 2006, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.
- World Education Centre 2005, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.
- World Education Centre 2004, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.
- World Education Centre 2003, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.
- World Education Centre 2003, *Educating for Global Citizenship, an INSET Resource for Teachers in Wales* , World Education Centre, Bangor University, Bangor.
- World Education Project 1999, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.
- World Education Project 1998, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.
- World Education Project 1997, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.
- Wrigley, T. 2003, *Schools of Hope: A New Agenda for School Improvement*, First edn, Trentham Books Ltd, Stoke-on-Trent.

WWF Scotland 2005, *Linking Thinking: New Perspectives on thinking & learning for sustainability*, WWF Scotland, Aberfeldy, Scotland.

Yin, R. 2003, *Case Study Research: Design and Methods*, 3rd edn, Sage Publications, Newbury Park.

Yin, R.K. 1989, *Case Study Research: Design and Methods*, rev. edn, Sage, Newbury Park, CA.

Yorkshire and Humberside ESD Forum Management Group 2006, *Yorkshire & Humber Region Education for Sustainable Development Strategy 2000-2010: Operational Plan 2006-08*, Yorkshire and Humberside ESD Forum Management Group, Yorkshire.

Young, M.D.F. 1998, *The Curriculum for the Future: From the 'New Sociology of Education' to 'Critical Theory of Learning'*, Falmer, London.

WEBSITES

Eco-Schools. Available: www.keepbritaintidy.org/ecoschools [2012, 21st January].

Estyn, Her Majesty's Inspectorate for Education and Training in Wales [Homepage of Estyn], [Online]. Available: www.estyn.gov.uk [2010, 25th October].

eLanguages website. Available: elanguages.org/ [2012, 1st April].

Fair Trade Wales 2012, *Fairtrade schools Wales* [Homepage of Fair Trade Wales], [Online]. Available: www.fairtradewales.com/schools/473 [2012, 4th April].

Funky Dragon, Available: www.funkydragon.org [2010, 13th September].

Philosophy4Children, Available: www.philosophy4children.co.uk [2012, 23rd March].

Pupil Voice Wales. Available: www.pupilvoicewales.org.uk [2010, 13th September].

Global School Partnerships [Homepage of DFID], [Online]. Available: www.dfid.gov.uk/get-involved/in-your-school/global-school-partnerships [2012, 16th March].

International School Award [Homepage of British Council], [Online]. Available: <http://schoolsonline.britishcouncil.org/International-School-Award> [2012, 13th March].

APPENDICES

APPENDIX 1 Comparison of some criteria for evaluating ESD/GC (Only key points for the criteria have been included)

Aspect	ESDGC Common Understanding (Welsh Assembly Government, 2008b) / Estyn (2010) Embedded level	Webster and Johnson (2009) Stage 4 - Evolved to eco-restorative	Scott (2010) level 3 viewed through concept of capital
Leadership and management	<p>ESDGC forms core part of the institutional philosophy and practice, and is monitored, evaluated and regularly developed</p> <p>Specific ESDGC resources and responsibilities are allocated in budgets</p> <p>Other features from other parts of the document: Devolved leadership Collaboration Governor training Link governor</p>		<p>The school, through its co-created, re-thought vision / mission statements has reoriented its ethos to a focus on learning as sustainability.</p> <p>Features: devolved and shared leadership, with involvement of governors; has created a social learning community with a systemic view of the world: enhances social cohesion, outward-looking,</p> <p>It values exploratory, experiential, outdoor and environmental learning as a means of effectively engaging with real-world issues in authentic settings; understands the need for appropriate pedagogies and communications that enables the student voice to contribute to the understanding</p>
Management	<p>school buildings and grounds integral to local (and global) community;</p> <ul style="list-style-type: none"> • school buildings and grounds reflect biodiversity, sustainability; • staff, parents, governors etc committed to ESDGC within the school and the local community • ethical purchasing and banking policy in place; • safe and sustainable transport to and from school (and on trips), car sharing initiatives • BREEAM standards applied to any new / additional buildings 	<ul style="list-style-type: none"> • The school buildings and campus are possibly 'eco-restorative' – they produce more energy than is used and enhance biodiversity and social capital. • The buildings / management of learning spaces is responsive, and flexible. 	<ul style="list-style-type: none"> • energy imported from the grid reduces; when possible, net energy exports increase. • Amount of water brought in from external sources, and the amount of waste water and sewage sent off site for treatment reduces • Amount of waste organic matter composted and used in the community rises; when possible to 100%. • Biodiversity value of the grounds and community increases. • Carbon footprint of the school's transport falls;. • Waste sent to landfill reduces; • Use of virgin raw materials only happens where this is part of a benign biological cycle maximise the efficiency of its buildings, and has a strategy for steadily reducing it, and a strategy for making all these a foci for learning.

Partnerships	<ul style="list-style-type: none"> • Community and international partnerships are well developed; • all staff (teaching and non teaching) working together and in partnership with local authority, community, parents, children • school focus point for ESDGC in local community • opportunities for shared learning • between pupils and their families • mutually beneficial / equitable school link established and maintained • active involvement in EES networks and with outside agencies involved in ESDGC 	<ul style="list-style-type: none"> • The community/ school boundary becomes very indistinct 	<ul style="list-style-type: none"> • Its work impacts on the local context (socially, economically, environmentally, and culturally), • It recognises global interdependence and shared responsibility; • mutual partnership with real communities in other parts of the world.
Research and monitoring	<ul style="list-style-type: none"> • [ESDGC] is monitored, evaluated and regularly developed . • Outcomes for pupils are monitored and evaluated • Targets for development included in planning. 		Open to evaluated school cases studies drawn from a range of contexts whilst acknowledging that what needs to be done and learned may vary dramatically from one setting to another
Teaching and learning coverage	<ul style="list-style-type: none"> • ESDGC integrated across the whole school curriculum • Development of ESDGC-relevant understanding, skills and values is made explicit in plans • Outcomes for pupils are monitored and evaluated. • Targets for development included in planning. 	<ul style="list-style-type: none"> • Curriculum is focused on learning for change (in society) and is highly personalised. • Systems thinking represents a preferred worldview with educators and learners when designing curriculum, campus and community (3Cs) programmes. 	<ul style="list-style-type: none"> • lets young people see that the school takes sustainability seriously, strong focus of the school development plan, and using it to create an inclusive school ethos. • positive in their approach to sustainability, taking young people's aspirations seriously, being honest with them and encouraging an open, questioning approach. • listens to, and take account of, young people's environmental and community perspectives, involving them in thinking about, and responding to, issues, and helping them make connections between ideas. • values the natural and cultural worlds, involving young people in outdoor learning, working with local groups in and out of school, seeing both school

			<p>and community as learning resources.</p> <ul style="list-style-type: none">• involves young people in developing and modelling sustainable school practices,• understand that sustainable development is a social learning process, and are open to learning from evaluated case studies of school practice, while acknowledging that what needs to be done and learned may vary dramatically from one setting to another. set out to help young people to manage sustainable development choices, and make judgements about the need for the compromises trades-off between desired goal <p>Level 4: 9 key concepts advocated , no more detail</p>	
Aspect	Estyn (2010) Embedded level	Oxfam (2006) Curriculum for Global Citizenship	Gayford (2009) Descriptors when judging the effectiveness of ESD	
Pupils’ knowledge and understanding	<ul style="list-style-type: none">• Most pupils acquire the skills of enquiry, critical analysis and communication clearly developed in context ;• Pupils understand and apply knowledge of EDSGC to analyse a range of interpretations about sustainability and to challenge simplified or stereo-typical views of other societies;• Pupils develop their understanding and skills through decision making and carrying out their own initiatives;• Pupils are able to present their findings to a wide range of audiences;• Pupils share their work with their family of schools	<p>Key Stage 2 Knowledge and understanding</p> <ul style="list-style-type: none">• fairness between groups• causes and effects of inequality• contribution of different cultures, values and beliefs to our lives• nature of prejudice and ways to combat it• trade between countries• fair trade• relationship between people and environment• awareness of finite resources• our potential to change things• causes of conflict• impact of conflict• strategies for tackling conflict and for conflict prevention	<p>Key Stage 4 Knowledge and understanding</p> <ul style="list-style-type: none">• causes of poverty• different views on the eradication of poverty• role as Global Citizen• deeper understanding of different cultures and societies• North/South power relationships• world economic and• political systems• ethical consumerism• global imperative of sustainable development• lifestyles for a sustainable world• conditions conducive to peace	<p>Content knowledge and understanding Stage 4 features: Pupils appreciate:</p> <ul style="list-style-type: none">• local-global impacts on action• Local community links• Diversity• Need for habitat maintenance• Links between ethical and sustainability, human rights.• Personal responsibility and philosophy of person power• alternatives noted, less certainty• healthy living and safety accepted and responsibility;• conservation of resources and monitoring,• recognise individuals have a role to play,• impact of purchasing power,• interconnections and complexity,• different perspectives,• government power.• They have a holistic understanding;

Pupil involvement	<ul style="list-style-type: none"> • Pupils make regular suggestions for and take initiatives in SD and GC practices of the school; • Arrangements for pupil participation is well developed; • Pupils are active in making decisions about wider issues in the school 	<p>Skills Key Stage 2</p> <ul style="list-style-type: none"> • detecting bias, opinion and stereotypes • assessing different viewpoints • finding and selecting evidence • beginning to present a reasoned case • recognising and starting to challenge unfairness • making choices and recognising the consequences of choices • accepting and acting on group decisions • compromising <p>Values Key Stage 2</p> <ul style="list-style-type: none"> • sense of importance of individual worth • empathy towards others locally and globally • growing interest in world events • sense of justice • growing respect for difference and diversity • sense of responsibility for the environment and the • use of resources • belief that things can be better and that individuals can make a difference 	<p>Skills Key Stage 4</p> <ul style="list-style-type: none"> • critically analysing information • making ethical judgements • arguing rationally and persuasively from an informed position • selecting appropriate action to take against inequality • following a personal lifestyle for a sustainable world • negotiation • mediation <p>Values Key Stage 4</p> <ul style="list-style-type: none"> • open-mindedness • sense of common humanity and common needs • commitment to social justice and equity • valuing all people as equal and different • concern for the future of the planet and future generations • commitment to a lifestyle for a sustainable world • willingness to work towards a more equitable future 	<p>Process ability Level 4</p> <ul style="list-style-type: none"> • High levels of pupil participation • Pupils: monitor the effectiveness of their initiatives; • are keen to take the initiative in enlisting the assistance of a wider range of people within the school community; • use their skills in accessing information; • pupils may take on quite ambitious projects ; • very proactive and realistic in school council; • appreciate, and where appropriate, accept alternative views; • have a broader appreciation of well-being and are advocates; • appreciate and positive about school and community as a diverse population; • clearly advocate behaviours that they see as environmentally sustainable, both within and outside the school; • Interest and concern for global and local issues; • have a strong wish to find out more, and to publicise and communicate information, ideas and opinions • Leadership skills are further developed;
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METHODS APPENDICES

APPENDIX 2.1.1 Letter to Local Education Authority support officers

Coleg Addysg a Dysgu Gydol Oes
Prifysgol Bangor
Safle'r Normal
Ffordd Caergybi
Bangor, Gwynedd LL57 2PZ
01248-383012



College of Education & Lifelong Learning
Bangor University
Normal Site
Holyhead Road
Bangor, Gwynedd LL57 2PZ
01248-383012

Address

June 5th, 2009

Ymchwil i ddatblygiad ADCDF yn ysgolion yng Nghymru

Annwyl

Gobeithiaf fod chi'n dda! Ar hyn o bryd, yr wyf yn astudio ar gyfer fy noethuriaeth yn y Coleg Addysg a Dysgu Gydol Oes, Prifysgol Bangor. Mae f'astudiaeth yn cael ei hariannu'n rhannol gan Lywodraeth Cynulliad Cymru drwy'r Panel ar gyfer Addysg Datblygu Cynaliadwy a Dinasyddiaeth Fyd-Eang (ADCDF). Y pwnc yw 'Beth yw'r dulliau mwyaf effeithiol o ddatblygu arbenigedd mewn Addysg Datblygu Cynaliadwy a Dinasyddiaeth Fyd-Eang (ADCDF) mewn ysgolion cynradd?'. Er mwyn ymchwilio i hyn, hoffwn ganolbwyntio ar ddatblygiadau yng ngogledd-orllewin Cymru.

Rydwy i wedi cael caniatiad i wneud yr ymchwil yma gan eich awdurdod.

Fel rhan o hwn hoffwn gyfweld rhai pobl allweddol, fel chi, sydd yn cyfrannu at ddatblygu ADCDF. Byddaf yn ddiolchgar iawn pe baech yn cytuno i gael eich cyfweld dros y ffôn. Dylai'r cyfweiliad bara ychydig o hanner awr.

Bydd unrhyw wybodaeth a rowch yn cael ei thrin yn gyfrinachol ac ni chewch chi na'ch sefydliad eich enwi mewn perthynas ag unrhyw un o'r canfyddiadau. Defnyddir recordydd tâp i dapio'r cyfweiliad llawn. Cedwir y tâp yn ddiogel a'i ddinistrio ar ddiwedd yr astudiaeth. Byddaf yn anfon copi o'r trawsgrifiad atoch. Fwy na thebyg y cyflwynir y canfyddiadau ar ffurf papur academiaidd mewn cynhadledd ryngwladol ac fe'u cynhwysir mewn traethawd hir ar gyfer doethuriaeth. Mae gennych yr hawl i dynnu eich sylwadau'n ôl a rhoi'r gorau i gyfrannu ar unrhyw adeg. Dylid anfon unrhyw gwynion at Dr David Sullivan (d.sullivan@bangor.ac.uk), Cadeirydd y Grŵp Tasg Moeseg, Coleg Addysg a Dysgu Gydol Oes, Prifysgol Bangor.

Byddaf yn ddiolchgar pe baech yn anfon e-bost atom i gadarnhau a fydddech yn hapus i gael eich cyfweld. Gellir anfon hwn i fi s.bennell@bangor.ac.uk a hefyd lofnodi'r ffurflen gydsynio isod.

Byddaf yn ffonio i drefnu amser addas i'r cyfweiliad. Cysylltaf amserlen ddrafft ar gyfer y cyfweiliad.

Edrychwn ymlaen at glywed oddi wrthydych.

APPENDIX 2.1.1 Letter to Local Education Authority support officers

Yn gywir

Sheila (Bennell), Coleg Addysg a Dysgu Gydol Oes, Prifysgol Bangor

Ymchwil i ddatblygiad ADCDF yn y cwricwlwm ysgol yng Nghymru

Cytunaf i gael fy nghyfweld ar gyfer yr ymchwil hon ac rydw i'n fodlon ar yr amodau a amlinellir uchod ar gyfer rhannu'r data.

Enw _____ Sefydliad _____

Dychweler at:

Sheila Bennell

Coleg Addysg a Dysgu Gydol Oes, Prifysgol Bangor

Llyfrgell Safle'r Normal

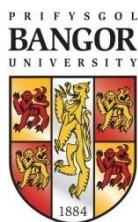
Ffordd Caergybi

BANGOR LL57 2PX

e-bost: s.bennell@bangor.ac.uk) ffôn: 01248 383728

APPENDIX 2.1.2 LEA interview schedule

Coleg Addysg a Dysgu Gydol Oes
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Ffordd Caergybi
Bangor, Gwynedd LL57 2PZ
01248-383012



College of Education & Lifelong Learning
Bangor University
Normal Site
Holyhead Road
Bangor, Gwynedd LL57 2PZ
01248-383012

Research into the development of ESDGC in the school curriculum in Wales

Questions for Local Authority, or similar, Officers

Interview Schedule

Name:	Role:
Questions	
<u>1. Your own involvement in ESDGC</u>	
You have been involved with ESDGC or related topics for a number of years.	
1a) When did you first become involved with this area?	
b) What is your role?	
1c) How did you come to work in this area?	
Do you have a particular interest in any areas of ESDGC?	
If so, could you describe how you feel this interest arose?	
<u>2. Regional development of ESDGC</u>	
2a) How long have you been involved with local ESDGC developments?	
County support for ESDGC	
2b) What kind of training or support for ESDGC do the counties you work with provide	

APPENDIX 2.1.2 LEA interview schedule

for schools?

Is this evaluated?

If so, how effective has this training and support been?

How many teachers and schools do you work with each year?

Do you collaborate with other advisers/initiatives in your county?

Can you give me some examples?

Do you know how much each county spends on ESDGC per year?

2c) What other regional initiatives do you know of which contribute to ESDGC development?

What is your perception of the effectiveness of these other ESDGC-related initiatives?

Do any forms of ESDGC support stand out as being particularly effective?

Have you been involved in Enabling Effective Support (EES) initiatives?

How do you feel about EES effectiveness?

e.g. as a national initiative:

as a local initiative:

In your opinion, have any local EES initiatives been particularly effective?

2d) Level of ESDGC development in your region's school

How do you feel about ESDGC in your counties' schools?

Could you make an estimate (%) of the number of schools you believe are doing it well and covering all aspects?

On the whole, do you think that all aspects of ESDGC are being covered equally?

APPENDIX 2.1.2 LEA interview schedule

Is anything else needed e.g. support, guidance?

When you reflect on the development of the current national ESDGC policy how do you feel about what has been achieved?

How useful do it feel it has been for you?

and for your schools?

In schools which you believe are delivering ESDGC effectively, what would you say have been the factors which have contributed to this?

Can you give me some examples?

In schools where you believe ESDGC is not being effectively delivered, what would you say have been the factors which have contributed to this?

Can you give me some examples?

APPENDIX 2.2.1 Email to ESDGC support organisations

Annwyl cyd-weithiwr

Hoffwn ofyn am eich cymorth i gasglu rhai manylion am gefnogaeth ADCDF yng Ngogledd-orllewin Cymru. Mae hwn ar gyfer dau bwrpas:

Yn gyntaf, mae NGFL-Cymru yn creu adran newydd o'r safle we ADCDF www.ngfl.org.uk/cym/esdgc. Bydd hwn yn rhoi rhestr o fudiadau sy'n cefnogi ADCDF ar gyfer pob ardal ADCDF. Bydd yn ddefnyddiol iawn i ysgolion, colegau, mudiadau ieuenctid ac ysgolion a hefyd, wrth gwrs, i fudiadau fel chi sydd yn cynnig cefnogaeth.

Yn ail, rydw i'n astudio ar gyfer fy noethuriaeth ar hyn o bryd, yn ymchwilio'r ffyrdd mwyaf effeithiol o ddatblygu arbenigrwydd ADCDF mewn ysgolion. Bydd y wybodaeth oddi wrthoch chi o ddefnydd fawr iawn i ddangos pa mor gyfoethog yw'r gefnogaeth sydd, ac wedi bod, ar gael i ysgolion.

Fel y gwelwch mai rhai o'r cwestiynau (8-11) yma ar gyfer fy noethuriaeth yn unig, nid ar gyfer y fas data. Cedwir y wybodaeth yma yn gyfrinachol gyda dim cydgysylltiad efo'ch enw neu'ch mudiad.

Buaswn yn gwerthfawrogi os gallech lenwi'r holiadur sydd wedi ei atodi ac yn anfon yn ôl i fi ar e-bost erbyn y 10fed o Orffennaf.

Edrychaf ymlaen at dderbyn eich ymateb.

Diolch yn fawr

Sheila

Dear Colleagues

I would like to ask for your help in gathering some information about ESDGC support in north-west Wales . This is for two purposes. Firstly NGFL-Cymru (Wales National Grid for Learning) is creating a section of the ESDGC website www.ngfl.org.uk/eng/esdgc for each ESDGC region - it will list organisations which support ESDGC. This should be of great benefit to schools, colleges and youth groups as well, of course, to organisations like yours who provide ESDGC support.

Secondly, I am currently studying for a doctorate at Bangor University, investigating the most effective ways of developing ESDGC expertise in schools. The information you provide will be of great use in showing the richness of support that is, and has been, available to schools.

You will see that some of the questions are solely for the use of my PhD study and the information from these will be kept confidential and not associated with you or your organisation.

I would be grateful if you would complete the attached questionnaire and return it to me by email by the 10th July

Thank you in advance for your support. I will look forward to receiving your replies.
Sheila (Bennell)

APPENDIX 2.2.2 Questionnaire for ESDGC support organisations

Database of organisations supporting ESDGC in Anglesey, Gwynedd and Conwy

NGFL-Cymru (Wales National Grid for Learning) is creating a section of the ESDGC website www.ngfl.org.uk/eng/esdgc.htm for each region. This will list organisations which support ESDGC. It will be of great benefit to schools, colleges and youth groups as well, of course, to your own organisation.

Your answers to questions **8, 9, 10 and 11 will not** be used in the NGFL database but may be used in an academic paper or in my doctoral thesis. Your answers to these questions will be treated confidentially and neither your name nor your organisation's will be associated with the data.

We are keen to capture information about **all** ESDGC support organisations for north-west Wales so please note question 12.


All the boxes are expandable.

We would be grateful if you would fill in this form and return it as an email attachment to Sheila Bennell s.bennell@bangor.ac.uk by **20th June if possible**.

1. Details of your organisation

Name of your organisation:	
Address:	
Telephone:	Fax:
Website:	
Main contact:	email:
Number of staff:	Number of educational support staff:
Main area of concern:	

2. Main purpose(s) of your organisation:

You may tick more than one. (Copy and paste this )

Influence educational policy	<input type="checkbox"/>	Provide support to schools and/or teacher education	<input type="checkbox"/>	Support other types of organisations	<input type="checkbox"/>
Curriculum development	<input type="checkbox"/>	Fundraising	<input type="checkbox"/>	Campaigning	<input type="checkbox"/>
Other (Please list below)	<input type="checkbox"/>				

3. Who do you support? Please tick those relevant.

Schools:							
Foundation Phase/ KS1		Key Stage 2		Key Stage 3		Key Stage 4	
Teachers' Professional Development		A Level		Welsh Bacc		Initial Teacher Training	
University students		Youth Groups		Adult groups		General public	

APPENDIX 2.2.2 Questionnaire for ESDGC support organisations

4.. Types of support provided for schools Please put Y for yes, N for no

Can schools visit you?	
Do you visit schools?	
Do you provide funding for schools?	
Do you provide learning resources?	
Do you support school Awards and Initiatives?	
Does your website provide support e.g. materials, resources?	
Is there a cost for your services? If so, please give details below	

5. ESDGC themes which your organisation supports. Please tick those relevant ✓

all		Natural environment	
Wealth & Poverty		Health	
Identity & Culture		Consumption & Waste	
Climate change		Choices & Decisions	

6. School award schemes which your organisation supports? Please tick those relevant ✓

Gwynedd and Anglesey Green Schools	
Eco-Schools	
Healthy Schools	
International Schools Award	
Fairtrade schools	
Other (please name)	

7. Counties where you provide support. Please tick those relevant ✓

NW Wales Counties (all)	
Anglesey	
Gwynedd	
Conwy	
Other:	
National	

Questions 8-11 are for use in my doctoral thesis. Your answers to these questions will be treated confidentially and neither your name nor your organisation's will be associated with the data.

8. Brief description of your major initiatives over the last few years

Which of these do you feel has been most effective?

APPENDIX 2.2.2 Questionnaire for ESDGC support organisations

9. How much support do you provide? Please answer the questions for which you have information. If you do not have the information please put ND

Approximate number of schools supported <i>per year</i> in recent years	
Approximate number of schools supported <i>per year</i> in recent years	
Approximate number of teachers supported with professional development <i>each year</i>	
Approximate number of Initial Teacher Training students supported <i>each year</i>	

10. How are your funded? (tick all those relevant ✓)

UK Government funds		WAG funds		Charitable funds (national body)	
Charitable funds (Local body)		selling our services		securing grants	

11. Your own estimate of your impact on ESDGC in schools in north-west Wales ✓

Delighted		Quite pleased		Could be better		Need to rethink	
<p>Please expand on this. For example you could include reasons that may account for high/low take-up of your services and indicate the kinds of support which could further improve your impact.</p>							

12. Finally.....

We are keen to produce as comprehensive database as possible and we may not know all of the organisations.

We would be grateful if you could give details of any other organisations or individuals working in your area which support ESDGC.

This box will expand, so please mention as many as you wish.

Please return to s.bennell@bangor.ac.uk by 20th June

Thank you very much for your help!

Sheila (Bennell)

APPENDIX 2.3 List of ESDGC reports and documents on studied

North-West Wales ESDGC Forum 2010, *Annual Report 2010*, North-West Wales ESDGC Forum, Bangor, Wales. Available from Cyfanfyd, Temple of Peace, Cathays Park, Cardiff, CF10 3AP.

North-West Wales ESDGC Forum 2009, *Annual Report 2009*, North-West Wales ESDGC Forum, Bangor, Wales. Available from Cyfanfyd, Temple of Peace, Cathays Park, Cardiff, CF10 3AP.

North-West Wales ESDGC Forum 2008, *Annual Report 2008*, North-West Wales ESDGC Forum, Bangor, Wales. Available from Cyfanfyd, Temple of Peace, Cathays Park, Cardiff, CF10 3AP.

North-West Wales ESDGC Forum 2007, *Annual Report 2007*, North-West Wales ESDGC Forum, Bangor, Wales. Available from Cyfanfyd, Temple of Peace, Cathays Park, Cardiff, CF10 3AP.

North-West Wales ESDGC Forum 2006, *Annual Report 2006*, North-West Wales ESDGC Forum, Bangor, Wales. Available from Cyfanfyd, Temple of Peace, Cathays Park, Cardiff, CF10 3AP.

Pitts, C. 2009, *Enabling Effective Support Wales: Monitoring and Evaluation Report*, Enabling Effective Support Wales, Cardiff.

World Education Centre 2009, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.

World Education Centre 2008, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.

World Education Centre 2007, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.

World Education Centre 2006, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.

World Education Centre 2005, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.

World Education Centre 2004, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.

World Education Centre 2003, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.

APPENDIX 2.3 List of ESDGC reports and documents on studied

World Education Centre 2003, *Educating for Global Citizenship, an INSET Resource for Teachers in Wales*, World Education Centre, Bangor University, Bangor.

World Education Project 1999, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.

World Education Project 1998, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.

World Education Project 1997, *Annual Report*, World Education Centre, Bangor University, Bangor, Wales. Available from the author.

APPENDIX 2.4.1 ESDGC questionnaire for teachers

Coleg Addysg a Dysgu Gydol Oes
Prifysgol Bangor
Safle'r Normal
Ffordd Caergybi
Bangor, Gwynedd LL57 2PZ
01248-383012



College of Education & Lifelong Learning
Bangor University
Normal Site
Holyhead Road
Bangor, Gwynedd LL57 2PZ
01248-383012

Study of Education for Sustainable Development and Global Citizenship (ESDGC) in primary schools in Anglesey, Gwynedd and Conwy

Dear Teacher

I would be very grateful if you would answer this questionnaire which is aimed at all teachers in your school. If you have already completed this earlier please let me know. You will not have to do it again! It aims to find about the types of events which have influenced your understanding of, and teaching skills in Education for Sustainable Development and Global Citizenship (ESDGC).

Please could you try to answer the questions, even if ESDGC is not your main interest or priority. It may look as if there are lots of questions but it should only take about **ten minutes** of your time.

The questionnaire has the approval of Cynnal and the local education authorities in Anglesey, Gwynedd and Conwy. The findings will be shared with your LEA, Cynnal and the Welsh Assembly Government and will help inform future ESDGC professional development opportunities.

The research is being carried out as part of a larger study for my doctorate and may also be published in an academic paper or presented at a conference. We are not asking for your name on the questionnaire. Any information you give will be treated confidentially and your school's name will not be associated with any of the findings. Any complaints or grievances should be addressed to Dr David Sullivan (d.sullivan@bangor.ac.uk), Chair of the Ethics Task Group, College of Education and Lifelong Learning, Bangor University.

I thank you in advance for your support with this research.

Sheila Bennell
College of Education and Lifelong Learning,
Bangor University

APPENDIX 2.4.1 ESDGC questionnaire for teachers

Questionnaire

School:

Teacher number:

(The teacher number is only to help me match the answers in the questionnaire with interview responses . It will not be used to identify you in any report.)

Section 1. About yourself

Please tick, or copy and paste this tick  if you wish to complete it electronically

1. Which age group(s) do you teach? Key Stage 1/ Foundation Phase ☐ Key Stage 2 ☐

2. How many teachers are in your school? 4 or less ☐ 5-9 ☐ 10-19 ☐ more than 20

3. Where did train as a teacher?

4. Which course did you study? BEd ☐ BA (QTS) ☐ PGCE ☐

5. What was your specialist area/subject of study?

.....

6. In which year did you qualify as a teacher?

7. How many years have you been teaching?

How long have you been in this school?

8. Do you hold any position of responsibility in your school? Please describe:

.....
.....

9. In which age group are you? 25 or under ☐ 26-35 ☐ 36-45 ☐ 46 or older ☐

10. Gender: Are you male ☐ or female ☐ ?

11. How would you rate your interest in ESDGC?

Very interested ☐ quite interested ☐ not very interested ☐ not at all interested ☐

APPENDIX 2.4.1 ESDGC questionnaire for teachers

12. What level of priority would you say you give to ESDGC compared to other teaching issues?

High priority ☐ medium priority ☐ low priority ☐

Is there any particular reason for this?

Section 2. Your understanding and awareness of ESDGC

ESDGC is a fairly broad topic and most teachers are still coming to grips with it. Everyone has had different experiences of ESDGC and no-one knows it all.

13. How well do you feel you understand what ESDGC is about?

very well ☐ quite well ☐ a little ☐ not very well ☐

14. How aware are you of the latest ESDGC guidance documents?

Common Understanding	Very <input type="checkbox"/>	a little <input type="checkbox"/>	not at all <input type="checkbox"/>
Information for teacher trainees and new teachers	Very <input type="checkbox"/>	a little <input type="checkbox"/>	not at all <input type="checkbox"/>

15. How well do you understand the issues addressed by the seven ESDGC themes

Wealth and poverty	very well <input type="checkbox"/>	quite well <input type="checkbox"/>	a little <input type="checkbox"/>	not very well <input type="checkbox"/>
Identity and culture	very well <input type="checkbox"/>	quite well <input type="checkbox"/>	a little <input type="checkbox"/>	not very well <input type="checkbox"/>
Choices and decisions	very well <input type="checkbox"/>	quite well <input type="checkbox"/>	a little <input type="checkbox"/>	not very well <input type="checkbox"/>
Health (local and global)	very well <input type="checkbox"/>	quite well <input type="checkbox"/>	a little <input type="checkbox"/>	not very well <input type="checkbox"/>
Consumption and waste	very well <input type="checkbox"/>	quite well <input type="checkbox"/>	a little <input type="checkbox"/>	not very well <input type="checkbox"/>
Climate change	very well <input type="checkbox"/>	quite well <input type="checkbox"/>	a little <input type="checkbox"/>	not very well <input type="checkbox"/>
Natural Environment	very well <input type="checkbox"/>	quite well <input type="checkbox"/>	a little <input type="checkbox"/>	not very well <input type="checkbox"/>

16. How well do you understand how ESDGC fits in with:

whole school activities	very well <input type="checkbox"/>	quite well <input type="checkbox"/>	a little <input type="checkbox"/>	not very well <input type="checkbox"/>
school award schemes	very well <input type="checkbox"/>	quite well <input type="checkbox"/>	a little <input type="checkbox"/>	not very well <input type="checkbox"/>
school ethos	very well <input type="checkbox"/>	quite well <input type="checkbox"/>	a little <input type="checkbox"/>	not very well <input type="checkbox"/>

17. How confident do you feel about how the Skills Framework links with ESDGC?

very confident ☐ quite confident ☐ a little confident ☐ not very confident ☐

18. Do you think ESDGC is important? Yes ☐ no ☐

APPENDIX 2.4.1 ESDGC questionnaire for teachers

If yes, please say why

Section 3. Your ESDGC teaching competence

19. How do you feel your ESDGC teaching competence has progressed up to now?

Very well ☐ quite well ☐ very little ☐ not at all ☐

20. Do you feel confident about integrating ESDGC in your teaching?

very confident ☐ quite confident ☐ a little confident ☐ not very confident ☐

21. How confident do you feel about introducing topics related to the seven ESDGC themes

Wealth & poverty very confident ☐ quite confident ☐ a little confident ☐ not very confident ☐

Identity & culture very confident ☐ quite confident ☐ a little confident ☐ not very confident ☐

Choices & decisions very confident ☐ quite confident ☐ a little confident ☐ not very confident ☐

Health (local & global) very confident ☐ quite confident ☐ a little confident ☐ not very confident ☐

Consumption & waste very confident ☐ quite confident ☐ a little confident ☐ not very confident ☐

Climate change very confident ☐ quite confident ☐ a little confident ☐ not very confident ☐

Natural Environment very confident ☐ quite confident ☐ a little confident ☐ not very confident ☐

22. How often do you include thinking skills activities in ESDGC?

Very often ☐ quite often ☐ occasionally ☐ very rarely ☐

23. How often do you make connections between the ESDGC themes?

Very often ☐ quite often ☐ occasionally ☐ very rarely ☐

24. How often do you work with other teachers in the school on ESDGC?

Very often ☐ quite often ☐ occasionally ☐ very rarely ☐

APPENDIX 2.4.1 ESDGC questionnaire for teachers

25. Does your school provide opportunities for this? Many ☐ some ☐ very few ☐
none ☐

Section 4. Influences on your ESDGC development

26. If you have a interest in ESDGC what do you think may have sparked this interest?
(you may tick more than one box)

	A great deal	Quite a lot	a little	not at
all				
family upbringing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
your cultural background	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
your friends' influence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
membership of a youth organisation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
your own school experiences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
your university degree course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
your Initial teacher training experiences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
articles in the media	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
experiences in the schools where you you have taught	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
holidays and travel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
living or working in other countries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Please note:				

Please feel free to expand on this if you wish

27. Have any of the following helped the development of your ESDGC teaching competence?

(you may tick more than one box)

	A great deal	Quite a lot	a little	not
at all				
Your own school experiences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your initial teacher training experiences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Early professional development courses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
LEA Continuing Professional Development courses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
MA courses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX 2.4.1 ESDGC questionnaire for teachers

A supportive headteacher	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>				
The support of other teachers in the school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Support of an ESDGC peer mentor from another school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Examples of ESDGC in other schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ESDGC Teacher conferences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dedicated time out of class to develop ESDGC	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your own personal study	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Informal discussion with other teachers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Welsh Assembly Government guidance documents	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Estyn Inspection guidance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Local Education Authority guidance materials	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taking part in school 'schemes' such as: Green Schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eco-Schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fair Trade Schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
International Schools award	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Healthy Schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Taking part in an international schools' partnership	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other training or study experiences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Such as?			
Visits to places offering ESDGC experiences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Such as?.....				
Visits by ESDGC organisations to your school	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Such as?.....				
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Please describe:.....				

Please feel free to expand on this if you wish

APPENDIX 2.4.1 ESDGC questionnaire for teachers

28. Would you say you actively seek out ESDGC training opportunities?

Yes definitely ☐ sometimes ☐ rarely ☐ never ☐

29. Would you say you are encouraged by your school to take advantage of ESDGC training events?

Yes definitely ☐ sometimes ☐ rarely ☐ never ☐

30. Have you encountered obstacles or challenges when implementing ESDGC? If so, which would you say were most important? Please name up to three.

31. What would have made it easier for you to get to grips with ESDGC?

32. Have any of the following helped build your *knowledge and understanding* of the ESDGC themes

	A great deal	Quite a lot	a little	not at all
Your own school experiences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your university undergraduate course	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your ITET experiences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Training or study courses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Your own personal study e.g. MA courses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TV or film documentaries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Research for your teaching	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Newspapers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Talks by speakers on ESDGC-related issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Visits to places offering ESDGC experiences	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Working in other countries	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Travelling	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Please note:

Please feel free to expand on this if you wish

APPENDIX 2.4.1 ESDGC questionnaire for teachers

33. What kind of support would you like to receive to help your ESDGC development?

- | | |
|---|--------------------------|
| examples and case studies from experienced teachers | <input type="checkbox"/> |
| examples from other new teachers | <input type="checkbox"/> |
| background information about the issues | <input type="checkbox"/> |
| information about what Estyn is interested in | <input type="checkbox"/> |
| EPD training sessions with other NQTs | <input type="checkbox"/> |
| CPD courses | <input type="checkbox"/> |
| Opportunities to visit good practice ESDGC schools | <input type="checkbox"/> |
| Examples of ESDGC teaching methodologies | <input type="checkbox"/> |
| Funding to develop ESDGC | <input type="checkbox"/> |
| Time out of teaching to develop ESDGC | <input type="checkbox"/> |
| Other | <input type="checkbox"/> |

Please list

APPENDIX 2.4.1 ESDGC questionnaire for teachers

Your school's development of ESDGC

34. How do you feel *your school's* development of ESDGC has progressed up to now?

A lot ☐ quite a lot ☐ a little ☐ not at all ☐

35. What would you say have been the most important factors in the school's development of ESDGC?

36. What would you say has been the most significant change in relation to ESDGC in your school?

37. What else could be done on the whole school level?

Thank you very much for taking your time to complete this questionnaire.

Please note: Neither your name nor school will be associated with any of the findings.

Sheila Bennell

APPENDIX 2.4.2a Head teachers' interview framework

<p align="center">Education for Sustainable Development and Global Citizenship in your school</p> <p align="center">Questions for the Headteacher</p> <p align="center">School:</p>	
<p>Section 1: The school's progress with ESDGC</p>	
<p>Length of time developing ESDGC</p>	
<p>Level of ESDGC development</p>	
<p>Important of ESDGC within education as a whole</p>	
<p>Level of priority to ESDGC</p>	
<p>Auditing ESDGC</p>	
<p>Engagement of staff</p>	
<p>Section 2: Factors in your school's development of ESDGC</p>	
<p>Your own interest in, and understanding of, ESDGC</p>	
<p>Why your school has developed ESDGC</p>	
<p>Factors in the school's development of ESDGC</p>	

APPENDIX 2.4.2a Head teachers' interview framework

<u>Section 3. Key achievements related to ESDGC</u>	
Examples of key ESDGC achievements in your school	
Examples of good practice in your school's ESDGC work	
<u>Section 4. Now, some more in-depth questions about how you have developed of ESDGC</u>	
<u>Planning and monitoring</u>	
Planning for ESDGC	
Resourcing ESDGC	
Links with other curriculum priorities	
<u>Staff development</u>	
Usefulness of different types of development	
Working with other schools	
Obstacles, frustrations or challenges	
<u>Section 5. Developing your school's ESDGC further</u>	
Future plans for ESDGC	

APPENDIX 2.4.2a Head teachers' interview framework

Support required	
Is there anything else you would like to say on the way you have developed ESDGC in your school	
Thank you very much for your time	

APPENDIX 2.4.2b Head teachers' interview framework – numbered for triangulation

Education for Sustainable Development and Global Citizenship in your school

Questions for the Headteacher

School:

Section 1: The school's progress with ESDGC

1. How long have you been developing ESDGC in this school?

How did it begin?

2. How do you feel your school's development of ESDGC has progressed up to now?

A lot ☐ quite a lot ☐ a little ☐ not at all ☐

Do you have any comments on this?

3. If you have completed the school audit in the ESDGC Common Understanding how would you rate your school's level of ESDGC compared to the levels in the table?

Basicembedded

If not, have you completed any other audit on ESDGC in your school?

Would you be prepared to share your audit outcomes with me?

4. How important do you think ESDGC is within education as a whole?

Why is this?

5. What level of priority would you say your school gives to ESDGC compared to other teaching issues?

APPENDIX 2.4.2b Head teachers' interview framework – numbered for triangulation

High priority ☐ medium priority ☐ low priority ☐

Could you describe to me why this is?

6. How well do you feel your members of staff understand ESDGC?

How many would you say are 'on board'? Are there any 'key players'?

Section 2: Factors in your school's development of ESDGC

7. Can you tell me a little more about where you feel your own interest in ESDGC has come from? E.g. have any key experiences, events or people sparked your interest?

8. Can you tell me a little more about how your own understanding and competence in ESDGC has developed?

9. Why would you say your school has developed ESDGC?
e.g. Government policy, because you think it's important, inspection questions, teacher with a special interest etc.

10. What kind of factors have contributed to the school's development of ESDGC?

For example:

- Your own personal drive
- Dedication, or interest, of other teachers
- Attention to planning
- Teacher collaboration
- Staff professional development
- Peer mentor support
- Networking with other schools
- Case studies from other schools
- Visitors to the school
- Taking advantage of specific opportunities that arise
- Guidance from WAG or Estyn

Is there anything in particular you would like to say about any of these?

APPENDIX 2.4.2b Head teachers' interview framework – numbered for triangulation

How useful have the WAG ESDGC documents been in helping you understand ESDGC? e.g. have you used them in depth?

How much are your governors involved in decision-making on ESDGC e.g. is there a link governor for ESDGC?

Would you say you actively seek out opportunities to develop ESDGC?

Section 3. Key achievements related to ESDGC

11. What kinds of key ESDGC achievements have been reached in your school?

What has been particularly successful... and why?

What has not worked ... and why?

12. Can you give me some examples of good practice in your school's ESDGC work, for example in relation to:

the school ethos?

whole school activities?

teaching and learning

pupil involvement in decision-making

the school management

partnerships and community links

13. Do you have evidence about the response of pupils to the ESDGC activities offered?

APPENDIX 2.4.2b Head teachers' interview framework – numbered for triangulation

14. What would you say have been the most significant changes in your school in relation to ESDGC?

15. Are there any areas you would like to improve on, or develop more?

Section 4. Now, some more in-depth questions about how you have developed of ESDGC

Planning and monitoring

16. Has ESDGC been in your School Development Plan?

Can you tell me a little more about this e.g. targets, if any, that you may have set for progress in ESDGC?

17. Do you have a separate school strategy on ESDGC?

18. Do you have special co-ordinator for ESDGC?

Who receives information about ESDGC

19. How do you go about planning for ESDGC?

How useful have the WAG ESDGC documents been in helping you plan?

Do you make links between ESDGC themes?

20. Who is responsible for monitoring ESDGC work at the school?

21. What criteria are used to monitor and assess ESDGC?

APPENDIX 2.4.2b Head teachers' interview framework – numbered for triangulation

Resourcing ESDGC

22. Have you purchased resources to assist with the teaching of ESDGC?

23. Have you used school funding to increase opportunities in ESDGC?

a. Do you have a specific budget for ESDGC?

24. Have you accessed any outside funding for your ESDGC work?

Links with other curriculum priorities

25. How do you see the relationship between learner-centred education, the Skills Framework and ESDGC?

26. If you have you taken steps towards a greater focus on the learner, in line with the revised curriculum can you give me some examples of what you have done in relation to ESDGC?

27. If you have you taken steps towards a greater focus on the learner's skills can you give me some examples of what you have done in relation to ESDGC?

Do you have a school council?

28. Were you already using these types of methodology before the Skills Framework was published or has the Skills Framework helped?

If you have used them for a while, where did you gain your methodology skills?

29. To what extent does your ESDGC work support the progress of pupils across key stages?

30. Have you linked your ESDGC work with:

a) your school's bridging scheme to secondary school?

APPENDIX 2.4.2b Head teachers' interview framework – numbered for triangulation

- b) with awards/schemes such as Green Schools. Healthy Schools, International School Award?

Do you make specific links in your planning between the different schemes and ESDGC?

31. Is your school involved in any international partnerships?

How useful have these been?

Can you give me some examples of how this works?

32. Have you included parents in your ESDGC work? If so, In what way?

Staff development

33. How useful have the latest ESDGC guidance documents been? E.g. have you used them in staff development?

ESDGC: Common Understanding

ESDGC: Information for teacher trainees and new teachers

34. Can you give me some detail about the types of professional development members of staff, including yourself, have had?

e.g. training or meetings within the school

other training courses

dedicated time off teaching to develop ESDGC

visits to local schools or schools in other countries?

Have any of these been particularly useful?

How many members of staff have had training?

How do you support new teachers with their ESDGC development?

How do you involve your support staff?

APPENDIX 2.4.2b Head teachers' interview framework – numbered for triangulation

35. Have you learned anything from other schools that has enabled you to improve your own ESDGC work?

36. Have you shared your ESDGC work with, or supported other schools?

In what way?

Has this helped your own school in any way?

37. Have you encountered any obstacles, frustrations or challenges when implementing ESDGC?

Would anything have made it easier for you to implement ESDGC?

Section 5. Developing your school's ESDGC further

38. What plans do you have for developing ESDGC further? E.g. are there any areas you would like to improve on, or develop more?

39. Is there any kind of further support you would like to receive?

Is there anything in particular you would like from:

- a. the Assembly
- b. the LEA
- c. other organisations

40. Is there anything else you would like to say on the way you have developed ESDGC in your school?

APPENDIX 2.4.3a Teachers' interview framework

Structured interview for teachers

School:

Teacher number:

(The teacher number is only to help me match interviews with questionnaire answers. It will not be used to identify teachers in any report.)

I would like to ask you some questions which are additional to those in the questionnaire you have already completed. They aim to find out more detail about some of your answers. The topics are shown below.

Section 1. About yourself

Your responsibilities

What are your responsibilities in the school with ESDGC?

Section 2 Your understanding and awareness of ESDGC

What you believe ESDGC is about

S: in your own words how would you describe what ESDGC means?

Importance of ESDGC in education

S: In your opinion how important is it in education as a whole?

Section 3. Influences on your ESDGC development

Your interest in ESDGC

Section 4. Your ESDGC teaching

APPENDIX 2.4.3a Teachers' interview framework

Priority given to ESDGC

What you have done in your ESDGC teaching

Evidence for pupils' responses

Methodologies and the Skills framework (Q22)

Planning for ESDGC

Obstacles and challenges (Q30)

Tips for other teachers or NQTs

Section 5: Your school's development of ESDGC

Your school's level of ESDGC development

Factors in your school's level of ESDGC development

APPENDIX 2.4.3a Teachers' interview framework

The most significant ESDGC change in your school

Further support needs

For the ESDGC co-ordinator:

How ESDGC is monitored and evaluated ESDGC

APPENDIX 2.4.3b Teachers' interview framework – numbered for triangulation

Structured interview for individual teachers

School:

Teacher number:

(The teacher number is only to help me match interviews with questionnaire answers. It will not be used to identify teachers in any report.)

The questions below are additional to those in the questionnaire you have already completed. They aim to find out more detail about some of your answers.

Section 1. About yourself

1. Position of responsibility (Q8)

Do you hold a position of responsibility in the school?

2. If you do does this involve any aspect of ESDGC?

Section 2 Your understanding and awareness of ESDGC

3. In your own words how would you describe what ESDGC is about?

4. How important do you think ESDGC is within education as a whole? (Q18)

Section 3. Influences on your ESDGC development

5. Can you tell me a little more about where you feel your interest in ESDGC has come from? E.g. have any key experiences, events or people sparked your interest?

6. Can you tell me a little more about how your understanding and competence in ESDGC has developed?

APPENDIX 2.4.3b Teachers' interview framework – numbered for triangulation

E.g. are there any things that stand out as helping you most?

Is there anything you would like to say about any professional development experiences you have had?

How useful have the WAG ESDGC documents been in helping you understand ESDGC? e.g. have you used them in depth?

Has anyone particularly helped you or inspired you with your ESDGC development?

Can you tell me a little about your experiences of ESDGC in your ITET course, if relevant?

Do you think your current career stage has an influence on how you deal with ESDGC?

Section 4. Your ESDGC teaching

7. Is there any particular reason for the level of priority you give to ESDGC? (Q12)

8. Can you describe briefly the kind of things you have done in relation to ESDGC?

What has been particularly successful... and why?

9. Do you have any evidence about the response of pupils to the ESDGC activities offered?

What has not worked ... and why?

APPENDIX 2.4.3b Teachers' interview framework – numbered for triangulation

- 10. Are there any areas you would like to improve on, or develop more?**

Methodologies and the Skills framework (Q22)

- 11. What kinds of methodologies do you use with ESDGC?**

How do you see the relationship between learner-centred education, the Skills Framework and ESDGC?

Has your knowledge of teaching methodologies been helped by the *Skills Framework*?

If you were you already using these types of methodology before the Skills Framework was published where did you gain your skills?

- 12. How do you feel if you have to teach about an issue that you're not sure about?**

If this happens what do you do?

Planning for ESDGC

- 13. How do you go about planning for ESDGC?**

How useful have the WAG ESDGC documents been in helping you plan?

- 14. Do you make links between ESDGC themes in your planning?**

How important do you think this is?

APPENDIX 2.4.3b Teachers' interview framework – numbered for triangulation

15. Do you make explicit links between the particular schemes such as Healthy Schools and ESDGC in your planning?

Do you make the links in your teaching?

16. Obstacles and challenges (Q30)

Do you have any more to say about these?

17. Do you have any tips for other teachers or NQTs?

Section 5: Your school's development of ESDGC

18. How do you feel *your school's* development of ESDGC has progressed up to now?

19. What would you say have been the most important factors in the school's development of ESDGC?

For example:

- The headteacher's drive
- Dedication, or interest, of other teachers
- Attention to planning
- Teacher collaboration
- Training events
- Peer mentor support
- Networking with other schools
- Case studies from other schools
- Visitors to the school
- Taking advantage of specific opportunities that arise
- Guidance from WAG or Estyn

APPENDIX 2.4.3b Teachers' interview framework – numbered for triangulation

20. How many members of staff would you say are 'on board' with ESDGC?

In your opinion are there any 'key players'?

21. What would you say has been the most significant change in relation to ESDGC in your school?

What has brought this about?

22. What else could be done on the whole school level?

Questions for the ESDGC co-ordinator:

23. Have you completed the school audit in the ESDGC Common Understanding?

24. If so, how would you rate your school's level of ESDGC compared to the levels in the table?

Basicembedded

25. If not, have you completed any other audit on ESDGC in your school?

26. What criteria are used to monitor and assess ESDGC?

27. Further support needs (Q33)

Do you have any further comments on this?

Thank you very much for taking the time to answer these questions

Appendix 2.4.4a Support staff interview framework

School:	Role:
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Education for Sustainable Development and Global Citizenship in your school

Topics for Support staff

I would grateful if you would answer some questions about how your school has developed with respect to environmental and global dimensions. This will only take around 15-20 minutes.

The topics are listed below.

Your role in the school

Your awareness of Education for Sustainable Development and Global Citizenship (ESDGC) or work that the school does on the environment or global issues

The impact of this kind of activity on your own work

Training you may have had

Your involvement in school activities

Changes you have seen in the school

How the pupils react to activities

Other things which could be done in the school which would help the environment or bring in a global dimension

APPENDIX 2.4.5 Questions for teachers on collaboration and networking

School:	Role:	Teacher no.
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Questions on ESDGC Collaboration and Networking – teachers

1. In your school with whom do you discuss ESDGC, and how often?

Teacher/support staff	How frequently do you discuss or work together on ESDGC?	What kinds of things do you discuss?
Headteacher	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/> never <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/> never <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/> never <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/> never <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/> never <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/> never <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/> never <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or	

APPENDIX 2.4.5 Questions for teachers on collaboration and networking

	twice a year <input type="checkbox"/> never <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/> never <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/> never <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/> never <input type="checkbox"/>	

2. With which LEA Officers do you discuss your ESDGC work?

LEA Officer	How frequently do you discuss or work together on ESDGC	What kinds of things do you discuss?
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/> never <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/> never <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/> never <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/> never <input type="checkbox"/>	

APPENDIX 2.4.5 Questions for teachers on collaboration and networking

3. Which teachers outside of your school do you discuss or share your ESDGC work with?

Teacher and school	How frequently do you discuss ESDGC	What kinds of things do you discuss? How do you communicate e.g. face to face, email, phone
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/>	

4. With who else *outside* of your school do you discuss or share your ESDGC work, and how often?

Person/ Organisation	How frequently do you discuss ESDGC	What kinds of things do you discuss? How do you communicate e.g. face to face, email, phone
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or	

APPENDIX 2.4.5 Questions for teachers on collaboration and networking

	twice a year <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/>	
	Daily <input type="checkbox"/> once a week <input type="checkbox"/> once a month <input type="checkbox"/> once or twice a year <input type="checkbox"/>	

5. Does your school provide special opportunities for any of these discussions or collaborations?

6. Please tick how useful the following types of collaboration or networking have been for you in developing ESDGC?

Working with:	Very useful	Quite useful	A little useful	Not very useful
other teachers in your school				
your Head Teacher				
teachers in other schools				
LEA Officers				
other individuals and groups				

APPENDIX 2.4.6a Pupil Focus Group interview framework

Questions and prompts for pupils	Reason <i>for</i> question
<p>You may have seen me around the school recently. I've been doing some work with the teachers on how the teach about global issues and sustainable development. I'd like to ask you some questions about some of the things you do in school and about things you know about what's going on in the world.</p> <p>Firstly, just to get started, what's your favourite thing about school?</p> <p>Can you tell me about some of the big things that are going on in the world today?</p> <p>What kind of things have you seen on the news recently? Can you tell me about any good or bad things? (depends on answers)</p> <p>Can you give me some ideas about connections we have to other places in the world?</p> <p>Prompt if necessary: what about what we eat? Where do we go on holiday? Do any of you have relatives living in other countries?</p> <p>Can you tell me some things you have learned about people in some other parts of the world?</p> <p>What have you learned from your link with XXXXX? (if it hasn't arisen already)</p> <p>What's been most interesting? What have you enjoyed most? Has anything surprised you? Can you show me Sri Lanka (etc) on the globe? And the village where your partner school is?</p> <p>What do you know about wealth and poverty in the world? (if this has not yet arisen)</p> <p>Why do you think some people are poor?</p>	<p>Global awareness</p> <p>Interdependence</p> <p>Identity and culture etc etc.</p> <p>School partnership.</p> <p>Wealth and poverty</p>

APPENDIX 2.4.6a Pupil Focus Group interview framework

<p>Is everyone in Wales rich?</p> <p>How important is being healthy to you?</p> <p>How do you look after your health?</p> <p>Do you know anything about health issues for children in some other parts of the world?</p> <p>You do a lot of recycling in school?</p> <p>Why do you think that's important?</p> <p>Do we need all the things we have (that we recycle)</p> <p>What other things do you do in school to do with the environment?</p> <p>What do you enjoy most of these?</p> <p>Why do you do think you do them?</p> <p>Tell me about some of your thoughts about what the future may be like?</p> <p>What do you think it may be like for you? (if not answered already)</p> <p>What do you think it may be like for the children in your link school (s)?</p> <p>Can you tell me about some challenges that we may have in the future?</p> <p>What do you know about climate change (or global warming?)</p> <p>And finally, do you think you can change what might happen in the future?</p> <p>Prompt: Can you change what happens in your school? How do you do that?</p> <p>Thank you very much for talking to me.</p>	<p>Health</p> <p>Consumption and waste</p> <p>Natural world, Personal action</p> <p>Thought of the future</p> <p>Empathy for Sri Lanka ?</p> <p>Challenges</p> <p>Climate change</p> <p>Choices and decisions, Personal action</p>
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APPENDIX 2.4.6b Letter to head teachers for pupil focus group interviews

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Safle'r Normal
Ffordd Caergybi
Bangor, Gwynedd LL57 2PZ
01248-383012



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01248-383012

Head teacher
School

May 2010

Dear

Primary school case studies on Education for Sustainable Development and Global Citizenship (ESDGC)

You may remember that in my first letter I mentioned the possibility of doing some pupil interviews for my PhD ESDGC school case studies.

I have now prepared some questions for pupils in years 5 and 6. These are enclosed with this letter. The questions would be asked in small focus groups with around 5 pupils in each. I would propose four focus groups in total, two from each year. Each focus group would take about half an hour.

I am also attaching a letter for parents seeking permission for their pupils to take part. There is also a short letter for pupils, asking them for their permission. They will not be expected to answer any question if they prefer not to. I have full CRB clearance.

Any information from the pupils will be treated confidentially and neither pupils' nor the schools' name will be associated with any of the findings. However, as Head Teacher you will have access to a summary of the interviews. Care will be taken in the reporting to avoid anything which may enable the school to be identified. The study has been approved by the Ethics Task Group of the College of Education and Lifelong Learning, Bangor University. Any complaints or grievances should be addressed to Dr David Sullivan (d.sullivan@bangor.ac.uk), Chair of the Ethics Task Group. Your Local Education Authority has already given its approval for the study. Ms Bethan James of Cynnal is the nominated contact person.

I would be delighted if you would agree to your pupils taking part. There is an agreement form to sign on the following page. Ideally I would like to conduct these interviews before the end of the school year. I will contact you to find out if you agree and if so, to arrange a date for the interviews.

Yours sincerely,

Sheila (Bennell), College of Education and Lifelong Learning, Bangor University

APPENDIX 2.4.6b Letter to head teachers for pupil focus group interviews

Primary school case studies on Education for Sustainable Development and Global Citizenship (ESDGC)

Pupil Focus Group interviews

I agree to pupils from years 5 and 6 in my school, subject to parental approval, taking part in focus group interviews about their views, knowledge and understanding of ESDGC issues.

..... (Head Teacher)

APPENDIX 2.4.6c Letter to pupils for focus group interviews

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June 2010

Dear Pupil

I am doing some research for a PhD degree in the College of Education and Lifelong Learning, Bangor University. I am trying to find out how schools help pupils learn about global issues and the environment.

I would like to ask if you would be happy to take part in a group interview with four of your classmates. Your parents will also need to agree to this and a letter will be sent to them from your Head Teacher. You do not need to answer questions if you do not wish to.

All of your answers will be treated confidentially.

There is an agreement form to sign on the following page. Please could you return this to your head teacher.

Yours sincerely.

Sheila (Bennell)

College of Education and Lifelong Learning, Bangor University

APPENDIX 2.4.6c Letter to pupils for focus group interviews

Primary school case studies on Education for Sustainable Development and Global Citizenship (ESDGC)

Pupil Focus Group interviews

I agree to take part in group interviews about global issues and the environment

..... (Pupil)

..... (School)

APPENDIX 2.4.6d Letter to parents for pupil focus group interviews

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Bangor University
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May 2010

Dear Parent

Primary school case studies on Education for Sustainable Development and Global Citizenship (ESDGC)

I am currently studying for my doctorate in the College of Education and Lifelong Learning, Bangor University. The topic is 'How does ESDGC competence develop in primary schools?'. As part of this study I would like to conduct some focus group interviews with pupils in years 5 and 6 of the school and I would like to ask your permission for to take part.

I have enclosed a list of questions for pupils. These would be asked in small focus groups with around 5 pupils in each. The questions will be asked sensitively, with regard to the fact that pupils may not wish to answer all of them - they will not be expected to answer any question if they prefer not to. Subject to your agreement there is also a short letter for pupils, asking them for their permission.

Any information from the pupils will be treated confidentially and neither pupils' nor the schools' name will be associated with any of the findings. Care will be taken in the reporting to avoid anything which may enable the school to be identified. The study has been approved by the Ethics Task Group of the College of Education and Lifelong Learning, Bangor University. Any complaints or grievances should be addressed to Dr David Sullivan (d.sullivan@bangor.ac.uk), Chair of the Ethics Task Group. Your Local Education Authority has already given its approval for the study. Ms Bethan James of Cynnal is the nominated contact person.

I would be delighted if you would agree to your child taking part. There is an agreement form to sign on the following page. Please could you return this to your school's head teacher. Ideally I would like to conduct these interviews before the end of the school year.

Yours sincerely,

Sheila (Bennell)

College of Education and Lifelong Learning, Bangor University

APPENDIX 2.4.6d Letter to parents for pupil focus group interviews

Primary school case studies on Education for Sustainable Development and Global Citizenship (ESDGC)

Pupil Focus Group interviews

I agree to my son/daughter taking part in focus group
interviews about their views, knowledge and understanding of issues associated with
sustainable development and global citizenship,

..... (Parent)

APPENDIX 2.4.7 Letter to case study school head teachers

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November 2009

Dear

Primary school case studies on Education for Sustainable Development and Global Citizenship (ESDGC)

As a school which has been identified by Estyn and local authority advisers as an effective school, I would like to invite you and your school to take part in a case study analysis of ESDGC development.

As you may know I am currently studying for my doctorate in the College of Education and Lifelong Learning, Bangor University. My study is part-funded by the Welsh Assembly Government's Panel for Education for Sustainable Development and Global Citizenship (ESDGC). The topic is 'How does ESDGC competence develop in primary schools?'

The case study would entail interviews with yourself, some governors and key members of staff, a questionnaire for all staff, on their interest in, understanding of and learning and teaching development in ESDGC, and some questions for support staff. There would also be an exercise to look at how you and other members of staff collaborate and network on ESDGC development both within the school and with others outside of the school. Ideally I would also like to carry out group interviews with pupils. The proposed study is described in detail on the next page.

I am aiming to study six effective schools in depth, some of which will have given very high priority to ESDGC and some which have given other areas priority.

If you are interested I would be happy to come over and discuss the study in more detail with you. I realise it would have implications for your school in terms of time and would wish to discuss with you the most suitable way for you for going about the study.

Any information from, and about, teachers, pupils and schools will be treated confidentially and neither the teachers', pupils' nor the schools' name will be associated with any of the findings. Care will be taken to avoid recognition of the school in the reporting. The study has been approved by the Ethics Task Group of the College of Education and Lifelong Learning, Bangor University. Any complaints or grievances should be addressed to Dr David Sullivan (d.sullivan@bangor.ac.uk), Chair of the Ethics Task

APPENDIX 2.4.7 Letter to case study school head teachers

Group. Your Local Education Authority has already given its approval for the study. Ms Bethan James of Cynnal is the nominated contact person.

I will telephone in two weeks to see if you are interested in taking part.

Yours sincerely,

Sheila (Bennell)

College of Education and Lifelong Learning, Bangor University

OUTLINE OF RESEARCH

Sheila J Bennell, College of Education and Lifelong Learning, Bangor University

Research question:

How does ESDGC competence develop in primary schools?

Case Studies of six effective primary schools recommended by Local Authority advisers or Estyn inspectors, some of which will have given very high priority to ESDGC and some which have given other areas priority. The case studies will include:

- an interview with the Head Teacher (maximum of 2 sessions of 1 hour)
- an interview with the Chair of Governors (maximum 40 minutes)
- A questionnaire for all teaching staff (30 minutes in a shared session)
- semi-structured interviews with certain teachers such as the ESDGC co-ordinator, Green/Eco-Schools co-ordinator, Healthy Schools Co-ordinator, Heads of Infants/Foundation Phase and Key Stage 2 and key curriculum leaders. These interviews will build on their questionnaire answers. (30-40 minutes each)
- An exercise for all teaching staff to identify teachers' networks which relate to ESDGC (1.5 hour total in a shared session)
- A short individual structured interview with members of support staff (20 minutes each)
- examination of documentation and examples of pupils' work relating to ESDGC (where possible)
- small focus-group interviews with pupils (under consideration).

Appendix 2.4.8 List of school documents studied

Faban School

School website
Global Citizenship statement
Parent newsletter
School Council report
School prospectus
Powerpoint presentation of the school's ESDGC work
Inspection reports
Certificates of achievements
Photographs and wall displays of pupils' work

Llefn School

ESDGC policy
Geography planning documents
English planning documents
Application to the British Council for joint curriculum planning projects
Portfolio for International School Award and teacher evaluations
Elanguages project planning documents
Lesson plans on global education, English and geography
Foundation Phase lesson plans
Report on ESDGC to the school's governing body
Photographs of activities
Wall displays
Examples of pupils' work
DVDs and videos made by teachers and about the school by external organisations
School website
News articles about the school
Articles in ESDGC N-W Wales Forum newsletter
Inspection reports
Certificates of achievements

Appendix 2.4.8 List of school documents studied

Gyrn School

ESDGC policy

Wall displays of pupils' work

Inspection reports

Certificates of achievements

Example of auditing form

Film of pupil activities

Bera School

ESDGC policy

Wall displays of pupils' work

Presentaton of school's Foundation Phase work

Inspection report

Drosgl School

Wall displays of pupils' work

Inspection report

Appendix 2.5 Example of manual coding of Faban interviews

Staff development, courses etc

Key: Training courses ITET Help in school Career stage WAG documents suggestions
for other teachers benefits

S: Have a lot of staff been on training courses?

1F: No, not a lot of the staff have. And we hope that with the grant system – the big one now of £5000, that more will be able to go over to XXXXX. But it doesn't really involve... there needs to be more than that. That's just one small part of it.

S: So. There needs to be more courses, or..?

1F: Maybe different people going on them rather than the same one. But it's hard though isn't it, because if the coordinator is supposed to coordinate, and things change and they haven't been on the course, someone else has been on the course, the information doesn't always...

S: So what's the answer, someone going on a course and then holding a session back at the school?

1F: It's not the same.

1F: There's only so much money as well isn't there? XXXX (2F) tends to have staff training on a Monday night after being (on a course). All the staff, but it's not quite the same.

1F: Because they've been [on the course] for a day, and she has to report it all in an hour

S: And XXXX this year is helping XXX Primary School as well?

1F: Yes she is. But they've got to establish some working group with a school in India haven't they?

S: And XXXX has been on the global schools partnerships' course as well hasn't she?

1F: Yes. Several times I think.

S: Great. So how do you know how many of the staff have had training?

1F: Only XXXX I think, and me. Just XXXX and me.

S: And do you include support staff in your sustainable development work?

1F: Yes, they take part in the projects, but they don't stay on a Monday night, so they don't get the same training.

S: Is there any kind of other training that you want, or you'd like to get in the school?

1F: I think we go after things ourselves a lot here. Things from Estyn – they have documentation about community cohesion. They have documentation about everything, so... because everything goes towards Estyn and the inspections, you look at that and think, are we doing this, are we doing that? But, I'm not sure if we're doing it because of Estyn and the inspection or because... we need to start questioning ourselves as well, don't we? Why are we doing it eh? Someone else says 'it's a good idea'?

2F: Coordinator

2F: Yes. I did an A Level in Geography, and a GCSE as well, and I really enjoyed it. Of all the subjects I did in school, I enjoyed geography. Then I thought the next step would be to study for a degree in Geography as well, and then go on to the education degree, and I think that influenced a bit – the things I did in my degree in Aberystwyth really, I feel it helped me understand more about geography. And global citizenship comes in hand in hand with that, and the sustainable development as well. I think the interest came from there.

S: What about the influence of the training to be a teacher?

Appendix 2.5 Example of manual coding of Faban interviews

2F: To be honest, because I only did a year there wasn't a lot at all about this subject as it were, but since I've arrived at the school – because we had geography lessons and all that, but there wasn't much talk about global citizenship and sustainable development – but since arriving here and going on lots of courses so since then really my awareness has been raised about how to develop it within the school, and we've been on numerous courses as well.

S: Is there anything you want to say about any of the experiences you had in developing?

2F: The courses yes? Um... I've been on many of them to be honest. I got a lot of courses, you know. I've been not just on the courses they hold locally, but we've been further afield as well. We've been in mid Wales, and down to the south as well. We've been to a few of the British Council seminars as well, which are an eye opening experience, and you know those that are organised, the global citizenship conference, I've found those very useful. I can see then where to go back and pass the information on.

S: How useful are the documents from the Assembly?

2F: Yes, they have been useful, especially recently. We felt that we didn't do as much with the sustainable development, so what we've done is we've had the frameworks from them that have been published – I know it's not statutory, but it's there to help us isn't it, so we've managed. What I've been doing recently now, in the last few weeks, is sitting down and mapping out where we need to get to with the sustainable development aspect. They have been very useful – I do use them – because there are examples as well of how to develop it, which is good, you know, because they tell you how to get them to be global citizens. Then there is an example of what you should do with the kids – I found that... they're very useful, aren't they?

S: Very good. Great. Is there anything else here? Do you think the timing of your career has had any influence? You know, you've been teaching for...?

2F: This is my fifth year, yeah. Yes, yes, I feel because I've been here for five years, I know a lot more about the subject now and I'm confident to do it now, because at the start it was all new, but

Teacher 3F:

S: Have you done lots of professional development in this area?

3F: Not in this field, no, only what I mentioned about Green Schools

S: How useful have the ESDGC document been? The Common Understanding and things like that?

3F: of course, I am aware of it but I don't deal with it every day! It's useful depending on what I'm doing, yeh.

Suggestions for other teachers?

St yes, speak with other people, that know more about the subject than I do, for example

Teacher4F

S: so has there been anything in professional development that you've done?

Appendix 2.5 Example of manual coding of Faban interviews

4F: **Not to do with this**, But I have an interest to develop it further.

S: Have you seen the documents from the Assembly, the Common Understanding for ESDGC?

4F: **No**

S: right. There's one for new teachers also. It's great for subjects so perhaps XXXX has been using it

Teacher 5:

5F: **in College, in my subject**

S: did you do it in any particular things in the college

5F: No. It wasn't included like that in the College but **we had to do a project on** it and **I have done an assignment** on it

S: what kind of project, do you remember?

5F: Not well, no. I did my degree through English and **it's difficult to remember the project**. It looked like... and things like the environment came in too.

S: so **nothing sticks out**

5F: **Well, we didn't do a lot to be honest**

What subject did you do?

5F: Mathematics

S: do you know about the documents from the government?

5F: **yes**

S: what do you think of them?

5F: **I wouldn't say a lot as a teaching resource but they more or else explain what the subject is about**, instead of giving ideas in a subject.

S; the second page of the resources give some ideas. Have you seen the document for **new teachers**?

5F: **Na**

S. it should be of some help to you. I'll send you a copy. So there's nothing especially which has inspired you?

5F: No

5F: no, i don't think so. No. Perhaps if there were **more resources** I would do more of it I'm sure. **There's not any courses either, no HMS**

S: Would you like to go on a course. Yes it's difficult because I suppose you have to go on courses to do with maths?

5F: **exactly, that's what it is...**

Appendix 2.5 Example of manual coding of Faban interviews

S: there was a course 2 years ago on maths and ESDGC so we'll see if they do it again. There's been one on science recently so the advisers do know about it

5F: There is so more emphasis on doing it but in order to do so there need to be more courses.

S: is there anything especial in the New Teacher EPD course?

5F: I've had some courses but we haven't done anything of it.

Teacher 7F:

Do you remember at all, I'm sure it quite a bit of time since you did your training?

7F: yes 12 years (check questionnaire)

S: Do you remember doing anything then, in that course?

7F: No, nothing at all.

S: what year did you graduate? 7F: 2004

S: oh right? The reason I'm asking this is that a lot of people have done a lot of work over the years on this aspect but, of course the course is short really. The BA course was it?

7F: yes, I don't remember it anyway.

S: What was your course? 7F: Music and Design and Technology

S: you didn't do anything with Ruth? 7F: no

Have you had any kind of training or ..?

7F: I have an interest in it. I was on one course two years ago on PSE and Citizenship.

S: Oh yes

7F: I went on that with XXXX and then that showed..; before that I hadn't realised that PSE and citizenship came under the same thing, so then it was 'oh right, OK, we can share more things, bring things together.

S: And do you have any suggestions for other teachers or new teachers who come into the school?

7F: Ehmm, I think it's... I'm not sure how to explain this. There are no.. we haven't got any training courses in the school. I haven't been on any course. I haven't seen anything that's specific and says 'This is what it is'. Do you understand. I'm not sure if I'm explaining it well? The course I did go on was PSE and Citizenship and I hadn't realised – oh these are two things that go together.

S: I've got a powerpoint if you'd like it? A lot of people have said the same thing actually, that they haven't had specific training and they're not sure exactly what they can do.

7F: Yes, you just think, I'll look at some country but you don't know. There are so many factors. Yes.

Appendix 2.5 Example of manual coding of Faban interviews

S: Because your work with the garden, it fits into Green Schools, doesn't it?

7F: yes, it does

Teacher 8F:

just perhaps teaching?. Its's....Perhaps because have a unit that we have to teach. I don't feel I have to push the thing because it's interesting, because I enjoy doing it.

S: What is the unit, sorry?

8F: ehmm, It's on the web in detail, I don't remember too well.

S: Do you do it as part of PSE?

8F: Yes, it comes into PSE, global citizenship, getting to know each other, why are we special and different.

S: So it's something that you have found on the web?

8F: Yes, it is. There are units for education there and it recommended this one.

S: Have you had any professional development in this area?

8F: ehmm, since September I've been doing this so there's been no course since then. Oh, I am going on a course on Healthy Schools next week.

S: Have you used the documents from the Assembly at all, the Common Understanding for ESDGC or the one for new teachers?

8F: I haven't looked at them, no.

S: What about your training as a teacher? You did it fairly recently?

8F: Yes, I did the PGCE course in Bangor.

S: Was there anything? 8F: No,.. no. As I remember, no.

S: You graduated in 2008, yes?

8F: Ehmm, perhaps with new teachers, what would have helped me, I think, would to be to do more in the college, yeh more of thinking about it in the college I think.

8F: The year I did was just a short burst of everything because we were out in schools a lot and didn't have a lot of time – PE, History, Art so it would be useful if it was introduced so that we are knowledgeable about it.

We didn't really do anything on the thing,(ESDGC) on it till September (in this school) and then we did a project from September to Christmas on the school garden, the new school garden, so that's what we did from September to November.

And if I need any advice I ask XXXX in Year 2 who is responsible for citizenship, then..

S: So you really didn't have anything in your early professional development.

8F: No, well, perhaps I just don't remember but nothing has stuck. NO, I don't remember it

Appendix 2.5 Example of manual coding of Faban interviews

Teacher 9F:

9F: The co-ordinator is great, she's fantastic

9F: I haven't been on any courses, you know. (thinks) No ... no

S: Have you seen the documents from the Assembly?, the Common Understanding which gives examples of what to do in the classroom?

9F: No, I've not seen those. XXXX has those.

S: I've got some spare copies if you would like one. I can bring one next time I'm up. They just show learning outcomes and examples across the class

9F: I've seen XXXX using them, for example when we had the Fair trade week and so on, she gave us examples

What about your experience of training as a teacher? Was there anything in your course at all? When did you qualify?

9F: I qualified in 2007. I don't remember.

S: Did you do the PGCE course or..?

9F: No I did the BA. I remember doing Geography and it was part of it. I don't remember doing anything special on it. No.

S: We had a project on it in 2001-4 and those who graduated in that period tend to remember and after that I think it went down a bit and it's risen more again recently. It doesn't look so good for us (laughs) but it's important to know because the course is so short isn't it.

9F: No, as I said, I haven't had the opportunity to go on any course and I don't see courses coming up often either.

S: And do you have any suggestions for other teachers or for new teachers?

9F: Well, I'm not... no, to be honest. I'm still learning myself, .. but with dancing I would, that's... with that you can teach a lot to children in a way, especially with Key Stage 2 children who can write. They can learn a lot from something unusual. We do it naturally, with Reception ('Derbyn') and year 1 (a'r flwyddyn 1.) It's a different way to try and give an idea to a child about different children, because that's important isn't it? (18.06)

S; But you'd like to have more training yourself?

9F: Yes

S: It's useful information to feed back. They know there's not enough about. LL was saying this morning that because there's not a lot of money you have to choose what is most relevant to you.

9F: Yes exactly

Teacher 10F:

S: have you been on any courses?

Appendix 2.5 Example of manual coding of Faban interviews

10F: no I haven't had any course and perhaps that's has to do with (not knowing), professional development.

S: so you've been on no courses, not with Elin Burns?

10F: no, the tendency is for the Foundation Phase to play and things like that therefore they don't start that No, therefore

S: Ok, so there's nothing else to say on that. Have you seen the documents from the Assembly at all?

10F: no, the only thing I've seen from XXXX is the Global Citizenship

Teacher 11F:

11F: I didn't receive training on this.

S: You were in Bangor?

11F: yes

S: there's a little more in the course now.

11F: I did the PGCE course, course of 1 year. There was no mention of it at all.

S: and to do with you competence in this area, where has this come from? Has it come from development in the school or? How have you learned teaching skills in the area?

11F: talking to the Coordinator and the subject co-ordinators in the school. That's what's helped me. And it comes into lots of subjects; when you're teaching Welsh or English or when you're teaching music etc; that's what it's been for me.

S: so you have had some help

11F: yes a little bit from the co-ordinator, yes and from the head because she is from, was born in Sri Lanka, and it's a country where she has lots of knowledge? (gampa?),

S Have you had any professional development?

11F: No. Nothing at all

S: Have you used the documents from the Assembly at all? The Common Understanding for this area

11F: na. The co-ordinator does it and gives it out to us.

?She has given you examples of things?

11F: yes S: out of the document? 11F: yes

11F: to this field, yes? I have an interest, yes but I am not very sure where to go in the field because I haven't been on a course or anything else. I had the opportunity to go to one meeting when we were trying to make a link with China and I enjoyed that. I have the interest but it is complicated for me being so new. Therefore I could develop it more than I am doing but I feel I am doing my best with what I know and I would need more 'adbornth' to me to continue to learn about it better.

S: so there's a need for training?

Appendix 2.5 Example of manual coding of Faban interviews

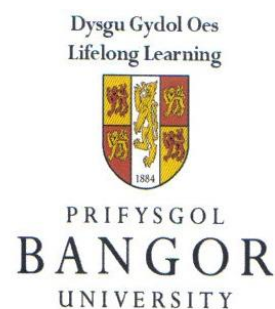
11F: training maybe, but help perhaps. I think ideas about how to make the subject more cross curricular. I think that's the need.

S: It sounds like it's a help have a co-ordinator

11F: yes, definitely. It's thanks to her that I'm doing as much as I am. Because the school is doing an awful lot, we are doing a lot.

Appendix 2.6 Ethics approval

COLEG ADDYSG Y CELFYDDYDAU A'R DYNIAETHAU
COLLEGE OF EDUCATION ARTS & HUMANITIES
YSGOL ADDYSG A DYSGU GYDOL OES
SCHOOL OF EDUCATION & LIFELONG LEARNING



10 December 2008

Mrs Sheila Bennell
World Education Centre
College of Education and Lifelong Learning
Normal Site

Dear Sheila,

RE: APPLICATION FOR APPROVAL OF POST-GRADUATE RESEARCH PROJECT BY THE ETHICS COMMITTEE

Thank you for submitting an application for approval for the ESDGC in the School Curriculum in Wales, which was considered briefly at the last Ethics Task Group meeting on 28th November. Following receipt of comments from members of the group not present at that meeting, the application was dealt with by expedited review.

I am pleased to inform you that your application was approved by the Task Group and you may continue with your research.

Yours Sincerely,

Dr. David Sullivan
Chair of the Ethics Committee.

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RESULTS APPENDICES

Appendices 3.1 - 5

APPENDIX 3.1 List of Faban School's ESDGC-related activities compiled from teacher interviews

Key:

SP = related to school links and partnerships	Sch. = whole school activities
MC = multicultural activities	Cl = classroom activities
Env = Eco/Green School activities	PC = Pupil centred, Activities using the existing knowledge and understanding and experiences of the children
H = Healthy School activities	Act: pupils taking action
Ch = Charitable activities	Misc = Other activities
Sk = skills-based activities	current = Current affairs
Glob = Global activities	

ACTIVITY	Years	Type of activity (see key)
Whole school/ all classes		
SE Asian visitors and visitors from other countries (all)	Whole school	SP,
Chinese day (all)	All classes	SP, MC
Raising funds for water in SE Asian School	Whole school, school council	SP, Act
European Day	All classes	Sch, MC, Glob
Eco School Bronze	Whole school	Env, act.
Green School going for gold	Whole school	Env, act.
Healthy school working towards level 4 – more on school environment to come	Whole school	Sch, HS, Env, Act
Growing vegetables (all)	All classes	Env, act, consumption
Garden, planting in classroom (yr 4 and all)	All classes	Act
RSPB visit (all)	All classes	Env.
Man from Council talking about recycling	All classes	Consumption and waste
Fair trade assembly, coffee evening, hamper	Whole school	Global issue, Act
Children help to design and make garden; magazines, costs	All classes; year 4	All classes, Act
Anti-Bullying week	All classes	All, act
School council – lot on raising funds e.g. Children in need, Haiti; plus letter writing about local issues	All classes	PC, Sch, Ch, Act
Cooking club, parental help e.g. Pakistan	Available to all	HS, PC
Classroom activities		
Class councils		PC, Act
Maps in every class showing children's connections (all) and map in foyer shows country links)	All classes and whole school	PC, Geog
We ourselves them and comparing with Sri Lanka	Infants, Reception class	PC
Arts grant for Artist in school – work on elephants – Sri Lanka and totem pole with masks for Sri Lanka and big map	all infant classes	SP, art
Music from other countries (SE Asia) ensemble plus using instruments	Infants and others	SP, MC, music
Clothing from other traditions (FP)	Foundation Phase	PC, MC
Travelling themes – made passports (FP)	Foundation Phase	PC, Geog
Finding out about children in the class	Yr 2 Foundation Phase	PC, MC
Made a book for Chinese pupils on Welsh poems and a tape and	Infants, yr 1	SP, PC, MC,

APPENDIX 3.1 List of Faban School's ESDGC-related activities compiled from teacher interviews

CD to go with them and we record them singing and we out the words in so they can learn. Also songs back from school in China on CD		English, music
climate with weather theme	Infants	Geog
Chinese New Year	Infants	MC, SP
Habitats - What lives in the garden	Infants	Env
Dance from different countries, traditional + music and dressing up (Babanod + juniors)	Infants, reception, yr 1, yr 2	PC, MC
Preparing for special days (infants and FP)	Foundation Phase and Yr 2 Key stage 1	MC
Activities from Global book adapted for class	Infants	Glob.
Toys in history	Yr 2	PC, MC
Animals and us	Yr 3	Env, science
Emails to and from Sri Lanka (one letter back)	Year 1-6	SP, ICT
PSE unit Living in a diverse World – all juniors, uses children's experiences	Years 3-6	PC, MC, PSE
Discussing Haiti, raising money	Yr 3, all classes	Geog, Ch, act
Show racism the red flag competition (juniors?)	Years 3-6	PC, glob., act.
Experiences of children going to Mosque	Years 3-6	PC, MC
Self portraits	Yrs 3 and others	
English story from China	Yr 4	SP, MC, English
Story from China translated into Welsh work in China info leaflet China emails stopped before they reached school	Yr 4	SP, Welsh, ICT
Swapping projects with SE Asia (all years) e.g. recycling (yr 4)	All years; yr 4	SP, Env, etc
Receiving books of project work from Sri Lanka		
Books made by SE Asian children		SP, Eng
Art project with Italy beginning		SP, art
Using children's experiences e.g. Iraq and Pakistan, discussion	Yr 4	PC, skills, Glob, MC, Language
Victorian age cf to children's recent experiences in school in Iraq, wedding etc (Gw)	Yr 4	PC, MC, history
Potato Council competition (?yr 4)	Potato Council competition (?yr 4)	Potato Council competition (?yr 4)
QCA lesson plans on introducing global	Yr 4	Global issue
Parental involvement in Indian dance, Bollywood		PC, MC, dance and music
Jewellery - cf to Russia (parent) (yr 4)	Yr 4	PC, design and technology
Global Citizenship community cohesion (?)		
Composting (to come)	Years 3-6	Env
Making artistic bird baths		Env, art
Business plan for enterprise selling vegetables	Yr 6	Env, entrepreneurship
Healthy eating	All classes, whole school	PC, HS
History - slavery and local links, Castle, Caribbean	Yr 4	Glob., PC
Weaving tied to Patagonia research and study	Yr 4	Geog, Design & Technology, ICT, MC, Glob
Activities on Creation and environment	Yr 5	Env, Religious Education
Work on children's rights	Yr 6	Glob.
RE: Christian Aid and work on poverty	Yr 6	Glob., Ch, Religious Education

APPENDIX 3.1 List of Faban School's ESDGC-related activities compiled from teacher interviews

Specific skills and child centred activities mentioned		
Making decisions		Sk
Solving problems (yr 5)		Sk
Children led activities		PC
IT searching, discussion (Babanod)		PC, Sk, ICT
Children come in and ask questions, leads to activities		PC, Sk
School Council action		PC, Sk
Diamond ranking (yr 6)		Sk
Grids, discussion (yr 6)		Sk
Using Oxfam and other GC materials throughout school to develop thinking skills (Ff) – partner working on questioning photos etc		Sk, Glob.

APPENDIX 3.2 List of Llefyn school's ESDGC-related activities compiled from teacher interviews

SP = related to school links and partnerships	Sch. = whole school activities
MC = multicultural activities	Cl = classroom activities
Env = Eco/Green School activities	PC = Pupil centred, Activities using the existing knowledge and understanding and experiences of the children
H = Healthy School activities	Act: pupils taking action
Ch = Charitable activities	Misc = Other activities
Sk = skills-based activities	OSL = out of school learning
Glob = Global issues	Current = Current affairs

ACTIVITY	Years	Type of activity (see key)
Whole school/ all classes		
Green School		Env
Healthy School		H
International Schools award		SP
School council (looking at Green school actions), discussing with Governors		PC, Act
School partnership Jamaican school including visits and ELanguages projects (ICT)		SP
School partnership – Chinese school including visits and ETwinning projects		SP
Visitors: Benjamin Zephaniah Martha (Zambia) Yasuf Afari (Jamaica)		SP, Glob.
ESDGC topic related art	All classes	Art, Glob
World music, music from Caribbean, China	All classes	Music, Glob, SP
Earthquake in China – outside speaker + reading newspapers, raising money	All classes	Glob, SP
Whole school art displays – e.g. slavery, China, fairtrade	Various classes	Glob, SP
Similies Wales, China, Caribbean	Several classes for E-languages	SP, language
Classroom activities	Years	
With Caribbean school		
Penpals with Caribbean pupils	5 and 6	SP
Anti racism video + reading Journey to Jo'berg	5 and 6	Glob., SP
Slavery video, visiting Maritime museum in Liverpool	5 and 6	Glob. SP
Working to be a Fair trade school	5 and 6	Glob, Act
Fair trade activities with Fair trade schools officer	5 and 6	Act
Comparing yard games	5 and 6	Physical Education, SP
Fitness and Healthy School	5 and 6	Physical Education, H
Human Rights	5 and 6	Glob.

APPENDIX 3.2 List of Llefyn school's ESDGC-related activities compiled from teacher interviews

Reggae dancing, Caribbean clothes	5 and 6	SP, Glob
Caribbean Poetry (with visiting poet)	5 and 6	Language, SP
Learning Patois and comparing to the Welsh Not (Welsh forbidden era)	5 and 6	Language, SP
Learning French	5 and 6	French
E-Languages projects	5 and 6	SP
Audit of wild flowers and preparing resources for younger pupil	5 and 6	Env
Coordination of rubbish collection on the estate	5 and 6	Env
Right to Education project on the Maasai with Oxfam-funded visitor	5 and 6	Glob.
Emailing Chinese school and penpals	5 and 6	SP, ICT
Biodiversity fieldwork for several days at a Snowdonia outdoor centre	5 and 6	Env
Europe	5 and 6	Glob
World Music	5 and 6	Music, Glob
Lesotho and religious education	5 and 6	Glob, RE
New government, action and changes		Current
Recycling, composting, wasting electricity	5 and 6	Env
Learning about diversity – globally and in Wales	5 and 6	MC, Glob
Global climate and climate change	5 and 6	Climate change, Glob
Making connections - Globingo	5 and 6	Glob, connections
Where do our Jeans come from? + impact on others	5 and 6	Connections, Glob.
Gardening project with a gardener in a valley close to school	Years 3 and 4	Env
World Music	Years 3 and 4	Music, Glob
Visit to recycling centre and poster work	Years 3 and 4	Env, art
Sports and games - comparison with Caribbean	Years 3 and 4	Physical Education, SP
Learning national anthems	Years 3 and 4	SP
Penpals and Christmas cards (Caribbean) and penpals (China)	Years 3 and 4	SP, language
Learning and teaching about Botswana (Kabo's day) + art	Years 1 and 2	Glob, art, reading
Learning about China + art	Years 1 and 2	Glob, art
Learning about earthquake in China	Years 1 and 2	Glob, SP
Learning about Aborigine life + art	Years 1 and 2	Glob
Learning about Canada	Years 1 and 2	Glob
Special days (countries, fair trade etc)	Foundation Phase	Glob, act
Questionnaires	Foundation Phase	maths
Rubbish and recycling	Foundation Phase	env

APPENDIX 3.2 List of Llefyn school's ESDGC-related activities compiled from teacher interviews

World Music	Foundation Phase	Music, Glob
Caribbean and China – similarities and differences with Wales	Foundation Phase	SP
Questioning photographs	Foundation Phase	Sk.
Playing outside	Reception	PC,, Physical Education
Learning about insects, other animals	Reception	Env
The seasons	Reception	Env
Emphasis on the children themselves	Reception	PC
Environment in the local area, photographs, journeys each month	Reception	PC, Env
Building a sustainable house	Reception	Env
Recycling and recycling boxes, visit to kitchen to look at recycling issues	Reception	Env
Making recycled musical instruments	Reception	Music, Design and Technology, PC
Tai Chi	Reception	Physical Education, Glob.
Tasting Chinese food, using chopsticks	Reception	Glob, PC
Visit to Chinese restaurant (proposed)	Reception	Glob
Planting vegetables and making soup	Reception	Env, act
Making a small wildlife garden	Reception	Env
Collecting supermarket tokens for seeds and tools	Reception	Act.
Specific skills and child centred activities mentioned		
Discussion (with each other and e.g. Governors)		Sk., PC
Direct experiences		Sk., PC
Language learning		Sk., language
dancing		Sk. physical
Developing empathy		Sk., attitudes
gardening		Env, Act.
Recycling		Env, act.
Making music, singing		Music
reporting		Sk, Act.
enquiring		Sk,
Using implements		Sk
Role playing		Sk,PC
Learning to respect others		PC, MC
Making connections		Sk.
Seeing similarities and differences		Sk.

APPENDIX 3.3 List of Gyrn School's ESDGC-related activities compiled from teacher interviews

Key:

SP = related to school links and partnerships	Sch. = whole school activities
MC = multicultural activities	Cl = classroom activities
Env = Eco/Green School activities	PC = Pupil centred, Activities using the existing knowledge and understanding and experiences of the children
H = Healthy School activities	Act: pupils taking action
Ch = Charitable activities	Misc = Other activities
Sk = skills-based activities	Current = Current issues
Glob = Global issues	

ACTIVITY	Years	Type of activity (see key)
Whole school/ all classes		
Visit from Country recycling officer	Whole school	Env
School council every Tuesday	Whole school	Act.
China Day – celebration, similarities and differences, Tai chi, Chinese food, music etc	Whole school	SP, glob.
Southern African day - similarities and differences	Whole school	SP, glob
Gwyl Dewi – celebrating Welsh identity	Whole school	Identity
Service on climate change by the children for Urdd Goodwill day	Whole school	Climate change
Mad a calendar of children eating for China and return emails	Whole school	SP, ICT
Fairtrade day, making cakes etc inviting parents and community, working towards becoming Fairtrade school	Whole school	Act., Glob.
Fruit shop in school	Whole school	H, act.
Project <i>Send a Smile</i> , Blue Peter project making hospital gowns for developing countries	Years 3-6	Glob.
Green School activities	Whole school, all classes	Env., act.
Healthy School activities	Whole school, all classes	H, PC
Deciding on which charities to support and raising funds	School council and class councils	Act., PC
School garden, working with Young Farmers, learning to raise chickens with local expert	All years	Act.
Classroom activities		
Link with school in China – writing, joint projects	Years 3-6	SP, language
Link with school in Lesotho - similarities and differences and links, day in the life of a child	Years 3-6	SP, PC, geography
Using First News children's newspaper, Weekly session on big issues, children have free access each day – topics. Afghanistan, 'the jungle' in Calais, refugee and asylum issues	Years 5 and 6	Current, Glob.
Stories from other countries	Years 5 and 6	Language, Glob.
Recycled art	Years 5 and 6	Art, env.
Looking at wildflowers, doing art work and making a resources for the infants	Years 5 and 6	Env., act.
Southern Africa – similarities, differences, climate change	Years 5 and 6	Geography, SP
China	Years 5 and 6	SP
Energy audit	Years 5 and 6	Env.
Recycling issues and water use	Years 5 and 6	Env.

APPENDIX 3.3 List of Gyrn School's ESDGC-related activities compiled from teacher interviews

Journey of wheat seed, food miles, food packaging, growing the seeds		Env., Glob, sustainability
Entrepreneurship and ESDGC – reading news on food miles and climate change, deciding on plan in school council, planning a hen business to sell eggs, raising funds for this through fair trade part – all arranged by pupils		Sustainability, Act., entrepreneurship
Fairtrade activities		Act, glob.
Recycled art	Years 1 and 2	Art, env.
Learning about Lesotho	Years 1 and 2	Geography, glob.
Kabo's diary – learning about Botswana	Years 1 and 2	Geography, glob.
Stories from other countries e.g. Ffair and Crempogau tp promote empathy		Reading, language, Glob.; sk.
Forest school type activities	all	Sk, act., env
Growing – growing, gathering, eating, mention climate change	infants	Env, act., climate change
Using artefacts from different countries e.g. India, China, Lesotho	juniors	Glob, SP
Learning about Canada through link with former pupil, weather in Canada c.f. to Wales	juniors	Glob.
Nature walks, learning to look after land around school	all	Env.
Health and healthy eating	all	H, PC
Specific skills and child centred activities mentioned		
Circle time		Sk, communication
Researching		Sk.
Thinking for themselves		Thinking skills
Reading and analysing news stories		Sk, analysis, deduction
Sharing ideas with each other		Sk, communication
Making decisions – e.g, school council		Sk, act.
Planning events		

APPENDIX 3.4 List of Bera School's ESDGC-related activities compiled from teacher interviews

Key:

SP = related to school links and partnerships	Sch. = whole school activities
MC = multicultural activities	Cl = classroom activities
Env = Eco/Green School activities	PC = Pupil centred, Activities using the existing knowledge and understanding and experiences of the children
H = Healthy School activities	Act: pupils taking action
Ch = Charitable activities	Misc = Other activities
Sk = skills-based activities	Current = Current affairs
Glob = Global activities =	OSA = out of school activity

ACTIVITY	Years	Type of activity (see key)
Whole school/ all classes		
Fair trade shop	all	Act, glob.
Operation Christmas Child	all	Act, glob
Collecting for charity – e.g. thanksgiving service, Christian Aid week	all	Act., glob.
Fair trade week activities, with parents etc	all	Glob, PC
Healthy School	all	H, act
Green School Gold level	all	Env, act
Visit from local Chinese stallholder – language and dancing	all	MC, Language awareness, Physical education
Urdd Message of Goodwill – climate change, with parents	all	PC, Glob
School Council		Act.
Classroom activities		
Work on Lesotho, China, India, Russia, Finland – always starts with a story and pupil questions	Infants	PC, glob., SK: thinking, listening, questioning
Gardening	all	
Dressing up, trying food, photos, using artefacts	Infants	PC, glob.
Travelling teddies with different backgrounds – go on holiday with pupils	Infants	PC, global
Fairness - stories	Infants	attitudes
World Cup South Africa	Key Stage 2	Current, Geography, Glob
Learning about water issues in Africa through Blue Peter programme	Key Stage 2	Glob.
Pompei and volcanoes	Infants, Key Stage 2	
Fair trade	all	
Visit to Coed y Brenin	Key Stage 2	OSA, env
Visit to Centre for Alternative Technology	Key Stage 2	OSA, climate change

APPENDIX 3.4 List of Bera School's ESDGC-related activities compiled from teacher interviews

Iceland volcano, experiments	Key Stage 2	Current, glob, science
Earthquake in Haiti	Key Stage 2	Current, glob
Work on local dam	Key Stage 2	Local history, PC
Chernobyl	Key Stage 2	Local relevance, PC
Landscape of the future	Key Stage 2	Geography
Start with a story - Stories based in other countries - questions	Key Stage 2	Reading, language, MC, global, thinking skills
Story on refugees	Key Stage 2	Glob, language
Climate change	Key Stage 2	Global, env, science
Particular skills		
Searching for information		Sk.
Communication		Sk.
Presentation		Sk.
Discussion		Sk.

APPENDIX 3.5 List of Droschl School's ESDGC-related activities compiled from teacher interview

KEY

SP = related to school links and partnerships	Sch. = whole school activities
MC = multicultural activities	Cl = classroom activities
Env = Eco/Green School activities	PC = Pupil centred, Activities using the existing knowledge and understanding and experiences of the children
H = Healthy School activities	Act: pupils taking action
Ch = Charitable activities	Misc = Other activities
Sk = skills-based activities	Current = Current affairs
Glob = Global issues	

ACTIVITY	Years	Type of activity (see key)
Whole school/ all classes		
Recycling healthy eating		Env, H
Fair trade (School)		Glob, act.
Eco school		env
Eco Council		Env, act.
School council		Act.
Global influences on music e.g. Smetana, Carl Jenkins	All classes	Music, glob.
Visitor from Lesotho	All classes	Glob.
Visit from a former Head teacher who works in Kenya – this led to raising funds through selling Christmas cards		Glob, act.
Fundraising for children in Uganda with the charity Beanie		Act.
Classroom activities		
New link with Turkish school, language learning and geography, art, dance, most subjects	Years 5 and 6	SP, glob.
Learning French and learning about France and other European countries	Years 5 and 6	Glob, language
World Cup, countries, South Africa, art	Years 5 and 6	Glob, geography, art
How countries celebrate Christmas	Years 5 and 6	MC
Chinese New Year	Years 5 and 6	MC
Divali	Years 5 and 6	MC, Religious Education
Games from other countries	Years 5 and 6	Physical Education, Glob
Local environment		Env.
Gardening		Env.
Recycling and Pollution	Year 1 and 2	Env.
Kabo's story (Botswana) and life in Botswana	Years 1 and 2	Language, glob.
Thanksgiving (bread from different countries + map)	Years 1 and 2	MC
Looking after the environment – rubbish, climate, recycling	Years 1 and 2	Env.
Fair trade	Reception	Act, glob.

APPENDIX 3.5 List of Drosgl School's ESDGC-related activities compiled from teacher interview

Healthy eating	Reception	H, PC
Chinese New Year	Reception	
Specific skills and child centred activities mentioned		
Eco school and Eco Council		Act, PC
School Council		Act, PC
Fair trade shop		Act
Recycling in classroom		Env, act
Researching for themselves		Sk.
Evaluating and considering		Sk.
Gaining knowledge through skills		Sk.
Teaching children to interact		Sk communication
Looking at children's lives in other countries		PC

APPENDIX 4 Comparison of teachers' descriptions of ESDGC and their views of its importance in education as a whole

FABAN

Description	Importance
In your own words how would you describe what ESDGC is about?	How important is ESDGC in education as a whole?
<p>1F (Head)</p> <p>SB: head places emphasis on identity but is aware of the others areas' importance too</p> <p>1,2, 3</p>	<p>1F: It develops the child with the awareness of who they are within their community, and who's who within their community. It teaches them how to relate to other people. It creates complete people. So I think that's very, very important, especially in the kind of world we are living in now. If they understand each other, and understand the differences as well. Know from when they are young. Maybe we have a hope of cohabiting/living together?</p>
<p>2F: I think it means that the kids are aware of the wider world, that they know the difference between us and people in far away places. And also not just the differences but also the similarities. It helps the children have empathy with other people across the world. It helps them become global citizens as well. I think that part of it is important. And then the other side is the sustainable development - how they can be citizens who look after the world, and looking at things like recycling, looking at what they could do in the garden, to grow things you know. We've started looking at that now. It's important really that we're bringing the children up to be... 'responsible citizens' is what they say isn't it... because the world is in their hands in the future isn't it, so it's up to them. I think that's really important – that they, that we, know the 'cultural' side of it, as well as, you know, sustainable development as well.</p> <p>1,3</p>	<p>2F: I think it's quite important because the thing is; it's not a subject on its own. It comes in to a lot of subjects you know? It happens naturally doesn't it – it happens in geography, it comes in to science, how to look after the world and all that. I think it's very important, and it goes hand in hand with a lot of other subjects that happen here anyway. You try to make it cross-curricular as well so it, so that's the way we do it. But it's very important because if the children were not aware of the wider world, or the importance of looking after the world, well their future isn't going to very bright.</p> <p>S: No point to education then...</p> <p>2F: No, exactly. So I think it's an important thing, and it should be developed.</p>
<p>3F: to me just it's a matter of the school helping the children so they know more about the world, know more about how other children live and which problems they are facing and also thinking of ways to help other children.</p> <p>3F: yes..., yes... everything links in the end</p> <p>1,2,3</p>	<p>3F: Well, I think it is really important and there is a place for it. I wouldn't say it is the most important, but certainly is important and everything fits together with each other, like a jigsaw, it's certainly part of the jigsaw in my opinion</p>
<p>4F: Well, global education, that the children learn about the world and how to look after the world, yes</p> <p>1,3</p>	<p>4f: Yes, it's important. It makes the children more 'goddedgar' (tolerant) I think, to different kinds of people, learn about different people who live in the world.</p>
<p>5F: links with other countries, with other schools, looking at how people in different countries live</p>	<p>5F: Yes, it is important and becoming more so at the moment with what is</p>

APPENDIX 4 Comparison of teachers' descriptions of ESDGC and their views of its importance in education as a whole

1	happening in the world and it's important that the children know about it, and how the children in other countries live.
7F: getting to know, learning about the world, I think 1	7F: It is important ehmm, important to them to know about their local area. I think it's important to emphasise that; and getting to chance to know about a wider area, what happens there. That's important too, to discuss with children in the school. There are children coming in having heard something on the news and asking what's happened. That's interesting to see they have an interest.
8F: ehmm, just information about living in a diverse world, knowing everyone, coming to know more about things outside of the school. 1	8F: Well, I think it is very important that children from the start know each other and it's important outside of the school too that they know that there is a wider society outside and they can be different. I think it's important that they know that.
9F: looking, looking.. what i see is how other schools are...what's going on that's different to us, what's going on that's the same to us 1	9F: I think it is really important. It's becoming more important I think, it's becoming more popular. I have taught a little more this year. I was teaching meithrin last year and didn't do very much. I'm teaching Derbyn now so I have more opportunity; I'm doing a little more with them. I think it's really important to them to know that there are children who aren't as fortunate as them; to understand how things work differently; that everyone isn't like them; everyone is different and work in different ways, in different countries, different peoples. I think it is really important.
10F: coming to know about the world out there and knowing about their own community, with young children at least. Learning about recycling and because the children in this school come from different places they learn about other communities in other parts of the world 1	10F: I think it is important from the point of view that they come to know each other and the cultures of others so we can live-together
11F: knowing about how an other country is run and lives and having a partnership with them so that the children and teachers can find out out they are different but the same as us.; how we have a bit more than some and to find out how we can help them and how they can help us; that education also is different. 12,3	11F: I would say that it is quite important because it opens eyes to children know that every child in the world doesn't live like them. I would say it's quite important.

APPENDIX 4 Comparison of teachers' descriptions of ESDGC and their views of its importance in education as a whole

LLEFN

Description	Importance
In your own words how would you describe what ESDGC is about?	How important is ESDGC in education as a whole?
	1L: I think it's all important, hand in hand with the Welsh Curriculum. You need both things to create a balance, because we live in a multi-cultural world, and our role is to prepare children for the big world outside, and going under the skin of, you know, different ideas and discuss respect and tolerance, and realising we are all one big family.
2L: Um. As a subject in the school – in general, before it becomes a subject it involves covering the world as a whole and making the most of the world and the opportunities regarding different nations and travelling, dealing with people from different countries and welcoming people from different countries to our country and celebrating multiculturalism, as well as protecting the world to ensure there is a nice world for our grandchildren to live in, and also to take an interest in and research all the differences that exist in the world regarding people and nature.	2L: In a way, for me, education works towards ESDGC, because in the end, that's where we live in the world, so every aspect of education contributes towards this. So, that's how I see the subject – as a subject that is overarching, where the other subjects feed into the children's understanding of where they are today and where they were in the past.
3L: Ehmnn that the children are part of, ... I select,..... on the part of global education that mars L2 organises the links with other countries and the British Council, that kind of thing but the sustainability that's more us with the Green School. That's how I see it.	L3: It's important that the children know about the world outside of their village, that is important.
4L: It means a lot in the children's education especially with aspects of Green School are exciting, I think that global education with the environment and working with the Gwynedd and Anglesey Green Schools scheme and we've working for the gold award and we look at the effects things have locally and also globally.	4L: Well it's gwreiddiol (basis of it all) I would think, very important, because we live in climate where there is so much emphasis on things that are in the Green School. I think the children enjoy the aspects.
5L: In general I would say Green School, International school	5L: In education generally for years 3 and 4, that they are aware of the aspects of the environment, the world and their local area too and perhaps more than anything in years 3 and 4 that they have a role to play in their environment. They won't be aware of all aspects until years 5 and 6 but in years 3 and 4 that and they aware that they have a role to play.
6L: That the children have the opportunity to learn about the environment, how to respect the environment, to respect people, how to be part of a community, how to look after the community they live in and other communities.	6L: Oh it's very important because the children have opportunities to learn about themselves, to compare themselves to other people, chance to learn about the environment, how to look after the environment. And I think, It's becoming part

APPENDIX 4 Comparison of teachers' descriptions of ESDGC and their views of its importance in education as a whole

	of the Foundation Phase now, I think it's becoming a natural part of children's education instead of something completely separate and what we are doing, taking the children out, learning about the trees collecting rubbish, noting, well how we use different things in the classroom.
7L: Well, community of the world, learning about the world, learning about people, learning about fairness, learning about fair trade, living healthily and sustainability.	Well its completely gwreiddiol (core to it) the most import to be honest. It's got to come through everything and if we don't respect the world, respect the person next door, we won't respect anyone. That's the answer.

GYRN

Description	Importance
In your own words how would you describe what ESDGC is about?	How important is ESDGC in education as a whole?
	1G It's exceptionally important because the principles and aspects are really important in a child's life in developing responsible citizens, honest people who are aware of Welsh identity, culture and values, respectful people, who can then take it into their home life - a full life (3.08) isn't it. It's not just a subject that is taught in school
2G: Well, I've been very happy with all the aspects.... I would say it different from other subjects in that it's completely included in the school and that it comes into different subjects, perhaps I shouldn't call it a subject because it's part of the ethos of the school, it's part of the school life. That generally what I'd say from my understanding	2G: Well it's very important. It's a basic thing, It's to do with life. It's become much more to the front. Only a little while ago it wasn't mentioned at all – it's a way of living rather than a subject
3G: Oh we look at countries and things and how they develop and the differences between them and us and so on	3G: Well, it comes in with lots of things, it's important that the children have empathy with what's going on in the world outside and not just in their own little corner.
4G: Raising children's awareness of the wider world outside of Wales which is about them and helping them to compare.	4G: I think it's very very important and also that it fist into the whole curriculum ehhmm as I said in the first question. It's important that our children become aware of children's lives in other countries which are very different to ours but also similar
5G: Well, as I said it comes into lots of different aspects in the classroom. The children more aware of the world outside and they are a working part of that, that it's a byd crwn (interconnected world) and they know they have responsibility for what happens around them. It's good for them. It's a good way of teaching. coming to know the world	5G: At them moment we're doing the themes of Growing in the classroom and that's brilliant. Three are so many things that come into that, there's growing in the garden. We grow seeds and we were thinking last week that we would be eating them, gathering them, and then we can mention climate

APPENDIX 4 Comparison of teachers' descriptions of ESDGC and their views of its importance in education as a whole

around them.	change and how it comes into that. Although they may not understand it a little we talk about things that come from far, far away..... It runs in to what we do. They are only 5 or 6 years old, they are small. They will understand more. (2.33)
6G: Ehmm, it's that we develop within the school community and the community as a whole and the world wide community	6G: It's very important that children are aware of things that go on around them, locally and in the world as a whole

BERA

Description	Importance
In your own words how would you describe what ESDGC is about?	How important is ESDGC in education as a whole?
	1B It's very important isn't it, that the children know about the world. That they know what is happening further afield than their home turf (square mile) kind of thing. And more than just geography lessons and history lessons about all these countries. It's more, deeper than that – what is happening for real in those countries.
2B Well, I think it means everything that's to do with the world – the world and the people and the climate, and the future of the world, and the world's past as well – and how that is going to affect, children especially. And how it <u>does</u> affect them at the moment. And try to pass the best values on to them about the world as it is at the moment, and what kind of world it will be for them in the future.	2B Yes, it's quite important. I think it's very important.

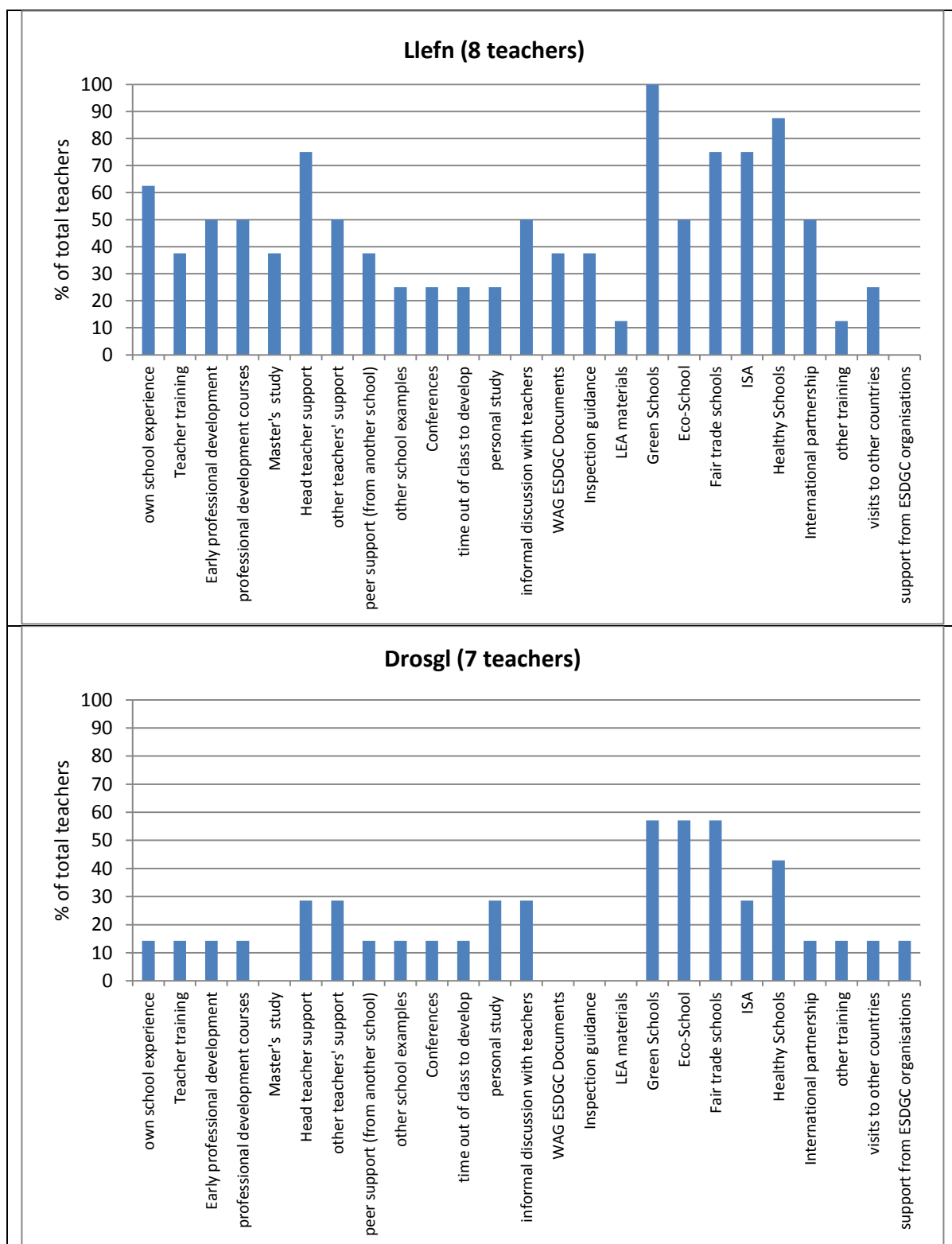
DROSG

Description	Importance
In your own words how would you describe what ESDGC is about?	How important is ESDGC in education as a whole?
	2D: Well I think it is very important, (interruption) It's important but it's important that it's done in a context and as well as , we've done a lot of things that have just arisen through , for example a European day, with a sploitch)big effort) on that. So a lot of things have arisen at this time, or if there is anything that has arisen in the news - they were talking about eh Tsunami this morning - then we would do a service on that. We have work raising money for Haiti, so we try to answer with information too. And we also have done things together, services all together and I think it's important in children's education that they see that the world is wider than themselves. That's what

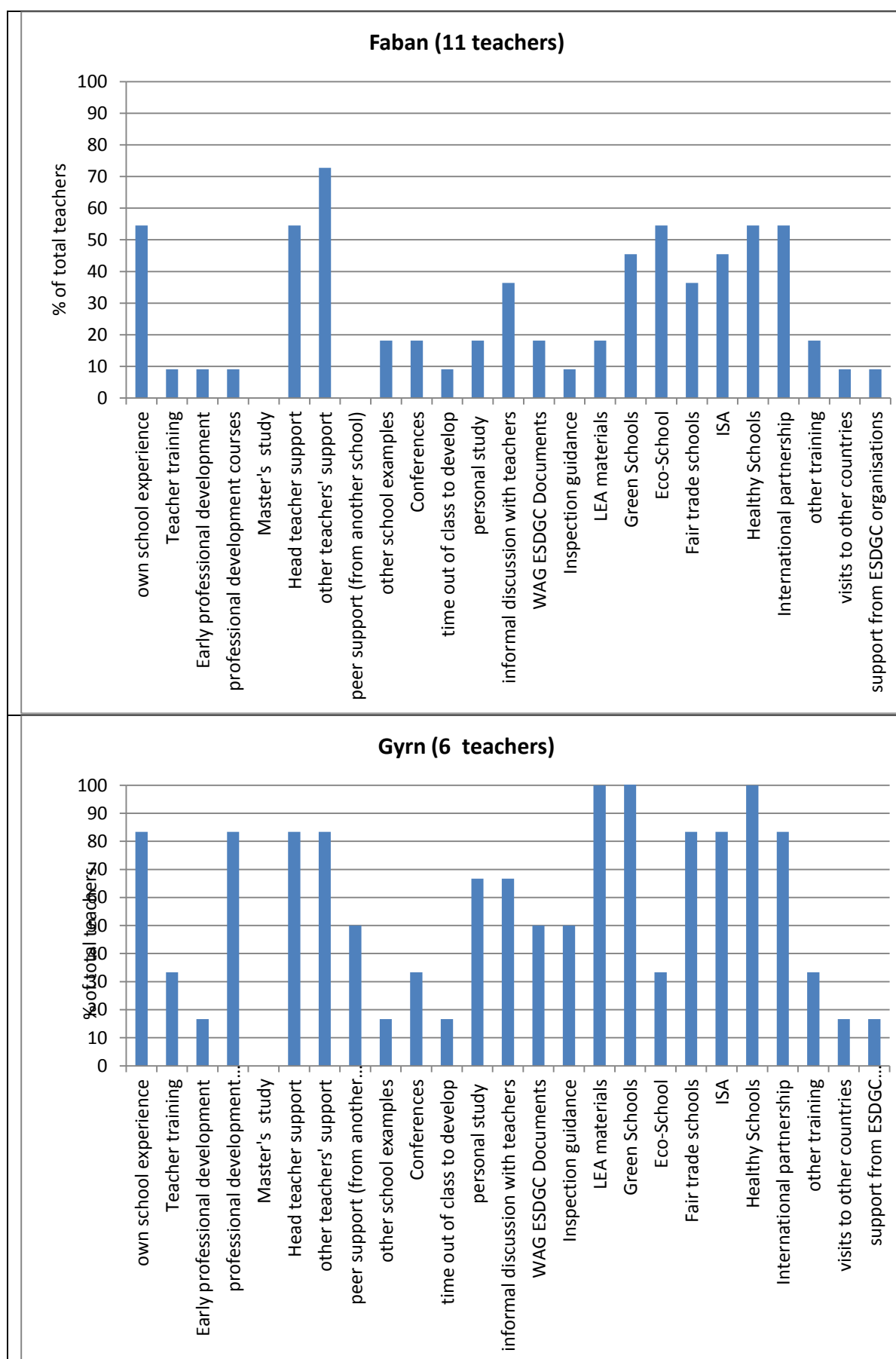
APPENDIX 4 Comparison of teachers' descriptions of ESDGC and their views of its importance in education as a whole

	we're trying to do anyway.
3D: Well, It ensures that they know about the world around them, they know about their local history first and then go wider. That's how I've usually gone about teaching, know the local and then go wider. I have made a link with a school abroad this term, so we're starting..	3D: I think it's very important because perhaps it doesn't, It will be a help to them in their careers and when they go to secondary school; perhaps they won't use it but they will have the knowledge. I think it's all important that they have they knowledge on behalf of interest. There's so much emphasis on the skills now that I feel the knowledge is being left out a little bit. So I feel it's all important that they have the knowledge as well as the skills. But on global citizenship I think its important that they know and that they understand too what the purpose is.
4D: Ehmm. It's to do with Healthy School, Eco School, recycling, knowing about religions and other cultures. Yes, But I know it's about more than that too.	4D: It's important for children to get to know about the world, yeh. It's very important, and especially in the society we live in.
5D: ehmm, because I am doing supply I don't do a lot in subjects because I'm not regularly in the school I haven't really got a hold of the subject in my teaching. When I was in the college, and with my time in school I did some thing with global and how people work in country further away, recycling, fair trade and things like that, yeh	5D: I think it <i>is</i> important and that children have the opportunity to learn in sessions like PSE to know about other people regularly.
6D: after seeing the questionnaire you sent I've noticed that, from seeing that, that is as a much bigger umbrella than we had thought before. I think we thought if we thought about, taught about someone living in another country, but there's a lot more comes into it too. I think also that the EcoSchool, there's a lot of things that happen in that too, I think, that go with what's suggested in ADCDF.	6D: I think it looks at different people, different ways of living in different countries, their climate, what's similar and different in people across the work, that we widen the square mile of the children, make it wider.
7D: Oh just teaching children about the world and how much diversity there is in the world really. You know and not to stereotype people and to see that there is a richness, that there is no need to be rich in money, things but that...Children think that poverty is not having a computer, no Ipod. Poverty can mean a lot of different things I would say and then I would say it's not just teaching children about countries in the world abut it's about their own country, how much variety there is in their own country.	7D: Well it's important that children learn to respect other people, to see that we are all people, never mind which colour, which language, which religion., that we respect difference and similarities altogether and that their lives can be richer because of this, by learning about other people. And that they appreciate the culture of other people too

APPENDIX 5 Comparison of factors affecting teachers' competence in ESDGC in the five case study schools



APPENDIX 5 Comparison of factors affecting teachers' competence in ESDGC in the five case study schools



APPENDIX 5 Comparison of factors affecting teachers' competence in ESDGC in the five case study schools

