

Education and Training Inspectorate



Report of an Evaluation on

Effective Practice in Education for Sustainable Development in a Sample of Primary, Post-primary and Special Schools in Northern Ireland

February 2010

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A number of quantitative terms are used in the report. In percentages, the terms correspond as follows:

More than 90%	-	almost/nearly all
75%-90%	-	most
50%-74%	-	a majority
30%-49%	-	a significant minority
10%-29%	-	a minority
Less than 10%	-	very few/a small minority



Section One

1. INTRODUCTION

This report summarises the findings of a survey into the nature and extent of good practice in environmental education and/or sustainable development (EE/SD) within a range of schools in Northern Ireland.

Many schools have been involved in a number of environmental initiatives and have engaged in a range of activities to promote environmental education and sustainable development. While this has not been a statutory element of the curriculum until now, such work has evolved often as a result of the interests and enthusiasm of a relatively small number of teachers and school leaders with a genuine commitment for environmental and global issues.

1.1 Survey Aims and Methodology

A key function of the survey was to highlight the characteristics of effective environmental and sustainable practice in schools. Such characteristics will help other schools develop a fuller understanding of the key element of Education for Sustainable Development (ESD) which is now a statutory requirement within the Northern Ireland Curriculum (NIC).

The intended outcomes of this report are to:

- inform and influence the Department of Education's (DE) strategy on Education for Sustainable Development; in keeping with other government departments, DE supports the Strategy for Sustainable Development for Northern Ireland (NI) and has committed itself to a range of actions and targets aimed at embedding sustainable development in all aspects of education in NI;
- raise awareness of and promote improvements in environmental education;
- assess the state of readiness in schools to address ESD;
- illustrate and celebrate good practice and to disseminate it to others; and
- establish a baseline position that could be revisited in the near future to determine the impact of ESD across the curriculum and the extent to which young people are developing as contributors to the environment.

The findings from this survey are based on evidence from:

- visits to 25 schools including 13 primary schools, three special schools and nine post primary schools (Appendix 1);
- questionnaires issued to 58 additional schools including a target sample of schools identified by the Non-Governmental Organisations (NGOs) and the Education and Library Boards (ELBs) as having good practice, together with a number of others that were selected at random. A copy of the questionnaire is included in Appendix 2;
- discussions with representative stakeholders from across the education service including the ELBs, the Sustainable Development Commission for NI, Tidy NI (Eco-Schools), The Environmental Education Forum (EEF), The Global Dimension in Schools NI and the Royal Society for the Protection of Birds; and
- a range of publications from each of the aforementioned organisations.

1.2 Context of the Survey

1.2.1 Sustainable Development *and* Education for Sustainable Development

“Sustainable development is a concept which, because of its wide ranging and cross-cutting nature, is hard to define and even harder to put into practice. The most widely known definition of sustainable development is ‘Development which meets the needs of the present without compromising the ability of future generations to meet their own needs’¹.

‘In principle, this involves safeguarding and using existing resources in a sustainable way to enhance the long-term management of, and investment in, human, social and environmental resources’².

Education for Sustainable Development (ESD) has evolved from aspects of environmental education and development education. It aims to develop in young people the knowledge, understanding, skills and values to help them make their own informed decisions about issues relating to the world around them and to be willing to take appropriate action. It is about learners being able to weigh up the economic, social and environmental aspects of issues and developing a willingness to participate and take action in order to promote change which is sustainable.

¹ The Sustainable Development Strategy for Northern Ireland (May 2006).

² Our Common Future (The Brundtland Report) - Report of the 1987 World Commission on Environment and Development.

Education for Sustainable Development is not additional to existing curricular provision; it is about looking at current curricular topics through a wider lens to consider possible implications for the economy, society and the environment, now and in the future. This approach promotes a wide range of learners' skills and capabilities and helps them make connections across the curriculum.

The aims of ESD in the Northern Ireland Curriculum (NIC) are to help learners:

- understand the interdependence of society, the economy and the environment;
- develop respect for the needs of both present and future generations;
- demonstrate how action can help improve the quality of life for people locally and globally; and
- exercise environmental responsibility through the conservation of resources, waste-management and the promotion of local biodiversity.

Education for Sustainable Development is concerned with:

- improving knowledge and understanding **ABOUT** the environment and development issues;
- offering first hand experience **IN** the environment and development issues;
- developing skills **THROUGH** the environment and development issues; and
- encouraging informed concern and action **FOR** the environment and development issues.

Examples of good practice from schools provide clear evidence that many young people care about their future and the kind of world in which they live. From an early age children are curious about the people, animals, places, plants and materials around them. They learn about their environment through first hand experiences, from their families, through the media and from a variety of sources. Schools have a vital role in helping children make sense of these experiences and in fostering a reasoned and sensitive concern for the quality of the environment and for the present and future management of the earth's resources. All children, however, need to learn to live in ways that improve the quality of life for themselves and others without endangering and depleting the Earth's resources. It is necessary, therefore, for young people to

acquire an informed and critical understanding of all the views held about issues and an appreciation of how actions and decisions now, and later, affect other peoples and the environment.

The wide ranging and cross cutting-concepts for developing ESD and the Global Dimension across the curriculum are outlined in Appendix 3.

Section Two

2. MAIN FINDINGS

2.1 Characteristics of Good Practice

In promoting and providing ESD effectively, all or some of the following characteristics were identified during school visits and from the questionnaire returns:

2.1.1 Whole-school ethos and culture for promoting ESD

- There is strong and inspirational leadership in establishing ESD as part of the whole-school ethos. This is evident where the principal has a clear overview of the initiatives being undertaken and how ESD is co-ordinated and integrated into the curriculum. In 80 % of the schools visited, the leadership was identified as playing a key role in promoting and supporting ESD.
- ESD is integrated effectively into the school's development planning. Over two thirds of the schools who responded to the questionnaire indicated that ESD features in their School Development Plans (SDP), and that a school policy for ESD is in place.
- There is a clearly defined role and agreed responsibilities for an environmental co-ordinator either discretely or as part of a broader job description. The most effective co-ordinators have a clear overview of all aspects of ESD being developed within the school. In the best practice, in approximately 70% of the schools visited, the co-ordinator and his/ her team have a clear monitoring and evaluating role, and an overview of where ESD fits into the curriculum. Questions that many schools found useful to self-evaluate the quality of provision and learning in ESD are included in Appendix 4.
- The entire school staff is involved in ESD initiatives and activities. Almost half of all schools visited were making a strong effort to involve all school staff in ESD activities.
- There is a genuine inclusion and empowerment of non-teaching staff in taking the lead in the development of ESD. Support staff in almost half of the schools included in the survey are currently involved in promoting ESD initiatives and activities.

- A community of interest has grown, which includes a number of teachers, learners, the Board of Governors and members of the local community in sharing responsibility and engaging actively in a wide range of ESD activities.
- Opportunities have been identified to promote ESD within and beyond the curriculum. Over one-third of all participating schools indicated that they had undertaken an audit to identify opportunities for ESD within the curriculum.

Case Study - Part of the whole-school ethos and culture

School A is a non-selective post-primary school situated in a small rural town. The school has been pro-active in piloting a number of educational initiatives and ESD has evolved as a means of addressing requirements of the revised curriculum, especially relating to citizenship, employability and aspects of the subject strands.

Environmental education is now very much embedded in the whole culture and ethos of the school with learner pledges, classroom charters, whole school assemblies, events and competitions all dedicated to promoting environmental awareness and action. There is a clear overview of where ESD issues are explored through the curriculum. Some of these issues have been developed and the school has achieved success with projects focusing on biodiversity and water and energy conservation in the United Nations Educational Scientific and Cultural Organisation (UNESCO) Awards.

The biodiversity project involved the learners lobbying local political representatives to support their campaign to save a local area of special scientific interest. The learners demonstrated high levels of enthusiasm, motivation and commitment throughout the project. They outlined the benefits of being involved in the project through their group evaluations. These included having the opportunity to work as part of a team in taking an active role in the protection of a special site and making a difference by raising awareness of the issue. This involved the learners presenting their ideas and findings confidently to an audience of Members of the Local Assembly (MLAs), environmental groups, learners and teachers from schools across NI and members of the general public at a high profile event in the Belfast 'whowhatwherewhenwhy' (W5) centre. The key strengths of the school's approach to promoting ESD include the involvement with the local community, as demonstrated by their Eco-fair, planned and organised by the learners for the local community and feeder primary schools. There is also a strong culture of self-evaluation and action planning, where whole school targets for recycling and energy savings are agreed, shared and monitored. This has enabled the school to achieve their Green Flag Status. The school is able to demonstrate considerable financial savings as a result of the learners identifying inefficient energy use in the school buildings and putting forward their own ideas to reduce consumption.

2.1.2 Education for Sustainable Development is clearly embedded within the curriculum

The implementation of the NIC is a key factor in the promotion of ESD initiatives. For example, the availability of resources in primary schools such as the Ideas for Connected Learning (ICLs) are being used to help plan and structure topic webs and schemes of work centred on ESD issues. The majority of schools visited, were able to demonstrate how ESD is firmly embedded in the curriculum and learning opportunities have been designed to use real-life environmental contexts to:

- support the development of literacy, numeracy and ICT skills;
- make purposeful links between different subjects and to promote learning;
- engage the learners in critical thinking and inquiry skills; and
- challenge the learners to explore and develop their values in relation to environmental and sustainable issues, both locally and globally.

In primary and special schools, a thematic approach with opportunities for connected learning is more common and easier to manage than in post-primary schools. In the post primary schools, delivery is often based in subjects, such as, science, geography and history, which take a leading role by incorporating ESD within schemes of work, and by promoting ESD events and initiatives. In addition, there are effective examples in a few post primary schools, where subjects such as art and design, home economics and religious education are creatively involved in contributing to aspects of ESD.

Case Study – ESD in the World Around Us (WAU)

School B is a primary school situated in the centre of a regional town. It is a Green Flag Eco school and has a very strong whole-school culture and ethos for environmental and global education. The school has recognised that awards can be an important vehicle for the development of environmental initiatives within the school but that they cannot just be an add-on and need to be explicitly embedded within the curriculum. To facilitate this, the role of Eco-coordinator has now been distributed to the senior management team (SMT) and the WAU co-ordinators. One outcome from this has been innovative planning for a WAU module, stimulated by the Ideas for Connected Learning (ICL) on Eco-Warriors. This unit develops the geography and science strands through an exploration of the biodiversity of the tropical rain forest. The focus is very much on challenging the learners to adopt a global perspective, by making links between destruction of the rainforests and their own lifestyle choices. The module identifies a range of real-life and motivating contexts for learners to develop their communication and information and communication technology (ICT) skills. For example, the learners in year 6 have written formal letters to the local mayor, inviting her to meet with them in order to discuss possible improvements to the council's recycling scheme which the learners had identified. In addition, they worked very effectively in groups to produce a digital video to encourage everyone in the school to recycle. This involved the learners sharing ideas, scripting, filming and editing a short television advertisement which they then presented to the mayor during her visit.

2.1.3 Benefits to the learners from engaging with ESD

Over half of the schools visited were able to demonstrate very clear links between ESD practices and positive benefits to the learners. This was most evident where there was a good internal system for auditing, evaluating and monitoring the provision for ESD and its outcomes. These benefits included:

- increased levels of learners' participation in sustainable activities, such as litter/waste management and recycling, energy and water conservation, biodiversity and health and well-being;
- increased levels of motivation;
- greater empathy and respect for others;
- an ability to express their own views and being able to listen to and respect the views of others;

- positive development in the learners' attitudes and values, for example, a greater concern for local and global issues and an increased understanding of concepts such as globalisation and interdependence;
- more open-mindedness and greater acceptance of differing viewpoints, such as cultural diversity and inclusion;
- increased concern for their environment leading to greater independence and personal responsibility for behaviours and actions, including lobbying for change, looking after areas within the school grounds, chairing meetings, taking minutes, producing newsletters and report writing; and
- acquisition of a range of thinking skills, such as enquiry skills, critical thinking and decision making through their involvement in ESD activities.

In some cases, the learners were able to highlight how their self-esteem and sense of ownership and pride in the school and its grounds were a direct result of having opportunities to plan, create and manage aspects of their immediate environment.

Case Study - The key benefits to learners

School C is a primary school situated in a suburban area with an enrolment of 420 learners. The aim of ESD in the school is to encourage the learners to become active citizens in relation to sustainable development issues. Sustainability is built into the fabric of school life in a way that links learning to living. For example, the learners developed an awareness of energy: where it comes from, how it is used and the carbon emissions that it creates. They made connections between energy use at home and school, and its impact on global warming. They learned that as a result of energy efficiency, it is possible to save money and, subsequently, reduce emissions. Subsequently, the learners in Key Stage 2 started a school-based campaign to raise awareness about energy use and its impact on climate change. In ICT class, the learners designed posters and stickers urging staff and learners to 'switch off and turn down'. Eco monitors go around turning off lights and screens in classes, and shutting doors and windows; points are given to the most energy saving classroom. Such activities motivate the learners to play a full part in the life of the school and wider community, by reducing, reusing and recycling. Through embedding sustainable development in the curriculum, the learners are equipped with the skills, knowledge, understanding and values to help them create a sustainable society that will tackle interrelated challenges such as climate change, inequality and poverty. The learners are creative, resourceful and are able to identify and solve problems. They are motivated to change things for the better, whether that's in their own area or on the other side of the world.

2.1.4 Participation in external awards, initiatives and projects

There is evidence that participation by schools in a range of different initiatives has been a key factor in promoting ESD. The wide range of initiatives, awards, competitions and projects in which schools were involved, is included in Appendix 5.

Almost all of the schools in the survey participate in ESD initiatives and projects and over 60% of these lead to accreditation. These initiatives provide the schools with a clear focus, structure and success criteria for developing aspects of ESD. In addition, more than half of the schools had attracted external funding to support various ESD initiatives, which are proving beneficial to the school community and learning environment.

Case Study – Eco-School

As the learners in school D were becoming increasingly aware of the need to take action to care for their planet, the Eco-School initiative enabled the school to do this in a structured and individualised way. In addition, the programme provided a reward system which the school felt was tangible and achievable. Following the formation of an eco-committee of learners and staff, the school's first task was to determine "where are we now" and then decide on their future priorities. The committee carried out a review and all the learners were able to put forward their opinions and suggestions. The learners were enthusiastic and creative in their thinking, making sensible, achievable suggestions on how the school could improve their local environment and global perspective. An action plan was formulated based upon many of the ideas which the learners presented. This was simple but very effective, for example, introducing classroom lighting monitors at breaktime and lunchtime, reusing waste paper for wet play, issuing letters and information electronically via the website which substantially reduced the amount of paper used, and forming a lunchtime Eco club. In addition, the school created a vegetable garden and the produce is used in school dinners. As well as having their own notice board, the school introduced a special area on their web site and learning platform which provides useful advice and information on how to become 'greener'. The school has further ideas to take forward including ways to reduce their carbon footprint, energy conservation including solar power options, planting more fruit trees, and introducing more wildlife friendly plants into the garden area. One of the positive benefits of the Eco-School initiative has been the support received from everyone, not least the learners, staff and governors, but also members of the local community and local businesses.

2.1.5 **Links with NGOS and other organisations**

A majority of schools benefit from links with a wide range of statutory and non-statutory bodies to promote ESD, particularly in accessing advice, support and resources. Many of these schools have built up effective working relationships and partnerships with an NGO or local council over a long period of time. In the best examples, the schools have been both pro-active and selective in establishing links with organisations and providers in order to get the support which aligns most closely with their particular curricular interests and needs.

A significant minority of schools identified the lack of awareness of available resources as a barrier to developing ESD. This is in spite of the high quality paper-based and online materials available to all schools from various NGOs and other organisations to support ESD (Appendix 5). Schools need to ensure greater awareness raising and more effective dissemination of these materials to all relevant staff.

2.1.6 **Out-of-Classroom Learning**

The survey indicated strongly that out-of-classroom learning opportunities provide the learners with inspiring, sensory and memorable experiences that bring the curriculum to life in an inclusive way. Those experiences which begin within the school grounds stimulate the learners' curiosity about their immediate natural surroundings, help broaden their outlook and deepen their understanding about the environment.

Over 80% of the schools surveyed make effective use of their school grounds, by providing physical, social, and emotional space for the learners. In the best practice, school grounds provide a valuable resource to enhance learning and teaching across the curriculum.

In all of the schools surveyed, the school grounds have been developed or modified to promote ESD. In the best practice, the development of wilderness and wooded areas, sensory gardens, ponds, nature trails and school gardens are used to extend learning opportunities beyond the classroom. Other examples of how schools have modified their outdoor areas to promote learning include the creation of orienteering routes, the use of natural materials for seating and play structures and the installation of recycling facilities such as water butts, wormeries and composting areas. These have impacted positively on the learners' enjoyment and motivation as well as enabling them to have first hand experiences in practising conservation and promoting biodiversity. They also transmit strong messages to the learners about the value which the school places on ESD.

In addition, almost all schools provide opportunities for learners to experience and learn about the environment beyond the school grounds through visits to a range of sites including outdoor education and field centres.

Case Study – Out-of-Classroom Learning

School E is a large post-primary school. The staff plan well the use of the school grounds as a way of making learning more hands-on. For example, the vegetable garden is used effectively throughout the year to encourage learning in a number of ways. The garden helps learners understand about responsibility: looking after and caring for an area producing food that classmates will eat, as well as learning about the life cycle of plants; understanding crop rotation, irrigation, cross fertilisation and organic gardening where the learners use compost produced from the fruit and vegetable morning snack and paper resources. Fruit and vegetables harvested are either used in the school kitchen or for learners to share in classrooms as part of a cookery topic. The school's well planned and integrated use of learning outside the classroom has given learners an increased sense of confidence and self-esteem resulting in improved outcomes and behaviours. The activities help learners to develop, apply and retain basic skills in real-world situations. They have a positive impact on the learners' personal development and contribute to their enjoyment of learning.

2.1.7 Use of school buildings

Almost all of the schools visited were able to demonstrate how they had modified or used the school buildings to minimise their impact on the environment, stimulate and promote learning and show through their actions that the school places a high value on ESD.

A few schools have incorporated alternative sources of energy into their buildings, for example, using photovoltaic cells to assist with water heating, and wind turbines to generate electricity. A majority of the schools have implemented low-cost and no-cost solutions to help reduce their environmental impact, for example, the use of water and energy saving devices such as reflective panels behind radiators and improved signage to develop learners' awareness of the importance of conservation. In the best practice, the learners were actively involved in planning some of these modifications, including undertaking audits of energy and water use in the school, identifying problems and presenting a business case to implement cost-effective solutions. In the most successful examples, the learners replicated their actions and behaviours at home and in other areas of their lives.

From the questionnaire returns, 40% of the schools reported that the implementation of sustainable practices led to significant financial savings.

2.1.8 Building community links and cultural diversity

All of the schools were able to demonstrate how their participation in ESD initiatives and projects was enhancing their links with the local community. In a small number of schools, members of the local farming community share their expertise with parents, staff and learners in the development of the school grounds. In addition, in a few schools, open days are well used to demonstrate the range of activities in which the learners have been engaged. In one school, a gardening project was used to good effect to encourage fathers to become more involved in the life of the school and in their children's learning.

Schools are also using their ESD projects to raise awareness of cultural diversity and to promote good relations and mutual understanding between people of different races, religions and political opinions. Environmental initiatives help schools to deliver the NIC requirement to foster attitudes and dispositions such as community spirit, concern for others, inclusion and respect.

Case Study – Community and cultural links

School F is a primary school situated in a socially disadvantaged inner city area which has undergone considerable change in recent years. Inward migration has contributed to the creation of a culturally diverse school population and local community. The focus on sustainability is delivered through personal development and mutual understanding (PDMU) and The World Around Us (WAU). The learners have researched ethnic groups in the area and considered the differences in dress, diet and beliefs that exist. In religious education classes, they considered the values and ethics taught in Christianity and in Hinduism. Subsequently, they discussed how they treat others and how they would like to be treated by others. The school has placed a particular emphasis on the value of cultural diversity and stresses the importance of helping learners to become informed about the local and global dimensions of the world in which they live. The programme encourages the learners to broaden their horizons and to adopt the attitudes of respect and acceptance which will help them become responsible citizens, better able to contribute positively to their own communities and to society as a whole.

2.1.9 Developing global awareness

Most schools are increasingly aware that in developing global awareness the learners will understand how economies, environments, societies and peoples are affected by global events and decisions made around the world.

Incorporating the global dimension in schools enables learners to:

- develop multiple perspectives and challenge stereotypes and assumptions;
- understand and respect diversity in our societies;
- understand that their decisions and actions can have a global impact; and
- understand that everyone has rights to challenge inequality and injustice.

Most schools have identified and planned for opportunities through the NIC to promote global awareness. This is being achieved through all of the areas of learning including, Personal Development and Mutual Understanding (PDMU) at Key Stages 1 and 2 and, Local and Global Citizenship at Key Stage 3. Global awareness is also supported by a number of the key elements including, mutual understanding, cultural understanding, ethical awareness, and moral character. The survey has highlighted that learners are able to make links between local and global issues and demonstrate an understanding of interdependence.

Case Study – Global Awareness

School G is expanding the learner's horizons and raising their awareness of global issues by creating links with schools around the world and embedding global learning across the curriculum. Through their participation in the GLOBE programme (Global Learning and Observations to Benefit the Environment) the school has developed a flourishing link with a primary school in the Papua New Guinea rainforest. The learners have challenged their own perceptions and explored life in the rainforest and as part of the United Nation's Children's Emergency Fund (UNICEF) Day for Change raised funds to support a health and well-being project in the link school. Many aspects of learning have been planned with a rainforest emphasis, including WAU, religious education, ICT, art, music, language and literacy. The rainforest project provided opportunities to promote the learners' interests in and appreciation of not just world issues but also more localised issues, and to examine the impact of emerging trends in climate and technology on conservation and development. It involved the learners thinking critically about a topical issue, discussing a range of solutions and building awareness of positive change, how it occurs and how individuals can contribute.

2.1.10 Giving learners a voice

In a number of the schools visited, initiatives in ESD had emerged from the interests of the learners. Environmental action groups and Eco-councils were leading the work and although some of these groups were managed by adults, it was often the learners who were responsible for proactive decision making. In a number of cases, schools reported that Eco-councils had in turn, encouraged the development of School Councils, which had given the learner voice greater importance within the school.

Case Study – Giving learners a voice

School H is a small rural primary school. The ESD work in the school is managed and driven by the learners. The school's Eco-Committee, which consists of elected representatives from each class, meets weekly to co-ordinate the ESD work of the school. At the meetings, the learners take stock of progress and action plan the way forward. The learners contact and liaise with others in the community who can support their work and they take responsibility for raising all the necessary expenditure. For example, they have approached local stores for assistance with their vegetable garden project and have raised money to enable the purchase of raised beds and compost. The learners report that their ESD work has led to a sense of empowerment. They feel that they are listened to, that they are able to effect change and make a difference, both at a local and at a global level. The Principal reports that encouraging the learner voice in the school's ESD work has resulted in the learners adopting a more responsible approach to their learning.

2.1.11 Promoting an inclusive ethos

All of the schools visited are committed to providing their learners with opportunities to become fully involved citizens enjoying, achieving and contributing to every aspect of school life.

Case Study – Rights Respecting School

School K is recognised as a Rights Respecting School by the United Nations Children's Fund (UNICEF) and demonstrates fully a rights respecting ethos. Displays are used throughout the school to reinforce awareness of rights, respect and responsibilities, locally and globally. There is a strong emphasis on mutual support and collaboration. The learners are involved fully in the assessment and evaluation of their work, and there is supportive evaluation of each other's work. In the class council, school committee, and eco team the school demonstrates how learners actively participate in decision making. They are encouraged to see that all learners have rights. This helps develop a sense of being connected with other learners globally and supports their development of becoming global citizens. In learning about their rights, the children also learn about the importance of respecting the rights of others, and in particular, develop a clear sense of responsibility. This helps to maintain a positive tone to any work and contributes to developing a socially responsible identity. This 'Rights Respecting School' promotes the learner's self-esteem and self-confidence, supports their overall development, encourages positive relationships and behaviour, develops their observation, language and literacy skills, as well as, helping to develop them as effective global citizens.

2.1.12 Promotion of health and well-being

The promotion of health and well-being falls within the broader concept of ESD by aiming to improve the quality of life for individuals and society generally. There are a variety of initiatives that schools are involved in to promote health and well being which also have environmental benefits, for example, a minority of the schools are involved in sustainable transport and travel initiatives.

As learners develop an understanding of the benefits of healthy eating, they become more aware about environmental issues related to food production, transportation and packaging. They develop an understanding of the social and environmental benefits of buying local and seasonal produce and how they can exercise their power as consumers to help farmers in developing countries get a fair deal for their produce. They are able to explore how healthy lifestyles and emotional wellbeing are related to the diversity and quality of the physical environment. A significant minority of the school explore Fairtrade as part of their ESD work.

Case Study – Health and Wellbeing

School L is a selective post-primary school situated in a large urban town. The Principal provides clear direction and is well supported by the teaching staff who are committed to a whole-school approach to promoting healthy eating and physical activity. An active School Nutrition Action Group (SNAG) includes representatives from the wide school community to promote healthy eating and citizenship. This whole-school approach to health has impacted upon the learners by increasing their nutritional awareness and supporting them to make healthier food choices. The SNAG surveyed learners' eating habits and found increasing consumption of healthier options within the canteen, particularly fruit and water, and an associated significant reduction in consumption of less healthy options. A competition linked to the selection of healthier choices from the canteen is held annually: the healthier the food, the more points learners earn. Prizes, sponsored by local food suppliers, are offered to the learners with the most points. The catering staff work closely with the SNAG to ensure there is a consistently wide range of nutritious and attractive meals available to the learners. The canteen offers daily healthy specials, taster sessions and theme days. The numbers of learners using the canteen have not reduced with the introduction of healthier menus. There has been thoughtful investment in the canteen to ensure that it is a pleasant environment in which to eat lunch; sufficient seating is available, music is played and the queues are effectively managed to assist service. All of these actions impacted positively on the quality of the learning experience. The increased consumption of fruit and practice of recycling waste has contributed to a reduction in litter around the school.

Section Three

3. CONCLUSIONS AND RECOMMENDATIONS

3.1 Key Findings of Good Practice

- The commitment demonstrated by senior management to ESD including its inclusion in the school development plan.
- A whole-school approach to the development of ESD.
- The effective practice of sustainable development observed in primary schools.
- The good delivery of local ESD issues.
- The clear evidence of improved self-esteem, motivation and engagement of those learners who are actively involved in ESD activities, as well as, developing well their thinking skills and personal capabilities.
- The positive impact of NGOs and other external agencies in developing ESD, including an appropriate range of recognised awards.
- The increasing and wide range of ESD activities which engage the learners and which contribute to the effective delivery of the NIC.
- The important role which the school community plays in the development of ESD, including the Boards of Governors, ancillary staff and parents.
- The first hand opportunities for learners to explore the environment as a result of the imaginative and creative use of school grounds as an extension of the classroom and through visits to areas of environmental interest and outdoor education centres, including field centres.
- The effective cross-curricular planning mostly in primary schools, where environmental and sustainable development issues are used to promote successfully a range of literacy, numeracy and ICT skills. In addition, the ESD within the NIC provides the learners with real life contexts which promote their critical thinking and collaborative learning.
- The reduction in energy consumption and the real financial savings realised by a significant minority of schools, through effective planning,

implementing and monitoring of sustainable practices by teaching, non-teaching staff and learners.

3.2 Recommendations for Promoting Good Practice in ESD

3.2.1 Schools need to:

- integrate ESD into their development plans;
- identify a key person and/or team to manage and co-ordinate ESD within and outside the classroom;
- ensure that there is a shared understanding of ESD by all teaching and non-teaching staff;
- give all learners the opportunity to learn about and take an active part in promoting sustainability within/without the school, through for example, membership of school councils and eco-committees; provide a range of opportunities for out of classroom learning, including visits to local and regional areas of environmental interest and outdoor education centres, including field centres;
- instil a strong global dimension into the learning experiences of all learners, giving them opportunities to put their understanding of local issues into a global context, so that they see how their decisions can have an impact on others now and in the future;
- offer ESD learning experiences that are safe and sustainable and of an agreed and consistently high quality;
- ensure that, as far as possible, school grounds, buildings, procurement and management of resources are organised in ways that promote sustainable living and working; and
- ensure that sustainable development is promoted and progressed across the curriculum.

3.2.2 The Curriculum Advisory Support Service (CASS) and the Education and Skills Authority (ESA) need to:

- support all schools in their understanding of ESD;
- assist schools in developing policies for ESD and in identifying and supporting a co-ordinator or team for developing it within the school;

-
- ensure that the curriculum reflects the importance of learning about ESD and that schools are supported in making it an integral part of their development plans;
 - disseminate good practice in ESD to highlight the contributions from a range of areas of learning;
 - support schools in using their buildings and grounds more imaginatively and creatively to optimise their educational, social and environmental potential including providing appropriate training and support to inform and engage teachers in understanding more fully what is required to make a school sustainable;
 - quality assure programmes to ensure learners have access to high quality learning experiences outside the classroom which promote ESD and which allow for appropriate learning progression; and
 - provide improved access to information, guidance and resources which are currently available.

SCHOOLS CONTRIBUTING TO THE SURVEY

Visits were made to the following schools:

Ballycraigy Primary School, Antrim
Ballymena Primary School
Banbridge High School
Beechlawn Special School, Hillsborough
Clea Primary School, Keady
Dalriada School, Ballymoney
Darkley Primary School, Armagh
Drumachose Primary School, Limavady
Drumadonnell Primary School, Banbridge
Edenderry Primary School, Banbridge
Grosvenor Grammar School, Belfast
Glenlola Collegiate, Bangor
Harberton Special School, Belfast
Holy Family Primary School, Belfast
Killylea Primary School, Armagh
Lagan College, Belfast
Orangefield Primary School, Belfast
Roan Primary School, Dungannon
Silverstream Primary School, Carrickfergus
St Catherine's College, Armagh
St Paul's College, Kilrea
St Colm's High School, Draperstown
St Jarlath's Primary School, Dungannon
St Patrick's High School, Keady
Sperrinview Special School, Dungannon

The following schools completed the online questionnaire:

Ballykeel Primary School
Braid Primary School, Broughshane
Cairnshill Primary School, Belfast
Christian Brothers Grammar School, Omagh
Collegiate Grammar School, Enniskillen
Craigavon Primary School
Cross and Passion College, Ballycastle
Donaghey Primary School
Downshire Primary School, Hillsborough
Fairhill Primary School, Dromore, Co. Down
Fleming Fulton Special School, Belfast
Gracehill Primary School
Groggan Primary School, Randalstown
Hazelwood College, Newtonabbey
Kilbroney Integrated Primary School, Rostrevor
Killowen Primary School, Lisburn
Kilronan Special School, Magherafelt
Lower Ballinderry Primary School, Lisburn
Millenium Primary School, Saintfield
Newtownards Model Primary School
Portrush Primary School
Sacred Heart Primary School
Slemish College, Ballymena
Star of the Sea Primary School, Belfast
St. Brigid's Primary School (Mayogall), Magherafelt
St Columb's College, Derry
St John's Primary School, Eglish
St Joseph's Boys Secondary School, Derry
St Malachy's High School, Castlewellan
St Malachy's Primary School, Belfast

Appendix 2

THE QUESTIONNAIRE COMPLETED BY THE SCHOOLS

1. Does the school have a policy for environmental education/sustainable development?
2. Does it have a global dimension?
3. Does environmental education/sustainable development feature in the school's development planning/action planning?
4. Has the school conducted an audit of the opportunities within and beyond the curriculum to promote environmental education/sustainable development?
5. Do teachers receive in-service training related to environmental education/sustainable development?
- 6a. Who is currently involved in promoting environmental education/sustainable development initiatives/activities?
 - A member of staff
 - Some members of staff
 - Whole teaching staff
 - Whole staff including ancillary staff
- 6b. What other groups are involved?
 - School governors
 - Wider school community
 - Local community
 - Non-Government Organisations (NGOs)
 - Other
 - None

7. Has the school attracted external funding for environmental education/sustainable development initiatives/activities?
8. Who/what is the key driver(s) for promoting and developing environmental education/sustainable development within the school?
- An individual teacher
 - A particular department
 - An environmental education/sustainable development coordinator
 - A group of learners
 - SLT
 - A member(s) of support staff
 - Other(s)
9. Which of these aspects of environmental education/sustainable development does your school actively promote and practise?
- Litter/waste management, recycling activities
 - Energy conservation
 - Water conservation
 - Biodiversity
 - Ethical purchasing (eg Fairtrade)
 - Cultural diversity and inclusion
 - Globalisation and interdependence
 - Health and wellbeing
 - Sustainable transport and travel
 - Sustainable food and farming
 - Other(s)

10a. Which of the following are used to promote learning outside the classroom?

- School grounds
- Fieldwork visits (urban)
- Fieldwork visits (rural)
- Historical and heritage sites
- Outdoor education centres
- Residential fieldwork centres
- Areas of Special Scientific Interest
- Forests and Forest Parks
- Wilderness areas
- Other(s)

10b. Rank the following statements from:

(Strongly agree, agree, neither, disagree, strongly disagree)

These opportunities are most successful when they:

i. are integrated into curriculum planning and linked to classroom activities

<i>Strongly agree</i>	<i>Agree</i>	<i>Neither</i>	<i>Disagree</i>	<i>Strongly disagree</i>

ii. have clearly defined learning outcomes

<i>Strongly agree</i>	<i>Agree</i>	<i>Neither</i>	<i>Disagree</i>	<i>Strongly disagree</i>

iii. are evaluated to look at their impact on pupil learning & attitudes

<i>Strongly agree</i>	<i>Agree</i>	<i>Neither</i>	<i>Disagree</i>	<i>Strongly disagree</i>

11. How has involvement in environmental education/sustainable development initiatives benefitted your learners?

- Increased levels of learner participation
- Increased levels of learner motivation
- Learners taking greater responsibility for their actions
- Learners demonstrating a connection to and concern for their environment
- Learners showing greater empathy for other people
- Learners expressing their own views and listening more to the views of others
- Learners demonstrating greater curiosity
- Other(s)

12. Has implementing sustainable practices saved the school any money?

- Yes
- No
- Not known

13a. Have the school grounds been developed or modified to promote sustainable practice and/or emotional well-being, for example?

- wilderness areas
- tree planting
- pond
- gardening
- bird-boxes
- use of recycled material for seating, structures etc
- sensory gardens
- nature trails, quiet areas etc
- other example(s)

13b. Have external agencies been used to facilitate this?

- Yes
- No

14. How have learners been involved in aspects of decision making or management of school grounds or buildings?

- Environmental (Eco) committee
- Schools council
- Class project
- School competitions
- Other example(s)

15. How does the school deliver environmental education/sustainable development in the curriculum? Is it...

- mainly limited to within certain subjects
- developed mostly through different activities such as award schemes
- developed through thematic approaches, subject collaboration etc
- a central part of the life and work of the school

16. Rank from:

(Strongly agree, agree, neither, disagree, strongly disagree)

a. Planning across the curriculum identifies opportunities for exploring environmental and global issues.

<i>Strongly agree</i>	<i>Agree</i>	<i>Neither</i>	<i>Disagree</i>	<i>Strongly disagree</i>

b. The school buildings and grounds are used effectively to support learning and promote active participation.

<i>Strongly agree</i>	<i>Agree</i>	<i>Neither</i>	<i>Disagree</i>	<i>Strongly disagree</i>

- c. There is a clear and shared understanding of the definition and purpose of the key element, Education for Sustainable Development in the curriculum.

<i>Strongly agree</i>	<i>Agree</i>	<i>Neither</i>	<i>Disagree</i>	<i>Strongly disagree</i>

- d. Learners can demonstrate and can make links between local and global issues and demonstrate an understanding of interdependence.

<i>Strongly agree</i>	<i>Agree</i>	<i>Neither</i>	<i>Disagree</i>	<i>Strongly disagree</i>

- e. There has been a positive development in learners' attitudes and values as a result of engaging with environmental/sustainable development issues and activities (eg concern for local and global issues, open-mindedness, tolerance, etc).

<i>Strongly agree</i>	<i>Agree</i>	<i>Neither</i>	<i>Disagree</i>	<i>Strongly disagree</i>

- f. There has been a noticeable change in learners' behaviours as a result of experiences in environmental education/sustainable development (eg increased rates of recycling, walking to school, selecting healthy options etc).

<i>Strongly agree</i>	<i>Agree</i>	<i>Neither</i>	<i>Disagree</i>	<i>Strongly disagree</i>

- g. There have been enhanced levels of learners participating more in environmental activities and taking responsibility for their actions

<i>Strongly agree</i>	<i>Agree</i>	<i>Neither</i>	<i>Disagree</i>	<i>Strongly disagree</i>

- h. Learners have been able to acquire and demonstrate a range of thinking skills through their experiences in environmental/sustainable development activities, especially enquiry and critical thinking skills (questioning evidence, challenging stereotypes and assumptions, giving reasons, seeing other perspectives, etc) and decision making.

<i>Strongly agree</i>	<i>Agree</i>	<i>Neither</i>	<i>Disagree</i>	<i>Strongly disagree</i>

- i. The school gives learners a voice and encourages them to make choices about taking part in actions for change in relation to local and global issues.

<i>Strongly agree</i>	<i>Agree</i>	<i>Neither</i>	<i>Disagree</i>	<i>Strongly disagree</i>

17. Does the school make use of the following to support the delivery of environmental education/sustainable development in the Northern Ireland curriculum and to link to a wide range of NGOs and other supporting agencies?

Websites

Environmental Education Forum
(www.eefni.org.uk)

Yes No

The Global Dimension
(www.globaldimensioninschools.org)

Yes No

Support materials

LEEF, Lines from the Environmental Education Forum NI, quarterly newsletter Yes No

ESD Good Practice Guide for Primary, Secondary and Special Schools 2005 (Inter-board ESD panel) Yes No

ESD Resource Guide for Teachers and Group Leaders 2008-2010 Yes No

18. What do you consider to be the 3 main obstacles to promoting and/or developing environmental education further in your school?

Conflicting curriculum priorities

Lack of awareness/understanding of environmental education/sustainable development across all staff

Limited involvement of SLT

Overdependence on small group of enthusiastic teachers to lead developments

Limited scope for developing school grounds and/or buildings

Lack of awareness of available resources and case studies of good practice

Lack of time and resources within school

Other

THE SEVEN KEY CONCEPTS OF ESD

Citizenship and stewardship

Recognises that people have rights and responsibilities to participate in decision-making and that everyone should have a say in what happens in the future. This involves a willingness to act as responsible citizens while developing the ability to engage with and manage change at individual and social levels. Learners are expected to know and understand the connection between personal values, beliefs and behaviour and how the school and community can be managed more sustainably.

Sustainable change

Promotes an understanding that there are limits to the way in which the world, particularly the richer countries, can develop. The consequences of unmanaged and unsustainable growth might include increasing poverty and hardship and the degradation of the environment, to the disadvantage of everyone. This involves learners in understanding how their home and school may be managed more sustainably and beginning to question decisions, practices and processes that affect sustainable development issues.

Needs and rights of future generations

This concept is about learning how we can lead lives that consider the rights and needs of others and recognising that what we do now has implications for what life will be like in the future. This involves learners in discussing the way they live and the products and services they use, to distinguish between actions and products which are wasteful and those which are sustainable. This should enable learners to begin to assess the sustainability of their own lifestyle.

Interdependence

Involves an understanding about the connections and links between all aspects of people's lives and places at a local and global level, and that decisions taken in one place will affect what happens elsewhere. Learners should develop an understanding that living things depend on each other and should acquire a sense that all living things have value. This should lead to an understanding that what people do elsewhere affects them, the places they live, other people, and plants and animals. They should become increasingly aware of the global context within which trade, industry and consumption operate.

Diversity

This concept is about understanding the importance and value of diversity in people's lives - culturally, socially, economically and biologically - and realising that all our lives are impoverished without such diversity. Through learning, learners should appreciate cultural and biological diversity in the school and locality and eventually be able to reflect critically on, and engage in, debates and decisions on political, technological and economic changes which impinge on diversity and sustainability.

Uncertainty and precaution

Involves a realisation that because people are learning all the time and that their actions may have unforeseen consequences, they should adopt a cautious approach to the welfare of the planet. This implies understanding that different people want to do things in different ways and are able to listen to arguments and weigh evidence carefully. Learners should thus be able to think critically, systematically and creatively about sustainable development issues, solutions and alternatives.

Quality of life, equity and justice

Recognises that for any development to be sustainable, it must benefit people in an equitable way. It is about improving everybody's lives. At a basic level this involves understanding the essential difference between needs and wants and developing a sense of fairness. It involves understanding the difference between quality of life and standard of living and seeks a good quality of life for all people, at local, national and global levels and an appreciation of why equity and justice are necessary to a sustainable society.

THE EIGHT DIMENSIONS OF THE GLOBAL DIMENSION IN SCHOOLS:

Values and Perceptions

Help young people develop multiple perspectives, including the power of the media, and allow them to challenge any assumptions and stereotypes.

Diversity

Includes enabling students to (more than just tolerate) but understand and respect diversity in our societies.

Social Justice

Allows students to understand the impact of unequal power, challenge prejudice and injustice and how they affect past and present politics.

Conflict Resolution

Enable students to develop skills of communication and negotiation.

Human Rights

Understand and value our common humanity with all people all over the world.

Sustainable Development

Allows students to understand and respect the environment, particularly, that the earth's resources are finite and lets them see the interconnections between environmental and economic spheres.

Global Citizenship

This helps students to appreciate the global context of local and national issues.

Interdependence

People, places, economies and environments are interrelated; choices and events that occur here have repercussions on a global scale.

Appendix 4

SELF-EVALUATION QUESTIONS FOR AUDITING THE QUALITY OF PROVISION AND LEARNING IN ESD

1. How is the school actively supporting ESD?
2. Is the school acting in a sustainable and ethical way, where possible?
3. Is there a shared understanding across the staff of ESD?
4. How are learners given the opportunity to develop the knowledge, understanding, skills and values associated with ESD?
5. How are learners given the opportunity to take positive action to promote ESD?
6. How well is the staff trained to incorporate aspects of ESD into their teaching?
7. What effective use is made of the range of statutory and non-statutory support organisations to support ESD in the school?
8. What has been the overall impact of involvement in an externally support project, scheme or initiative?
9. What are the next steps for promoting ESD in the school?

ESD INITIATIVES, PROJECTS AND RESOURCE MATERIALS

The schools visited were involved in a wide range of initiatives, awards, competitions, and projects. These included Eco-schools, Eco-Unesco Award, International Schools Award, Health Promoting Schools Award, Best Kept Schools, Food for Life, Eco-World Competition, Science in Society, Rights Respecting Schools, Life through a Lens, Safe and Sound and BBC Breathing Places (RSPB), BP Carbon Challenge, ASDAN Certificate in Environmental Awareness, Shoutabout Week (Friends of the Earth), Cash and Clobber appeal.

In addition, the following online and published resources are available in all schools and are designed to provide centralised information about the support available to schools from a large number of statutory and non-statutory organisations.

- The Environmental Education Forum (EEF) is a networking organisation that promotes a co-ordinated approach to the delivery of environmental education in Northern Ireland. The website provides to links to a wide range of statutory and non-statutory organisations who are involved in supporting environmental education and education of sustainable development, as well as access to its own publications and updates on relevant training and events.
www.eefni.org.uk
- The Global Dimension in Schools NI website aims to provide teachers with effective and sustained support in incorporating the global dimension into their lessons. It co-ordinates the support available from a wide range of statutory and non-statutory organisations and provides a range of resources, case studies, lesson plans and schemes to support the incorporation of global perspectives in all areas of learning.
www.globaldimensioninschools.org
- The ESD Resource Guide 2008-10 for teachers and youth leaders contains details of the Environmental Education Forum members, the education programmes that they provide, and the links those programmes have to all levels of the Northern Ireland curriculum and youth service programmes. It also contains relevant contact details, e-mail and website addresses and resources available to download or order.

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- The ESD Good Practice Guide 2005 was developed by the Northern Ireland Inter-board ESD group for primary, post-primary and special schools. It provides clear advice on how to audit ESD in schools and shows progression in ESD from Foundation Stage to Key Stage 4. It can be downloaded from www.welb-cass.org/mfc.
 - Educational Visits Best Practice 2009 can also be downloaded from www.welb-cass.org/mfc.

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