

AN ASSESSMENT OF THE ROLE OF ECO-SCHOOLS IN ACHIEVING WHOLE SCHOOL  
DEVELOPMENT THROUGH SUSTAINABILITY EDUCATION

by

WAHEEDA MARIA CARVELLO

Submitted in part fulfilment of the requirements for  
the degree of

MASTER OF EDUCATION – WITH SPECIALISATION IN ENVIRONMENTAL EDUCATION

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROF C P LOUBSER

NOVEMBER 2009

## DECLARATION

I declare that

AN ASSESSMENT OF THE ROLE OF ECO-SCHOOLS IN ACHIEVING WHOLE  
SCHOOL DEVELOPMENT THROUGH SUSTAINABILITY EDUCATION

is my own work and that all the sources I have used or quoted, have been  
indicated and acknowledged by means of complete references.

---

SIGNATURE

---

DATE

(Ms W M CARVELLO)

## **ABSTRACT**

The Johannesburg World Summit on Sustainable Development in 2002 reaffirmed the school as the centre of change and as critical for promoting sustainable education. The purpose of this research was to assess, firstly, how the Eco-Schools Programme can achieve whole school development by implementing sustainability education, and secondly, the feasibility of its incorporation into the formal school system. It examined what impact the South African Eco-Schools Programme, since 2003, has had on the implementation of sustainable education through whole school development. The qualitative evaluation research design was used and data was collected through interviews, questionnaires and narratives that included all role players. It noted the strengths of the programmes already in place and identified the challenges that still need to be addressed. The outcome of the study proves that the Eco-Schools Programme does achieve whole school development by implementing sustainability education and should be incorporated into the formal education system.

Key words:

Eco-Schools, Eco-Schools Programme, Education for Sustainable Development, Environment, Environmental Education, Green Flag, National Curriculum Statements, Sustainability Education, Sustainable Education, Whole School Development.

## **ACKNOWLEDGEMENTS**

In presenting this dissertation, I wish to express my sincere gratitude and a deep sense of appreciation for the assistance received from the following:

1. Prof C P Loubser, my promoter, for his guidance, encouragement and interest shown throughout the duration of this dissertation.
2. The learners, educators, Department of Basic Education officials, Eco-Schools officials and Wildlife and Environmental Society of South Africa for their support and participation.
3. All those who readily offered advice and assistance.

## **TABLE OF CONTENTS**

<b>DECLARATION</b>	<b>2</b>
<b>ABSTRACT</b>	<b>3</b>
<b>ACKNOWLEDGEMENTS</b>	<b>4</b>
<b>LIST OF TABLES, GRAPHS AND DIAGRAMS</b>	<b>11</b>
<b>CHAPTER 1: OVERVIEW AND RATIONALE</b>	
1.1 Introduction	12
1.2 Factors that led to the Problem Statement	13
1.2.1 The need for establishing Eco-Schools	19
1.3 Formulation of the Research Problem	20
1.4 Aim of the Research	21
1.5 Research Design and Methodology	21
1.6 Structure of the Study	21
1.7 Summary	23
<b>CHAPTER 2: LITERATURE REVIEW</b>	
2.1 Introduction	24
2.2 From Environmental Education to Education for Sustainable Development	25
2.2.1 The United Nations Conference on the Human Environment in Stockholm, June 1972	25
2.2.2 The International Environmental Education Workshop in Belgrade, the former Yugoslavia, 13 – 22 October 1975	26
2.2.3 The Intergovernmental Conference on Environmental Education at Tbilisi, Georgia, 14 – 26 October 1977	26
2.2.4 The Brundtland Report, April 1987 – 42/187. (Report of the World Commission on Environmental and Development)	28

2.2.5	The United Nations Conference on Environment and Development (UNCED), Earth Summit in Rio de Janeiro, Brazil, 3-14 June 1992	28
2.2.6	World Summit on Sustainable Development (WSSD): in Johannesburg, South Africa, 26 August – 4 September 2002	32
2.2.7	United Nations General Assembly Resolution 57/254 – The United Nations Decade of Education for Sustainability, 2005 – 2014	36
2.2.8	SADC Regional Environmental Education Programme	38
2.2.9	Important References for Environmental Education in South Africa	39
2.2.9.1	The National Environmental Education Programme (NEEP)	39
2.2.9.2	Legislation and Environmental Education in South Africa	41
2.2.9.2.1	The White paper on Environmental Education (1989)	41
2.2.9.2.2	The White paper on Education and Training (1995)	42
2.2.9.2.3	The Constitution of the Republic of South Africa (Act 108 of 1996)	42
2.2.9.2.4	The National Environmental Management Act (NEMA) – 1998	43
2.2.9.2.5	The Norms and Standards for Educators Policy – 2000	43
2.2.9.2.6	The National Curriculum Statements (NCS) 2005	43
2.3	Eco-Schools: Towards a Healthy Environment and Whole School Development	44
2.3.1	From Policy to Practice – Foundation for Environmental Education (FEE)	44
2.3.2	A Flexible Framework	44
2.3.3	Eco-Schools and International Perspectives	45
2.3.4	The Eco-Schools Programme in South Africa	48
2.3.4.1	The Eco-Schools Programme helps the school to...	48
2.3.4.2	What is the Eco-Schools Programme?	49
2.3.4.3	Registration	50
2.3.4.4	Seven steps to becoming an Eco-School	51

2.3.4.5	The Awarding System and Earning the Green Flag	51
2.3.5	Professional Development of Teachers	53
2.3.6	Evaluation of the Old Mutual Out of the Box Project	56
2.3.6.1	Old Mutual Out of the Box Project: Training and Support	56
2.3.6.2	Old Mutual Out of the Box Project: Classroom Practice	58
2.4	Whole School Development Approach	59
2.4.1	Framework for developing a Whole School Approach to Environmental Education	60
2.4.1.1	The Formal Curriculum: Subjects and Cross-curricular Themes	60
2.4.1.2.	Whole School Ethos	61
2.4.1.3	School Involvement in Community Action	64
2.4.1.4	Extra-curricular Activities	64
2.4.1.5	Special Events	65
2.5	Summary	67

### **CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY**

3.1	Introduction	68
3.2	Research Design	68
3.3	Research Methodology	70
3.3.1	Qualitative Interviews	72
3.3.2	Triangulation: Group Interviews through Quantitative Questionnaires	75
3.3.3	Narrative Inquiry	78
3.4	Research Sampling	79
3.5	Data Collection, Capturing and Analysis	80
3.5.1	Data Collection	80
3.5.2	Data Capturing	81
3.5.3	Data Analysis	81
3.6	Reflection on Limitations and Advantages of the chosen Research Design	82
3.7	Summary	82

## **CHAPTER 4: RESEARCH FINDINGS**

4.1	Introduction	84
4.2	Research Sampling and Profile	84
4.3	Data Collection	85
4.4	Outcome of the Research	88
4.4.1	An assessment of whether Eco-Schools can achieve Whole School Development by implementing Sustainability Education	88
4.4.1.1	Responses from Teachers, Parents and Eco-School Co-ordinators	89
4.4.1.2	Responses from Learners	90
4.4.2	Evaluate awareness of Sustainability Education and the Eco-Schools Programme in Public Schools and in a District Office of the Department of Basic Education (DBE)	91
4.4.3	Incorporation of the Eco-Schools Programme into the Formal Education System	92
4.5	Challenges	93
4.5.1	Teachers	93
4.5.2	Learners	94
4.5.3	The Green Flag	94
4.5.4	Management Skills	95
4.6	Summary	95

## **CHAPTER 5: TOWARDS A SUSTAINABLE SOCIETY – RECOMMENDATIONS AND CONCLUSION**

5.1	Introduction	97
5.2	Main Findings	98
5.3	Anomalies and Surprise findings	100
5.4	Recommendations	102
5.5	Conclusion	103

<b>BIBLIOGRAPHY</b>	<b>106</b>
---------------------	------------

## **APPENDIXES**

### **APPENDIX A: Interview Questions and Questionnaires**

A 1	Focus Groups and Educators	113
A 2	Learners	116
A 3	Department of Education Officials	119

### **APPENDIX B: Interviews**

B 1	Anton Van Wouw Laerskool	120
B 2	Filedelfia Secondary – Special School	130
B 3	General Smuts High School	140
B 4	Greyville Primary School	146
B 5	Lilydale Primary School	153

### **APPENDIX C: Focus Groups and Educators Questionnaires**

C 1	Al Ghazali College	159
C 2	Ekukhanyisweni Primary School	162
C 3	Unity Secondary School	167

### **APPENDIX D: Learners Questionnaires**

D 1	Consolidated analysis of Learners responses	171
-----	---	-----

### **APPENDIX E: Department of Education Interview**

E 1	Department of Education Tshwane South District	177
-----	--	-----

### **APPENDIX F: Narrative Paragraphs or Essays**

F 1	Brescia House	182
F 2	Mamelodi Environmental Education Centre	184
F 3	Al Ghazali College:	186
	Mrs S Mahomed (p. 186)	
	Mrs A Schloss (p. 189)	
	Mrs V Pillay (p. 193)	

	Mrs F Ebrahim (p. 197)	
F 4	Sue Bellinger Consulting	200
F 5	Wildlife and Environmental Society of South Africa (WESSA)	
	/ Eco-Schools:	203
	WESSA Director: Mr J Taylor (p.204)	
	WESSA Marketing Manager: Mr J L Holmes (p.210)	
	WESSA / Rhodes University: Ms K Ward (p.205)	
	WESSA Curriculum Specialist: Mr S Walker	
	– Gauteng (p.203)	
	World Wildlife Fund: Ms H Gets (p.209)	
	Eco-Schools National Coordinators:	
	Mrs B Ringdahl (p.206)	
	Ms C Physick (p.209)	
	Eco-Schools Regional Coordinators:	
	Ms L Conde – Eastern Cape (p.203)	
	Mr D Mkhabela – Gauteng (p.207)	
	Mr L Barkhuizen – Free State (p.208)	
	Mr N Mshibe – KwaZulu Natal (p.207)	
	Ms C Dzerefos – Limpopo (p.209)	
	Ms Z de Beer – Mpumalanga (p.208)	
	Ms J April – Western Cape (p.210)	

## **LIST OF TABLES, GRAPHS AND DIAGRAMS**

### **CHAPTER 1**

Table: 1.1	Evidence of Environmental and Sustainability Education in the NCS	15
------------	--	----

### **CHAPTER 2**

Graph 2.1	Number of schools participating	47
Table 2.1	Countries currently participating	48
Table 2.2	Eco-Schools Awarding System	52
Table 2.3	The growth of Eco-Schools in South Africa since 2003	53
Graph 2.2	Rating of support received: Out of the Box Project	57
Graph 2.3	Rating of training: Out of the Box Project	58
Diagram 2.2	Schematic presentation of a Whole School Development Approach	66

### **CHAPTER 3**

Table 3.1	Sample of Schools	80
Table 3.2	Sample of Organisations	80

### **CHAPTER 4**

Table 4.1	Analysis of Schools and DBE District Office interviewed in Gauteng	86
Table 4.2	Narratives	87

## About, in, through and for the Environment

*Meaning cannot be masterminded at a global level. It is found through small-scale pursuits of significant personal and organizational goals. The school is the “centre” of change. (Fullan 1991)*

### 1. 1 Introduction

In 1992, the Rio Earth Summit, in its Agenda 21 (see paragraph 2.2.5), set a high priority on the role of education in enabling sustainable development. Chapter 36 of Agenda 21 focused on re-orientating education, including greater public awareness and in-depth training as means by which human beings and societies can reach their full potential. It was noted that education is critical for promoting sustainable development and for improving the capacity of people to address environmental and developmental issues. It further recognised the critical role education can play in acquiring environmental and ethical awareness, values, skills and behaviour, as well as growing effective public participation in decision-making. It therefore called for environmental education to be incorporated as an essential part of learning in the formal and non-formal sectors of education.

Ten years later the same sentiments were echoed at the World Summit on Sustainable Development (WSSD) held in Johannesburg (see paragraph 2.2.6). One of the outcomes of the WSSD was to set a time frame of ten years to strengthen the focus on education for sustainable development. In 2002, the UN General Assembly passed resolution 57/254 in support of this initiative (see paragraph 2.2.7). In March 2005, the United Nations launched its “Decade of

Education for Sustainable Development” (DESD) with the introduction of a fully developed plan for implementation (see paragraph 2.2.7).

With this initiative, environmental education, having gained some ground over the past 30 years, is required to reinvent itself by addressing more socio-economic factors, as well as environmental issues. Education is regarded as an important instrument in implementing sustainable development at grass-roots level. The question is: How do you educate for a concept that is difficult to define? Educational institutions still associate education for sustainable development as a curriculum process, whereby knowledge has to be transferred. However, sustainability education, better known as education for sustainable development demands new holistic approaches to involve people rather than to convey a body of knowledge. Education for sustainable development is discussed in detail in chapter 2 (see paragraph 2.2.7).

## **1.2 Factors that led to the Problem Statement**

The impetus for this research does not only stem from declarations and resolutions passed at The Rio Earth Summit 1992 or The World Summit on Sustainable Development 2002, but also from various international and national conferences, held over the past 30 years, on environmental education, sustainable development and the establishment of Eco-Schools.

The statements on environmental education made at The Tbilisi Conference 1977 (see paragraph 2.2.3) and The Rio Declaration on Environment and Development (Sustainable Development), set out in Agenda 21 (see paragraph 2.2.5), paved the way for the development and implementation of sustainability education.

In terms of the South African context, *The White Paper on Education and Training (1995:18)*, finally endorsed environmental education in Chapter Four: *Values and Principles of Education and Training Policy* which states:

Environmental education, involving an interdisciplinary, integrated and active approach to learning, must be a vital element of all levels and programmes of the education training system. This approach aims to create environmentally literate and active citizens and ensure that all South Africans, present and future, enjoy a decent quality of life through the sustainable use of resources (statement no 20:18).

Curriculum 2005 (C2005) responded to *The White Paper on Education and Training* by allocating an entire phase organiser to the environment. In 2002, when Curriculum 2005 was revised, this feature of the Curriculum changed as the phase organisers were discarded. The new National Curriculum Statement (NCS) integrated environmental education into eight learning areas from grade R to 9 and into all subjects from grade 10-12.

The first principle of the NCS emphasises the relationship between a healthy environment, social justice, human rights and inclusivity. Furthermore, most learning areas and subjects have learning outcomes and assessment criteria dedicated to environmental and sustainability education. The table below lists some examples of learning areas and subjects that include environmental and sustainability education.

**Table: 1.1 Evidence of Environmental and Sustainable Education in the NCS**

<b>Learning Area</b>	<b>Relative Learning Outcomes per Learning Area in General Education Training (GET) Grade R - 9</b>
<b>Natural Sciences</b>	<p><b>LO 1: Scientific Investigation</b> Learners act confidently on their curiosity about natural phenomena; they investigate relationships and solve problems in science, technology and environmental contexts.</p> <p><b>LO 2: Constructing Science Knowledge</b> Learners know, interpret and apply scientific, technological and environmental knowledge.</p> <p><b>LO 3: Science, Society and the Environment</b> Learners are able to demonstrate an understanding of the interrelationships between science and technology, society and the environment.</p>
<b>Social Sciences</b>	<p><b>LO 1: Geographical Enquiry</b> The learner is able to use enquiry skills to investigate geographical and environmental concepts and processes.</p> <p><b>LO 2: Geographical Knowledge and Understanding</b> The learner is able to demonstrate geographical and environmental knowledge and understanding.</p> <p><b>LO 3: Exploring Issues</b> The learner is able to make informed decisions about social and environmental issues and problems.</p>
<b>Life Orientation</b>	<p><b>LO 1: Health Promotion</b> The learner is able to make informed decisions regarding personal, community and environmental health.</p>
<b>Economic and Management Sciences</b>	<p><b>LO 2: Understanding of Sustainable Growth and Development</b> The learner is able to demonstrate an understanding of sustainable growth, reconstruction and development, and reflect critically on related processes.</p>
<b>Technology</b>	<p><b>LO 3: Technology, Society and Environment</b> The learner is able to demonstrate an understanding of the interrelationships between science, technology and the environment.</p>

(<http://www.education.gov.za/curriculum/GET/GETstatements.asp>)

Subject	Relative Learning Outcomes per Subject in Further Education Training (FET) Grade 10 – 12
<b>Business Studies</b>	<p><b>LO 1: Business Environments</b> The learner is able to demonstrate knowledge and analyse the impact of changing and challenging environments on business practice in all sectors.</p> <p><b>LO 2: Business Ventures</b> The learner is able to identify and research viable business opportunities and to explore these and related issues through the creation of achievable business ventures.</p> <p>(issues include entrepreneurship, forms of ownership, location factors, legal considerations (e.g. contracts), and social and environmental issues).</p>
<b>Consumer Studies</b>	<p><b>LO 3: Responsible Use of Resources</b> The learner is able to demonstrate consumer responsibility towards the sustainability of the environment, the community and self through the judicious use of resources.</p>
<b>Life Orientation</b>	<p><b>LO 2: Citizenship Education</b> The learner is able to demonstrate an understanding and appreciation of the values and rights that underpin the Constitution in order to practice responsible citizenship, and to enhance social justice and environmentally sustainable living.</p>
<b>Agricultural Sciences</b>	<p><b>LO 1: Investigate and Analyse</b> The learner is able to investigate, critically analyse and understand the challenging nature of agriculture in order to plan and solve problems relating to sustainable agriculture.</p> <p><b>LO 2: Sustainable Agricultural Practices</b> The learner is able to demonstrate an understanding of the dynamic nature of agricultural knowledge and of appropriate technology, and to interpret and apply this knowledge to agricultural management practices and systems to ensure a sustainable agricultural environment.</p> <p><b>LO 4: Interrelated Issues in Agriculture</b> The learner is able to demonstrate an understanding of the links between humans and nature and the impact of socio-economic and political issues on natural resources and on sustainable agricultural production.</p>

<b>Subject</b>	<b>Relative Learning Outcomes per Subject in Further Education Training (FET) Grade 10 – 12</b>
<b>Tourism</b>	<p><b>LO 2: Responsible and Sustainable Tourism</b> The learner is able to demonstrate an understanding of the importance and benefit of responsible and sustainable tourism for social, economic and environmental growth.</p>
<b>Mechanical Technology</b>	<p><b>LO 1: Technology, Society and the Environment</b> The learner is able to demonstrate an awareness and understanding of the interrelationship between mechanical technology, society and the environment.</p>
<b>Economics</b>	<p><b>LO 1: Macro-economics</b> The learner is able to demonstrate knowledge, critical understanding and application of the principles, processes and practices related to the economy.</p> <p>Learners are exposed to the fundamental concepts and understanding that choice and sacrifice impact on the destiny of resources in the production process. This should not be in conflict with the priorities of the Constitution, nor should it impair the sustainability of the environment.</p> <p><b>LO 3: Economic Pursuits</b> The learner is able to demonstrate knowledge, understanding and critical awareness of the policies and practices underpinning the improvement of the standard of living.</p> <p>The focus is on actions, processes and structures that advance sustainable reconstruction and development of the national economy, while taking into account the dynamics of the global economy.</p>

(<http://www.education.gov.za/curriculum/SubjectStatements.asp>)

This means that teachers have to incorporate environmental and sustainability education in their lessons. However, it is one thing to have a well-balanced NCS and quite another for it to be meaningfully implemented in the teaching and learning environment across South Africa (see paragraph 2.3.5).

The resistance amongst teachers to the implementation of a new curriculum, let alone integrating environmental and sustainability education into their lesson plans, calls for continued training, capacity building, support and monitoring.

For environmental and sustainability education to have the desired impact in terms of ensuring sustainable development and reversing or halting practices that are detrimental to the environment, it has to become part of every aspect of the school milieu and of education, as mentioned in The White Paper on Education and Training (see paragraph 2.2.9.2.1). Chen substantiates this when he states:

“...we cannot be satisfied with the claim that environmental education can be infused into the current curriculum or taught through new subjects that deal solely with environmental issues while most students are bombarded with too much content already. There is a need to pay attention to the whole school curriculum and to design a new curriculum, which emphasizes the relevance of sustainable development if we are to avoid existing piecemeal therapy techniques (Chen 1997:235)”.

What is therefore needed is a sustainability education curriculum that involves the formal curriculum, extra-curricular activities, the school community as a whole and which reflects the ethos of the school in order to implement and cultivate a sustainable community. Each discipline – learning area or subject – must examine and critically analyse environmental and developmental issues from its own perspective or its own context. In addition it must contrast it with the findings of other disciplines to come to a more holistic response to environmental problems. With such an approach, one can develop best practices for the implementation of environmental and sustainability education among all the role players.

### **1.2.1 The need for establishing Eco-Schools**

The 4th World Environmental Education Congress, held in Durban, 2 – 6 July 2007, focused on “*Learning in a Changing World*”, calling for teachers to “get radical” (Daily News 2007:6). The Congress warned that by 2008 an estimated half of the earth’s population would be living in urban areas. Sub-Saharan Africa would be one of the worst affected regions in the world. It cautioned that unless solutions and mitigation measures were put in place urgently, urban slums, solid waste, urban crime, demand for energy such as coal and fuel, excessive overcrowding, pressure on sewage systems and water supplies would increase exponentially. Concurrently noise, air and water pollution would increase at an alarming rate.

Mtholephi Mthimkhulu (Daily News 2007:6), provincial minister of Agriculture and Environment, who spoke at the official opening of the congress, alluded to the predictions of environmentalists and activists concerning global warming and said its looming dangers were now a reality. He cited the recent destruction of the coastline, from Empangeni to Port Edward as an example. The congress even raised the issue of making the 2010 Soccer World Cup a “green” event. This was an urgent attempt to bring about not only environmental awareness but also to ensure that green fuel was used for transportation, that water saving technology and waste management plans are implemented and that all cities become environmentally friendly.

Julie Johnston, from Upper Canada College (Daily News 2007:6), told the congress that we have eight years to change how we live on earth and that we have even less time to change how we teach children.

From the above it is evident that there are serious concerns and time is running out. South Africa is fortunate that the NCS has incorporated environmental and sustainability education. The challenge lies in its implementation. It is here that

the Eco-Schools Programme can be used most effectively. The Eco-Schools Programme is an international programme of the Foundation for Environmental Education (FEE). It was developed in 1994 in order to promote and implement environmental education in schools (see paragraph 2.3.1).

Eco-Schools encourage whole-school improvement through better environmental learning and more efficient management of the school environment through experiential and active learning strategies. It offers a range of approaches on how teachers and the school structures can provide opportunities for learning about, in, through and for the environment.

The Eco-Schools Programme is currently being implemented in more than 27 countries around the world by non-government organisations and incorporates the “whole school approach” in its programme. In South Africa, this programme started in 2003 (see paragraph 2.3.4). The Eco-Schools Programme is not part of the formal education system. This is a serious flaw as participation by schools is voluntary and not compulsory. Hence the low level of registration by schools to participate in the Eco-Schools Programme and the evident lack of support by teachers for the programme. The success of the aims and objectives of the Eco-Schools Programme is left in the hands of the few dedicated teachers who are faced with the arduous task of convincing the entire school community to get involved.

### **1.3 Formulation of the Research Problem**

The focus of the study was to investigate how the Eco-Schools Programme can achieve whole school development by implementing sustainability education.

## **1.4 Aim of the Research**

The aim of the research was to:

1. Assess whether the Eco-Schools Programme can achieve whole school development through the implementation of sustainability education.
2. Evaluate whether public schools and district officials of the Department of Basic Education (DBE) are aware of the Eco-Schools Programme.
3. Recommend that the Eco-Schools Programme be incorporated into the formal education system.

## **1.5 Research Design and Methodology**

Since the aim of this research was to assess the role of the Eco-Schools Programme in achieving whole school development through sustainability education, the research design used to conduct the research was evaluation research (see paragraph 3.2). The method used was qualitative research. The research methodology included a sample of schools drawn from the 104 schools in the Gauteng Province that had registered with the Eco-Schools Programme in 2008, the Department of Basic Education and the Wildlife and Environmental Society of South Africa (WESSA) with its Eco-Schools Programme (see paragraph 3.4). Data was collected through interviews, qualitative questionnaires and narrative story-telling (see paragraph 3.5.1).

## **1.6 Structure of the Study**

### **Chapter 1**

Chapter 1 is the introductory chapter. It briefly explains the context, the reasons for the research and gives a short historical account of the development of

environmental and sustainability education and the implementation strategies employed through the Eco-Schools Programme.

## **Chapter 2**

Chapter 2 looks at the development of environmental education internationally, regionally and locally. It explores the academic research done on environmental and sustainability education. It also examines the development of the whole school approach as per Sustainability Education in the European Primary Schools (SEEPS) model, as well as the development and implementation of the Eco-Schools Programme internationally and locally.

## **Chapter 3**

The research design and the methodology employed are discussed in this chapter. It describes the design, the methodology, the criteria used to select the sample size, the process used to gain access to the subjects and the procedure used to capture the data.

## **Chapter 4**

Chapter 4 presents the findings of the research. It contains the description and summaries of the main results and discusses the main trends and patterns. Tables and figures are used to support the findings.

## **Chapter 5**

This chapter discusses the main findings of the study. Recommendations are made in terms of the aims and objectives of the research.

## **1.7 Summary**

In the opening quotation of this chapter it is noted that “the school is the ‘centre’ of change” (Fullan 1991) and that education is critical and central in promoting the priorities as set out in Chapter 36 of Agenda 21 (see paragraph 2.2.5). In order to implement the priorities of Agenda 21 at school level, FEE (see paragraph 2.3.1) developed the Eco-Schools Programme in 1992. One of the outcomes of the World Summit on Sustainable Development (WSSD) in 2002 was to set a time frame of ten years to strengthen the focus on education for sustainable development. As required by UN resolution 57/254, in March 2005, the United Nations launched the Decade of Education for Sustainable Development (DESD) with a fully developed plan for implementation (see paragraph 2.2.7). Hence, this research aims to assess if the Eco-Schools Programme can achieve whole school development through the implementation of sustainability education. It also recommends that the Eco-Schools Programme should be incorporated into the formal education system.

## **Collective responsibility is an important part of our heritage**

*“Education for sustainable development implies a shift from viewing education as a delivery mechanism, to the recognition that we are all learners as well as teachers. Education for sustainable development must happen in the villages and cities, schools and universities, corporate offices and assembly lines, and in the offices of ministers and civil servants. All must struggle with how to live and work in a way that protects the environment, advances social justice, and promotes economic fairness for present and future generations. We must learn how to resolve conflicts, create a caring society and live in peace.” Ahmedabad Declaration – India 2005 (Taylor 2006:5)*

### **2.1 Introduction**

The focus of this chapter is to give an overview of how environmental and sustainability education:

1. Has evolved over the last 30 years into education for sustainable development for and about the environment;
2. Has been integrated into the South African education system through the National Curriculum Statement (NCS); and
3. Is being implemented through the Eco-Schools Programme to assist in achieving whole school development.

Eco-Schools have incorporated the whole school development approach. In doing so the programme aims to empower all role players within the school community to become actively involved in sustainable development. Teachers are pivotal to this process and need to be appropriately trained. However, according to “Le Roux and Maila (2004:243), “teachers appear to lack clarity regarding the status and relevance of environmental education as directed by education policy and environmental policies...”.

## **2.2 From Environmental Education to Education for Sustainable Development**

### **2.2.1 The United Nations Conference on the Human Environment in Stockholm, June 1972 (Filho et al 1996:25-26)**

The global concern about the world’s environmental problems prompted the United Nations Conference on The Human Environment, held in June 1972 in Stockholm, to take some action. The result was Recommendation 96. It called on “the organizations of the UN System, especially UNESCO...to take the necessary steps to establish the international programme in environmental education.” It suggested that the approach should be interdisciplinary and take into account all levels of education, including that of the general public.

Three years after the Stockholm Conference, the International Environmental Education Programme (IEEP) was established in January 1975 in response to Recommendation 96. The aims and objectives of the IEEP were to:

1. Facilitate the co-ordination, joint planning and preplanning of activities essential to the development of an international programme in environmental education;
2. Promote the international exchange of ideas and information pertaining to environmental education;

3. Co-ordinate research to understand better the various phenomena involved in teaching and learning;
4. Formulate and assess new methods, materials and programmes (both in school and out-of school, youth and adult) in environmental education;
5. Adequately train and retrain personnel to staff environmental education programmes; and
6. Provide advisory services to Member States relating to environmental education.

### **2.2.2 The International Environmental Education Workshop in Belgrade, the former Yugoslavia, 13 – 22 October 1975 (Filho et al 1996:25-26)**

As a follow-up on the Stockholm Conference, Belgrade hosted an exclusive 10-day international environmental education workshop. At this workshop, “The Belgrade Charter: A Global Framework for Environmental Education”, was adopted.

It outlined the guiding principles for environmental education programmes, both formal and non-formal. The non-formal education sector included youths and adults from all sectors of the community (UNESCO-UNEP, 1976). The Belgrade Workshop emphasised that environmental education needed to be “an educational process with important ethical, economic, and political implications”.

### **2.2.3 The Intergovernmental Conference on Environmental Education at Tbilisi, Georgia, 14 – 26 October 1977**

[http://www.gdrc.org/uem/ee/EETbilsi\\_1977.pdf](http://www.gdrc.org/uem/ee/EETbilsi_1977.pdf)

Two years after the Belgrade Workshop UNESCO, in co-operation with the United Nations Environment Program (UNEP), convened the world’s first Intergovernmental Conference on Environmental Education. At this conference

the delegates accepted and elaborated on the goals, aims, objectives and principles outlined in the Belgrade Charter.

The Tbilisi Conference (UNESCO, 1977:27) produced twelve principles for environmental education, which the Moscow Congress endorsed in 1988.

The twelve principles state that environmental education should:

1. View the environment in its totality.
2. Follow an interdisciplinary approach.
3. Sensitise learners to the environment, teach knowledge and skills, and clarify values.
4. Look at major environmental issues from a local, national and international perspective.
5. Focus on current and potential situations and at the same time maintain a historical perspective.
6. Help learners discover the causes and symptoms of environmental problems.
7. Give learners the opportunity to plan their own learning experiences and to take decisions.
8. Ensure it is an on-going process.
9. Emphasise every individual's responsibility towards the environment.
10. Emphasise the value of co-operation for solving environmental problems.
11. Emphasise the complexity of environmental problems and so make people realise that there is a need for critical cognitive skills.
12. Use a large number of teaching approaches and strategies for teaching and learning.

#### **2.2.4 The Brundtland Report, April 1987 – 42/187. Report of the World Commission on Environment and Development**

<http://www.un/documents/ga/res42-187.htm>

In April 1987, the United Nations World Commission on the Environment and Development (WCED), produced a 380-page report entitled, “Our common future”. Ms Gro Harlem Brundtland, who was then the chairperson of the WCED spearheaded this report which became better known as the Brundtland Report.

The main contribution of this report is its direction that economic growth should be approached in a more responsible way. The report urges governments to make environmental concerns central issues in their decision-making processes to ensure that meeting the needs of the present citizens does not compromise the ability of future generations to meet their needs. This consideration must be the crux of all sustainable development decisions and efforts.

#### **2.2.5 The United Nations Conference on Environment and Development (UNCED), Earth Summit in Rio de Janeiro, Brazil, 3-14 June 1992 (UN 1999: 264-269)**

The delegates who attended this conference expressed strong support for sound environmental management and sustainable development. Most of what was agreed in Brazil by way of Agenda 21 and the Rio Declaration was not new to the environmental community.

Chapter 36 of Agenda 21, entitled “Promoting Education, Public Awareness and Training” represents the contributions from the environmental sections of UNESCO and the United Nations Environment Programme (UNEP). The programme areas, the basis for action and the objectives of Chapter 36 read as follows:

## **“(a) The reorientation of education towards sustainable development**

### Basis for Action

36.3 Education, including formal education, public awareness and training, should be recognised as a process by which human beings and societies can reach their fullest potential. Education is critical for promoting sustainable development and improving the capacity of the people to address environmental and developmental issues. While basic education provides the underpinning for any environmental and development education, the latter needs to be incorporated as an essential part of learning. Both formal and non-formal education is [sic] indispensable to changing people’s attitudes so that they have the capacity to access and address their sustainable development concerns. It is also critical for achieving environmental and ethical awareness, values and attitudes, skills and behaviour consistent with sustainable development and for effective public participation in decision-making. To be effective, environment and development education should deal with the dynamics of both the physical / biological and socio-economic environment and human (which may include spiritual) development, should be integrated in all disciplines, and should employ formal and non-formal methods and effective means of communication.

### Objectives

36.4 Recognising that countries and, regional and international organisations will develop their own priorities and schedules for implementation in accordance with their needs, policies and programmes, the following objectives are proposed:

- (a) Endorsing the recommendations arising from the World Conference on Education for All: Meeting Basic Learning Needs (Jomtien, Thailand, 5-9 March 1990) and striving to ensure universal access to basic education and to achieve primary education for at least 80 per cent of girls and boys of primary school age through formal schooling or non-formal education

and to reduce the illiteracy rate of adults to half of its 1990 level. Efforts should focus on reducing the high illiteracy levels and redressing the lack of basic education among women to bring their literacy levels in line with that of men;

- (b) To achieve environmental and developmental awareness in all sectors of society on a world-wide scale as soon as possible;
- (c) To strive to achieve the accessibility of environmental and developmental education, linked to social education, from primary school age through adulthood to all groups of people;
- (d) To promote integration of environmental and developmental concepts, including demography, in all educational programmes, in particular the analysis of the causes of major environmental and developmental issues in a local context, drawing on the best available scientific evidence and other appropriate sources of knowledge, and giving [sic] special emphasis on the further training of decision-makers at all levels (UN 1999:264).

### **(b) The urgent need to increase public awareness**

#### Basis for action

36.8 There is still a considerable lack of awareness of the interrelated nature of all human activities and the environment, due to inaccurate or insufficient information. Developing countries in particular lack relevant technologies and expertise. There is a need to increase public sensitivity to environment and its associated problems of development. One way would be to get the community involved in finding solutions. This process can also be helped by assisting the public to develop a sense of personal responsibility for the environment and greater motivation and commitment towards sustainable development.

### Objectives

36.9 The objective is to promote broad public awareness as an essential part of a global education effort to strengthen attitudes, values and actions which are compatible with sustainable development. It is important to stress the principle of devolving authority, accountability and resources to the most appropriate level with preference given to local responsibility and control over awareness-building activities (UN1999:267).

### **(c) The need to promote training**

#### Basis for Action

36.12 Training is one of the most important tools to develop human resources and facilitate the transition to a more sustainable world. It should have a job-specific focus, aimed at filling gaps in knowledge and skill that would help individuals find employment and be involved in environmental and development work. At the same time, training programmes should promote a greater awareness of environment and developmental issues as a two-way learning process.

#### Objectives

36.13 The following objectives are proposed:

- (a) To establish or strengthen vocational training programmes that meet the needs of environment and development with ensured access to training opportunities regardless of social status, age, gender, race or religion;
- (b) To promote a flexible and adaptable workforce of various ages equipped to meet growing environmental and developmental problems and changes arising from the transition to a sustainable society;
- (c) To strengthen national capacities, particularly in scientific education and training, to enable Governments, employers and workers to meet their environmental and developmental objectives and to facilitate the transfer

and assimilation of new environmentally sound, socially acceptable and appropriate technology and know-how;

- (d) To ensure that environmental and human ecological considerations are integrated at all managerial levels and in all functional management areas, such as marketing, production and finance (UN 1999:268)".

Activities for each of the programmes are listed and explained in Chapter 36 of Agenda 21 (UN1999:264 – 269). However, for the purpose of this research paragraph 36.17 needs to be noted in terms of the training and human resource development advocated. It reads as follows:

“Countries should encourage all sectors of society, such as industry, universities, government officials and employees, non-governmental organisations and community organisations, to include an environmental management component in all relevant training activities with emphasis on meeting immediate skill requirements through short-term formal and in-plant vocational and management training. Environmental management training capacities should be strengthened, and specialised “training of trainers” programmes should be established to support training at national and enterprise levels. New training approaches for existing environmentally sound practices should be developed and create employment opportunities and make maximum use of local recourse-based methods (UN 1999:268/7).”

#### **2.2.6 World Summit on Sustainable Development (WSSD): Johannesburg - South Africa, 26 August – 4 September 2002**

([http://un.org/jsummit/html/document/summit\\_docs.html](http://un.org/jsummit/html/document/summit_docs.html).)

Resolution 1. The political declaration, known as the Johannesburg Declaration on Sustainable Development, was adopted at the 17<sup>th</sup> plenary meeting on 4 September 2002.

Resolution 1 states:

“1. We, the representatives of the peoples of the world, assembled at the World Summit on Sustainable Development in Johannesburg, South Africa, from 2 to 4 September 2002, reaffirm our commitment to sustainable development.

2. We commit ourselves to building a humane, equitable and caring global society, cognisant of the need for human dignity for all.

3. At the beginning of this Summit, the children of the world spoke to us in a simple yet clear voice that the future belongs to them, and accordingly challenged all of us to ensure that through our actions they will inherit a world free of the indignity and indecency occasioned by poverty, environmental degradation and patterns of unsustainable development.

4. As part of our response to these children, who represent our collective future, all of us, coming from every corner of the world, informed by different life experiences, are united and moved by a deeply felt sense that we urgently need to create a new and brighter world of hope.

5. Accordingly, we assume a collective responsibility to advance and strengthen the interdependent and mutually reinforcing pillars of sustainable development, economic development, social development and environmental protection at local, national, regional and global levels.

6. From this continent, the "Cradle of Humanity", we declare, through the Plan of Implementation of the World Summit on Sustainable Development and the present Declaration, our responsibility to one another, to the greater community of life and to our children.

7. Recognising that humankind is at a crossroads, we have united in a common resolve to make a determined effort to respond positively to the need to produce a practical and visible plan to effect poverty eradication and human development.

### **From Stockholm to Rio de Janeiro to Johannesburg**

8. Thirty years ago, in Stockholm, we agreed on the urgent need to respond to the problem of environmental deterioration. Ten years ago, at the United Nations Conference on Environment and Development, held in Rio de Janeiro, we agreed that the protection of the environment and social and economic development are fundamental to sustainable development, based on the Rio Principles. To achieve such development, we adopted the global programme entitled Agenda 21 and the Rio Declaration on Environment and Development, to which we reaffirm our commitment. The Rio Conference was a significant milestone that set a new agenda for sustainable development.

9. Between Rio and Johannesburg, the world's nations have met in several major conferences under the auspices of the United Nations, including the International Conference on Financing for Development, as well as the Doha Ministerial Conference. These conferences defined for the world a comprehensive vision for the future of humanity (WSSD 2002:1-3).”

Resolution 2. Provides the Plan for the Implementation of the World Summit on Sustainable Development.

With regard to Education for sustainable development, Resolution 2 states:

“116. Education is critical for promoting sustainable development. It is therefore essential to mobilise the necessary resources, including financial resources at all levels, by bilateral and multilateral donors, including the World Bank and the

regional development banks, by civil society and by foundations, to complement the efforts by national governments to pursue the following goals and actions:

- (a) Meet the Millennium development goal of achieving universal primary education, ensuring that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling;
- (b) Provide all children, particularly those living in rural areas and those living in poverty, especially girls, with the access and opportunity to complete a full course of primary education.

117. Provide financial assistance and support to education, research, public awareness programmes and developmental institutions in developing countries and countries with economies in transition in order to:

- (a) Sustain their educational infrastructures and programmes, including those related to environment and public health education;
- (b) Consider means of avoiding the frequent, serious financial constraints faced by many institutions of higher learning, including universities around the world, particularly in developing countries and countries in transition (WSSD 2002:61).

121. Integrate sustainable development into education systems at all levels of education in order to promote education as a key agent for change.

122. Develop, implement, monitor and review education action plans and programmes at national, sub-national and local levels, as appropriate, that reflect the Dakar Framework for Action on Education for All and that are relevant to local conditions and needs. These goals aim to lead towards achieving community development and provide conditions and fulfill needs that make education for sustainable development a part of those plans.

123. Provide all community members with a wide range of formal and non-formal continuing educational opportunities, including volunteer community service programmes, in order to end illiteracy and emphasise the importance of lifelong learning as well as promote sustainable development.

124. Support the use of education to promote sustainable development, including through urgent actions at all levels to:

(a) Integrate information and communications technology in school curriculum development to ensure its access by both rural and urban communities and provide assistance, particularly to developing countries, among others, for the establishment of an appropriate enabling environment required for such technology;

(b) Promote, as appropriate, increased access to affordable programmes for students, researchers and engineers from developing countries in the universities and research institutions of developed countries. This will promote the exchange of experience and capacity that will benefit all partners;

(c) Continue to implement the work programme of the Commission on Sustainable Development on education for sustainable development;

(d) Recommend to the United Nations General Assembly that it consider adopting a decade of education for sustainable development, starting in 2005 (WSSD 2002: 61-62).”

**2.2.7 United Nations General Assembly Resolution 57/254 – The United Nations Decade of Education for Sustainable Development (DESD) 2005 – 2014. (<http://www.unesco.org/education/desd>)**

The primary goal for the DESD is laid out in the United Nations General Assembly resolution 59/237 in which the General Assembly “encourages Governments to consider the inclusion ... of measures to implement the Decade

in their respective education systems and strategies and, where appropriate, national development plans". Furthermore, the General Assembly "invites Governments to promote public awareness of and wider participation in the Decade, inter alia, through cooperation with and initiatives engaging civil society and other relevant stakeholders, especially at the beginning of the Decade." (<http://www.unesco.org/education/desd>).

At the national level, two sub-goals within the broad goals established by the General Assembly for the DESD are:

- (1) To provide an opportunity for refining and promoting the vision of and transition to sustainable development – through all forms of education, public awareness and training.
- (2) To give an enhanced profile to the important role of education and learning in sustainable development.

Education for Sustainable Development (ESD) is fundamentally about values, with respect as its core value: respect for others, including those of present and future generations, for difference and diversity, for the environment and for the resources of the planet we inhabit. Education enables us to understand ourselves and others and our links with the wider natural and social environment, and this understanding serves as a durable basis for building respect. Along with a sense of justice, responsibility, exploration and dialogue, ESD aims to move us to adopting behaviours and practices that enable all to live a full life without being deprived of basics.

ESD will be shaped by a range of perspectives from all fields of human development, including all the acute challenges that the world faces. ESD cannot afford to ignore the implications arising from striving for a more just and sustainable process of change. The plan notes the important perspectives provided by: human rights, peace and human security, gender equality, cultural diversity and inter-cultural understanding, health, HIV/AIDS, governance, natural

resources, climate change, rural development, sustainable urbanisation, disaster prevention and mitigation, poverty reduction, corporate responsibility, accountability and market economy.

UNESCO, in its role as task manager for the United Nations Decade on Education for Sustainable Development (UNDESD), explains the role of education in “education for sustainable development” as follows:

“ESD prepares people of all walks of life to plan for, cope with and find solutions for issues that threaten the sustainability of our planet. Understanding and addressing these global issues of sustainability that affect individual nations and communities are at the heart of ESD. These issues come from the three spheres of sustainable development – environment, society and economy. Environmental issues like water and waste affect every nation, as do social issues like employment, human rights, gender equity, peace and human security. Every country also has to address economic issues such as poverty reduction and corporate responsibility and accountability. Major issues that have grabbed global attention such as HIV/AIDS, migration, climate change and urbanization involve more than one sphere of sustainability. Such issues are highly complex and will require broad and sophisticated educational strategies for this and the next generation of leaders and citizens to find solutions. Educating to deal with complex issues that threaten planetary sustainability is the challenge of ESD. Education reform alone will not accomplish this. It will take a broad and deep effort from many sectors of society (UNESCO 2005:3)”.

### **2.2.8 SADC Regional Environmental Education Programme**

The Southern African Development Community (SADC) and Regional Environmental Education Programme (REEP) have been supporting environmental education in southern Africa since 1993. The SADC-REEP mid-term review report of 1999 noted that the REEP programme is accepted in the

international arena and that its programmes form the basis for the development of resources for training and material development throughout the SADC region (Parker & Murray 1999).

The SADC's regional environmental education programme consists of four major components. Each component has a specific objective. These are:

Policy: Strengthen and broaden the regional environmental education policy.

Networking: Strengthen and broaden the regional environmental education network.

Resources: Develop relevant resource material for the region.

Training: Develop and strengthen of training capacity in environmental education (SADC - REEP 2002:14).

## **2.2.9 Important References for Environmental Education in South Africa**

### **2.2.9.1 The National Environmental Education Programme (NEEP)**

([www.environment.gov.za/ProjProg/2003NEEP/capcity-building-21052003.html](http://www.environment.gov.za/ProjProg/2003NEEP/capcity-building-21052003.html).)

NEEP was a collaborative project co-ordinated by the Department of Basic Education (DBE). Its purpose was to support teachers in implementing environmental education at schools. One of its main objectives was to get environmental learning integrated throughout the curriculum for the General Education and Training (GET) band. The project ended in December 2003 after the Revised National Curriculum Statement (RNCS), which is now known as the National Curriculum Statement (NCS).

#### **The strategy proposed for the NEEP-GET Project included:**

1. Curriculum design and revision

It participated in the process of revising and streamlining C2005.

## 2. Resource based learning

It emphasised the importance of resources in learning and worked towards adapting Learner Support Material to suit contexts in which teachers work.

## 3. Professional development of provincial and district staff and teachers

NEEP-GET implemented professional development programmes to influence environmental teaching and learning in schools.

## 4. Improvement of environmental learning in schools

The project worked towards promoting improved environmental learning in schools through the incorporation of school-based environmental activities into the curriculum. Participating teachers were encouraged to initiate activities and projects that support environmental learning, the development of school environmental policies, management plans, and the incorporation of enviro-days into their own curriculum plans.

NEEP regarded the major aim of environmental learning to be the development of the ability to identify, analyse and respond to environmental issues in context.

This aim includes the ability to:

1. Identify and solve environmental problems;
2. Understand interconnectedness between systems (political, economic, ecological, cultural, social);
3. Develop a historical perspective on environmental issues;
4. Use science and technology appropriately without detriment to life sustaining systems;
5. Develop action competence to address environmental issues;
6. Develop environmental literacy (an understanding of current environmental key concepts);
7. Understand the contextual and constructed nature of environment and environmental issues;

8. Develop a deeper understanding of how people come to perceive of environment and the consequences of their perceptions and actions;
9. Clarify personal values and perceptions on environment and environmental issues.

## **2.2.9.2 Legislation and Environmental Education in South Africa**

### **2.2.9.2.1 The White paper on Environmental Education (1989)**

The *White Paper on Environmental Education* formulated the objectives of environmental education for the promotion of action at all government levels, including formal education authorities and individuals, as well as institutions concerned with non-formal and informal education. (Statement no 1: 5)

With regard to the implementation of environmental education, Statement no 5.2 and 5.3 read as follows:

#### **“5.2 Environmental education: General**

5.2.1 The establishment of environmental education as a new, independent subject is not envisaged. However, an attempt will be made, in co-operation with the responsible educational bodies, to ensure that the principles of environmental education are included in all appropriate educational curricula.

#### **5.3 Formal Education**

5.3.1 With regard to the primary and secondary school phases of formal education, the attention of the education authorities is drawn to the fact that there is a need for:

- (a) The clear definition of the concept of environmental education;
- (b) The integration of the objectives of environmental education into the core syllabuses of all applicable subjects; and

- (c) The optimum use of all available educational facilities, including urban and rural environmental centres.

5.3.3 With regard to serving teachers, the attention of the education authorities is drawn to the need for:

- (a) In-service training of teachers in environmental education and the possible institution of a training programme on environmental education;
- (b) Seminars and work sessions on environmental education with a view to updating the teacher's knowledge; and
- (c) Experienced teachers to be made available to approved urban and rural environmental education centres to optimise the use of such centres, and to develop teaching aids that could be made available locally for environmental education."

#### **2.2.9.2.2 The White paper on Education and Training (1995)**

In 1995, *The White Paper on Education and Training* finally endorsed environmental education. "Values and Principles of Education and Training Policy – Statement no 20:18", Chapter Four declares:

"Environmental education, involving an inter-disciplinary, integrated and active approach to learning, must be a vital element of all levels and programmes of the education training system, in order to create environmentally literate and active citizens and ensure that all South Africans, present and future, enjoy a decent quality of life through the sustainable use of resources."

#### **2.2.9.2.3 The Constitution of the Republic of South Africa (Act 108 of 1996)**

The Bill of Rights enshrines the right to an environment that is not detrimental to the health and well-being of citizens (Statement 24:11).

#### **2.2.9.2.4 The National Environmental Management Act (NEMA) – 1998**

This act commits the South African government to sustainable development, and emphasises the need for environmental education and capacity building in all sectors of South African society.

#### **2.2.9.2.5 The Norms and Standards for Educators Policy – 2000**

The Norms and Standards for Educators Policy requires teachers to identify and respond to social and environmental issues through their educational practice.

#### **2.2.9.2.6 The National Curriculum Statement (NCS) 2005**

The revision of Curriculum 2005 resulted in a draft Revised National Curriculum Statement (RNCS) for grades R-9 and was made available for public comment on 31 July 2001. It was revised in terms of the input received. Hence the RNCS was not a new curriculum but one that revised, streamlined and strengthened Curriculum 2005 (RNCS: 6).

The RNCS has tried to ensure that all learning area statements (subjects in grade 10 -12) reflect the principles of social justice, respect for the environment and human rights as defined in the Constitution (RNCS: 10). This is reflected in chapter 1, Table: 1.1.

The RNCS grades R – 9 and the NCS grade 10 -12 are now collectively known as the National Curriculum Statement (NCS: 2005).

## **2.3 Eco-Schools: Towards a Healthy Environment and Whole School Development**

### **2.3.1 From Policy to Practice – Foundation for Environmental Education (FEE) <http://www.eco-schools.org/>**

Eco-Schools was developed in 1994 as a response to some of the needs identified at the Earth Summit of 1992 and at conferences held over the past 30 years. The programme was initiated by member organisations of FEE, with the support of the European Commission. It provides an ideal way to implement Agenda 21 in schools and their neighbouring communities – each making a local contribution to a wider goal. It combines a strong formative component with concrete action plans that should result in clear, tangible environmental benefits. The programme provides a mechanism for schools, and indeed for the learners themselves, to understand the importance of establishing and putting into practice appropriate environmental and sustainability policies for the school but also for every individual at a personal level.

### **2.3.2 A Flexible Framework**

Initiated in 1995 with support of the European Commission, the Eco-Schools programme offers a flexible approach for schools to implement an environmental management system, based on the model EMAS – Eco-Management and Audit Scheme. While initially it focused on themes such as water, energy and waste, it has now expanded to include other thematic areas developed in several different countries such as noise, nature and biological diversity, healthy living and transportation.

To encourage active participation, the Green Flag Certification Program was established. It is awarded to schools that have successfully followed the Eco-Schools methodology, adapting its application to meet their specific needs and

achieving their own determined, concrete objectives. With its participatory approach, getting learners totally involved in both activities and decision-making processes, Eco-Schools can be an important instrument for promoting the values of participation and citizenship. Fostering ties with local authorities, organisations, businesses, and indeed learners' families, Eco-Schools provide a platform for school-based community development. Under a global partnership to promote the programme as an instrument for sustainable development, in particular in developing regions, the Eco-Schools Programme is recognised by the United Nations Environment Programme (UNEP) as among its "preferred school-based / children and youth global model programme for environmental education, management, sustainability and certification at the international level" (<http://www.eco-schools.org>).

### **2.3.3 Eco-Schools and International Perspectives**

The Eco Schools Programme has been very successful throughout Europe and is seen as providing an invaluable example for other regions to emulate, as it serves not only as a means of addressing environmental education but also of motivating community development. The partnership between FEE and UNEP provides important technical and institutional capacity to facilitate the introduction of the Programme in other regions, particularly in developing countries and those with economies in transition (<http://www.eco-schools.org>).

South Africa was the first country outside Europe where a national organisation, the Wildlife and Environmental Society of South Africa (WESSA) became a Foundation for Environmental Education (FEE) member. The Eco-Schools Partnerships in Africa Workshop held in South Africa in 2002 was instrumental in identifying the potential of the programme for adaptability to regional contexts and needs.

While recognising the participatory environmental management system as a sound and compatible framework, conclusions from the 14 national delegations from Southern and Eastern African countries noted that the scope of programme “themes” for Africa would vary considerably from those used in most European countries.

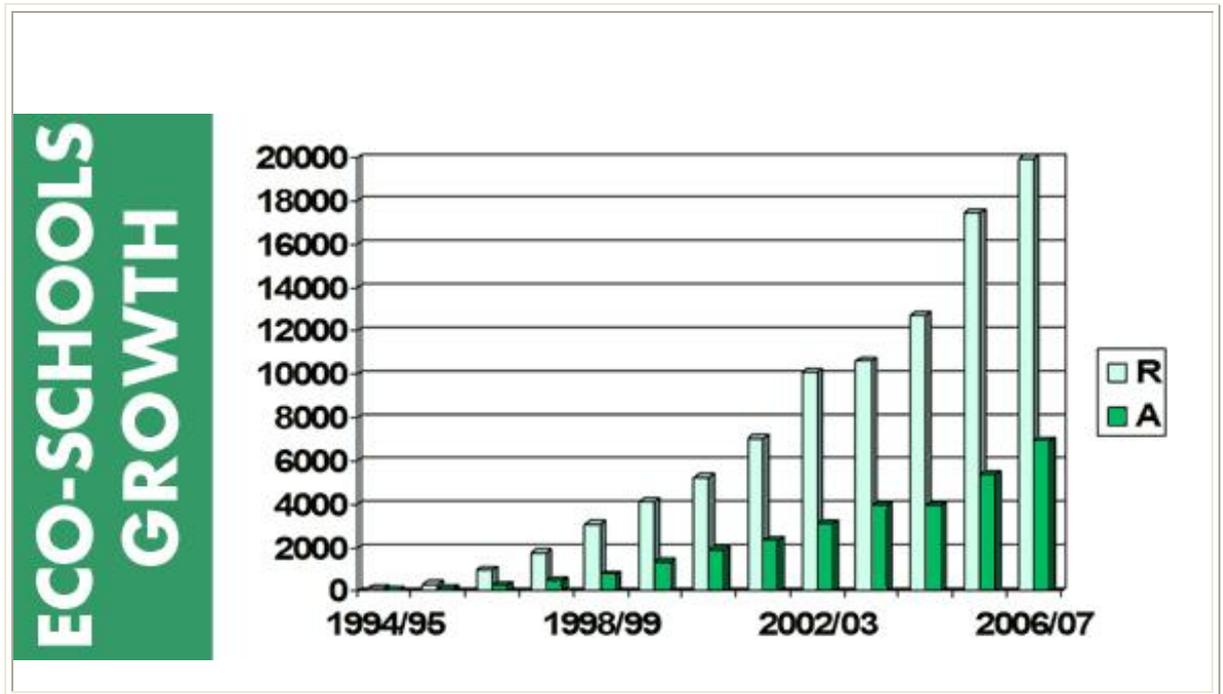
In many regions of Africa, the Eco-Schools Programme can be an instrument for education on health and sanitation, community-based natural resource management, as well as acting as an incubator for local-level micro-projects. The latter could lead to income generation for the school and training for young people in sustainable, natural resource based trades.

During 2005 the number of participating countries increased to just over 40. The programme is now being implemented in a number of countries in Europe, Africa, South America, Oceania and Asia. The number of Eco-Schools is growing as more and more schools take up the challenge and work towards improving their environment through education and action.

Newsletters, email news and the online projects keep schools in touch and aware of developments throughout the network, while periodic international events are organised to provide personal and direct contact. Eco-Schools Programme may be known by different names in different countries, though they share the same methodology and concept, and are identified by the Eco-Schools logo and the Green Flag.

The number of schools participating internationally has grown considerably since the beginning of the programme, as graph 2.1 shows. By the end of the 2004/2005 school year, there were about 14 000 schools participating of which more than 4000 were Green Flag award-winners (<http://www.eco-schools.org>).

Graph 2.1 Number of schools participating



R: Registered

A: Awarded with Eco-Flag

The Eco-Schools Programme extends learning beyond the classroom and develops responsible attitudes and commitment, at home and in the wider community, promoting sustainable living and building ties with the community. In this way it contributes to the New Partnership for Africa's Development (NEPAD) priorities such as human resource development and bridging the education gap (Vallabh 2005:5).

**Table 2.1 Countries currently participating include:**

Bangladesh	France	Norway
Belgium	Germany	Poland
Brazil	Greece	Portugal
Bulgaria	Iceland	Romania
Canada	Ireland	Russia
Caribbean	Italy	Scotland (UK)
Chile	Kenya	Slovakia
Croatia	Latvia	Slovenia
Cyprus	Lithuania	South Africa
Czech Republic	Malta	Spain
Denmark	Montenegro	Sweden
England & Northern Ireland	Morocco	Turkey
Estonia	Netherlands	Wales (UK)
Finland	New Zealand	

### **2.3.4 The Eco-School Programme in South Africa**

The Eco-Schools Programme started in South Africa in 2003 and is managed by the (WESSA), in partnership with World Wildlife Fund: South Africa (WWF-SA) and support from various stakeholders. In addition to many small groups of Eco-Schools (or “nodes”), these programmes also receive support from various organizations (Vallabh 2005:5).

#### **2.3.4.1 The Eco-Schools Programme helps the school to:**

1. Improve the school environment;
2. Build young people’s confidence and sense of citizenship through participation;

3. Increase environmental awareness and responsibility;
4. Involve the local community;
5. Reduce litter and waste;
6. Reduce costs by saving water and energy;
7. Gain local publicity; and
8. Develop relationships with other schools around the world.

#### **2.3.4.2 What is the Eco-Schools programme?**

The Eco-Schools Programme is designed to encourage curriculum-based action for a healthy environment. The programme incorporates:

##### **Curriculum**

The Eco-Schools Programme is a learning programme that raises awareness of environmental and sustainable development issues through activities linked to curriculum learning areas (see Table 1.1).

##### **Action**

The Eco-Schools Programme encourages learners to take an active role in how their school can be run for the benefit of the environment. Practical steps are taken to reduce the environmental impact of the school following a simple process based on environmental management systems.

##### **Community**

The Eco-Schools Programme extends learning beyond the classroom and develops responsible attitudes and commitment, both at home and in the wider community, thus promoting sustainable development and building ties with the community.

## **Participation**

The Eco-Schools Programmes have successfully implemented the principles of the whole school development approach into a working programme that can easily be adapted to suit the unique demands and challenges of any school environment.

The Programme incorporates seven elements that schools at any level can adopt as a methodology. These elements have been designed to be the core of the Eco-Schools process, yet the structure is flexible enough to be adopted in any country, and at any level of a school's previous environmental achievement.

Learners' involvement throughout the process is an integral and essential factor. The participation of other stakeholders in the school and community in the decision-making process is an important step towards dialogue and co-operation, providing a good basis for citizenship education. This flexible system, with its pedagogic and practical elements, has made the Eco-Schools Programme a very successful programme with clear and tangible benefits for the entire school community.

### **2.3.4.3 Registration**

Schools may register anytime, before the end of April in order to qualify for a flag by the end of the same year. Unless otherwise negotiated, a school should register at least 6 months before submitting a portfolio. Portfolios are due on 31 October each year. A school needs to register each calendar year in order to receive new materials.

#### **2.3.4.4 Seven Steps to becoming an Eco-School**

1. Form an Eco-Committee
2. Write an Eco-Code
3. Do an Eco-Audit and Choose a Theme
  - Utilisation of resources
  - Nature and Biodiversity
  - Local and Global Issues
  - Healthy Living
  - Community and Heritage
4. Plan for Teaching and Learning
5. Develop a plan to Take Action
6. Schedule for Reporting and Sharing
7. Review the Portfolio and give the Award

#### **2.3.4.5 The Awarding System and Earning the Green Flag**

The new awarding system now follows a five year process. Refer to Table 2.2 on the next page.

**Table 2.2 Eco-Schools Awarding System**

<b>Year in which Report is presented</b>	<b>Requirements</b>	<b>Award</b>
Year 1	Project and lessons on 1 Focus area	Bronze Certificate
Year 2	Project and lessons on 2 Focus areas (including focus from Year 1)	Silver Certificate
Year 3	Project and lessons on 3 Focus areas (including focus areas from Years 1 - 2)	Green Flag
Year 4	Project and lessons on 4 Focus areas (including focus areas from Years 1 - 3)	Gold Certificate
Year 5	Project and lessons on 5 Focus areas (including focus areas from Years 1 - 4)	International Flag
After Year 5	Project and lessons on special Themes	Special Merit

The Eco-Schools Programme through the advocacy of whole school development can play an important role in shaping and transforming societies. Bonnet, (1999:323), describes the role of schools as follows:

“Many relevant attitudes and values will be expressed in the ethos and daily practices of the school, in the literature that it directs people to, in the versions of life that it holds up as successful and the status it accords to different activities and relationships. These should be carefully evaluated from the perspective of sustainability if damaging inconsistency of message and learner cynicism are to be avoided.”

**Table 2.3 The growth of Eco-Schools in South Africa since 2003**

<b>Province</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>
Eastern Cape	17	91	114	112	117	90
Free State	1	9	6	72	121	91
Gauteng	3	30	48	36	40	104
KwaZulu Natal	78	93	391	326	301	370
Limpopo	-	9	24	68	90	110
Mpumalanga	2	14	9	22	36	25
North West	1	18	5	15	8	24
Northern Cape	-	3	8	13	22	11
Western Cape	12	52	81	95	103	103
<b>Total</b>	<b>114</b>	<b>319</b>	<b>686</b>	<b>759</b>	<b>838</b>	<b>928</b>

### **2.3.5 Professional Development of Teachers**

Teachers are the proponents of change and are fundamental to transformation. They therefore, play a leading role in the implementation of education policies.

Dr Eurita Rosenberg (2005) notes that:

“...while environment is now firmly ‘in’ the curriculum, it is unfortunately not yet ‘on’ the agenda of most teachers and education department officials ...South Africa needs ...well planned teacher development programmes to help teachers (and their partners) to make full sense of environment in the curriculum”.

Teacher training and development are challenges that need to be addressed urgently. The Norms and Standards for Teachers 2000 (Government Gazette No

20844), see teachers as mediators of learning, interpreters and designers of learning programmes and materials, leaders, administrators and managers, scholars, researchers, lifelong learners, community members, citizens and pastors, assessors and learning area/ subjects/ phase specialists.

In a case study research conducted by Le Roux and Maila (2004: 239-240) on, *“Issues and challenges regarding environmental education policy implementation”*, the constraints experienced by teachers in their design and implementation of environmental education learning opportunities included:

1. Constraints related to status and relevance of environmental education:
  - (a) Inadequate knowledge about the environment and environmental issues, that is, subject-specific knowledge;
  - (b) Lack of understanding of the relevance of environmental education;
  - (c) The “add-on” status of environmental education and lack of recognition that environmental learning is integral to the curriculum; and
  - (d) Uncertainty regarding the status of the environment within the curriculum.
  
2. Constraints related to Outcomes-based Education (OBE):
  - (a) Lack of understanding of the principles and processes of OBE;
  - (b) Lack of motivation to adopt OBE;
  - (c) Need to change teaching style from ‘chalk and talk’ to facilitation of learning; and
  - (d) The inability to engage in learning programme development.
  
3. Constraints related to supporting active environmental learning:
  - (a) Need for support in developing learning programme units;
  - (b) Lack of monitoring the implementation of workshop processes in practice;
  - (c) Inability to generate a whole-school approach to active environmental learning;

- (d) Lack of support from school management in introducing environmental learning to the curriculum;
- (e) Lack of support and assistance from teachers in implementing environmental learning;
- (f) Lack of co-ordination of partner support; and
- (g) Lack of teacher self-confidence in implementing OBE and environmental learning.

4. Constraints related to learning support materials:

- (a) Lack of learning support materials;
- (b) Lack of funds to purchase learning support materials; and
- (c) Lack of experience in developing environmental learning support materials.

The research also pointed out that teachers appeared to lack clarity regarding the status and relevance of environmental education as directed by education policy and environmental policies (Le Roux & Maila 2004: 243).

Ward, Vallabh and Archery Vallabh (2005:13) reiterated the need for opportunities for teacher development in their Eco-Schools Programme WWF Funding Report of 2005. They added that a lack of an environmental advisor to the new National Minister of Education was a further setback as it was difficult to establish links with the Ministry of Education.

In the evaluation report of the Old Mutual Out of the Box Project the following was noted with regard to incorporating environmental education in classrooms: "During the site evaluation, classroom observations and interviews it was evident that not all teachers had the ability to incorporate environmental education in the classroom. Teachers would use the kit items, but not know how to link the lesson to environmental issues. The lesson would therefore be purely

Mathematics or Science related, without weaving environmental education into the lesson” (Uys 2006:53).

The evaluation noted that in some instances teachers with many years of experience have problems with transformation in the educational system and find it difficult to apply the principles of OBE, while younger, less-experienced teachers have received training in OBE and apply the principles of OBE with ease (Uys 2006:118).

### **2.3.6 Evaluation of the Old Mutual Out of the Box Project**

The Out of the Box Project initiated by Old Mutual is to enhance environmental education within schools by introducing a learner-centred curriculum and resources. These will stimulate learners, especially those from disadvantaged backgrounds to gain greater knowledge and understanding of the environment.

Emphasis is placed on environmental issues and school improvement projects. The project aims at making environmental education an integral component of the school’s approach to education and citizenship. Schools are encouraged to take part in projects in and around the school in order to enhance and add value to the environment (Uys 2006:17).

To roll out the pilot project, Old Mutual approached four service providers, namely, The Maths Centre, Eco-Schools, Primary Science Programme and the Schools’ Development Unit in the provinces of KwaZulu Natal, Western Cape, Eastern Cape and Gauteng (Uys 2006:13 -17).

#### **2.3.6.1 Old Mutual Out of the Box Project: Training and Support**

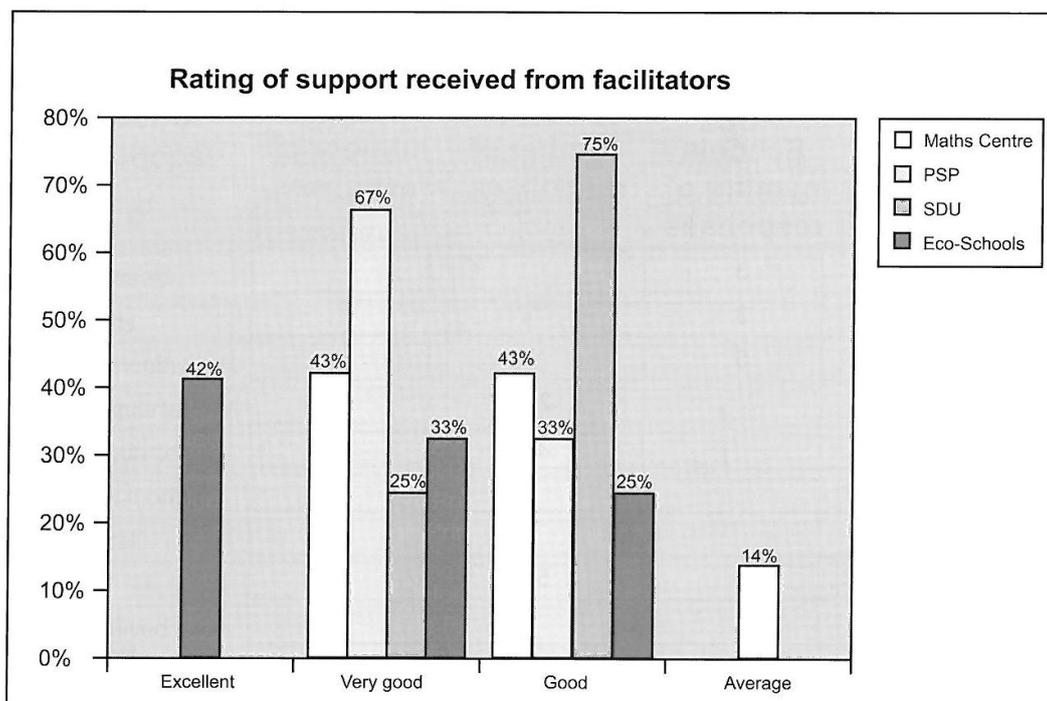
In the Out of the Box Project Eco-Schools worked on contact sessions with teachers, during which they developed lesson plans, demonstrated and observed

lessons. Initial implementation was slow. Clusters were formed and cluster leaders (teachers) were trained in implementation.

Eco-Schools focused on teacher support and on educating the teachers in the use of the resources by means of co-teaching and the blending of skills. Teachers were encouraged to take the lead. Different methods of training were used at different schools, determined by the needs of the school (Uys 2006:39).

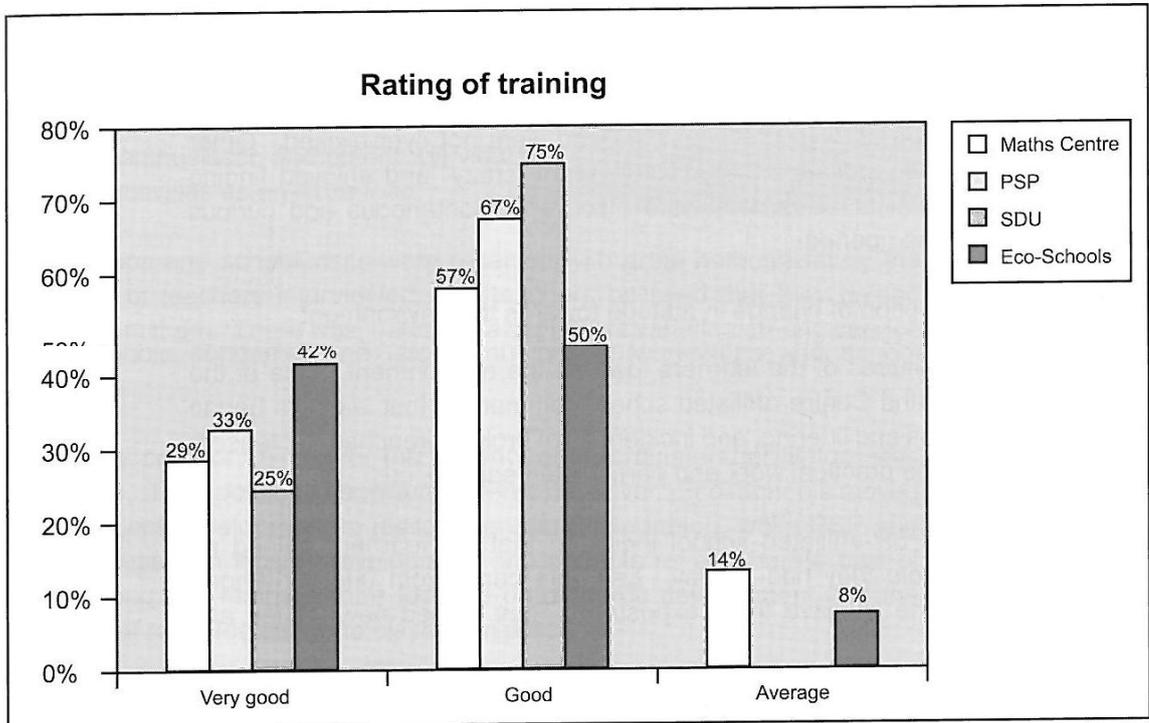
Graph 2.2 indicates the rating teachers from all four service providers gave to their coordinators/facilitators in terms of support they received. The highest rating that co-ordinators/facilitators could receive on the questionnaire was “Very good”. However, several of the teachers from schools affiliated with Eco-Schools felt that “Very good” was insufficient and that an additional rating of “Excellent” should be added (Uys 2006:46).

**Graph 2.2 Rating of support received: Out of the Box Project**



KEY: **PSP**: Primary Science Programme. **SDU**: Schools' Development Unit

**Graph 2.3 Rating of training: Out of the Box Project (Uys 2006:47).**



KEY: **PSP**: Primary Science Programme. **SDU**: Schools' Development Unit

### 2.3.6.2 Old Mutual Out of the Box Project: Classroom Practice

This aspect of the evaluation included observations in terms of teachers' classroom practice and the learners' ability to do practical work. It should, however, be noted that due to pre-preparation of the lesson, there was some level of window dressing...Furthermore, it was found that in schools affiliated to all the service providers, with the exception of Eco-Schools, projects were dealt with as separate from the classroom learning experience (Uys 2006:51-53).

## **2.4 Whole School Development Approach**

A whole school development approach to sustainability education means: “...working to make the educational institution a microcosm of the emerging sustainable society, rather than of the unsustainable society” (Sterling 2001:33) or “...shaping our interaction with the environment in an intellectual, material, spatial, social and emotional sense to achieve a lasting/sustainable quality of life for all” (Posch 1999: 341-2).

In order to implement sustainability within the whole school development approach, it is crucial to adopt a holistic approach that emphasises the interconnectedness of every aspect of the school, its environment and all the stakeholders.

Implementing whole school development, according to the Sustainability Education in European Primary Schools (SEEPS) project (Shallcross 2004:16), requires the monitoring of curricular, social and institutional practices in schools as well as monitoring their links with the community. According to SEEPS, when planning a holistic approach to school development, one must address the following questions:

1. Is the curriculum providing the knowledge that learners need to live sustainable lifestyles?
2. Are all the role players well informed?
3. What is the current thinking on and attitude to the whole school development approach?
4. What resources are available?
5. Can the best solutions be formulated locally?
6. Is the school able to act appropriately?
7. Can the school act as a research base to find out about environmental justice in the school and its local community?

## 8. How well are the role players equipped to manage change?

The effectiveness of environmental education is dependent upon the entire school community being aware of, and actively contributing to, the careful use of the environment. Traditionally, much of the focus of environmental education in schools involved developing knowledge about the environment. It is essential that, in addition to developing knowledge, the education process also guides the development of attitudes and values which influence behaviour and affect lifestyles.

### **2.4.1 Framework for developing a Whole School Approach to Environmental Education**

The five contexts for learning identified below form a framework for developing a whole school approach to environmental education (Shallcross 2004:58-61).

#### **2.4.1.1 The formal Curriculum: Subjects and Cross-Curricular Themes**

##### **Teaching and Learning Approaches**

Effective environmental education has to move away from teaching and learning approaches/models based solely on the transmission of knowledge. It has to move towards approaches/models that encourage the development of qualities, such as initiative, reflection and responsibility in relation to the environment. It has to foster values and attitudes that influence behaviour and action. Teaching and learning approaches, such as group work, discussion, debate, role-play, case studies, action, research and problem-solving can be effective techniques for stimulating and maintaining learners' interest in the environment (Shallcross 2004:58).

The range of approaches and strategies set out below offers examples of how teachers can provide opportunities for learning about, in, through, and for the environment.

1. Use of real issues: Learners respond best to real situations. Issues, such as the impact of a new housing development or the commissioning of a new mine in the local area can engender interest and encourage learners to reflect upon the real environmental issues.
2. The use of secondary sources: Interest in the problems of unfamiliar environments can be stimulated by the use of videos, photographs, newspaper and magazine articles, and displays in museums and information centres.
3. Use of School grounds: Learners need opportunities to realize that responsibility for the earth begins at a local level and that environments can be managed in a manner that promotes sustainability. Introducing learners to the management of a small area, such as the school grounds, can help to develop understanding of how similar principles can be applied to larger scales and of how actions and decisions at a local level can have meaning in a global context (Shallcross 2004:61).

#### **2.4.1.2 Whole-School Ethos**

##### **Spirit and Atmosphere**

The spirit and atmosphere of the school will reflect the extent to which the school is genuinely committed to environmental education and action. The care and maintenance of school grounds often provides a good indicator of the school's commitment. Individual and collective responsibility for the school environment can be encouraged through:

1. Making the issue to be addressed a regular topic at school assemblies;

2. Using school notice boards to display environmental work and materials; and
3. Inviting representatives of environmental organisations to make presentations and stimulate discussions.

For environmental education to be effective, behaviour and action, both inside and outside the classroom, need to be consistent with the environmental message and exemplified in the school's approach to issues, such as:

1. Care of the school building and grounds;
2. Energy efficiency;
3. Recycling;
4. Conservation;
5. Purchasing policy;
6. Use of material and resources; and
7. Disposal of waste.

### **Parental Involvement**

Liaison with parents and their involvement in the life of the school are just as important as environmental messages conveyed at school that are to be reinforced and supported at home. School Governing Bodies and parent groups can be encouraged to make environmental issues part of their planned programme of activities which include, for example, raising funds or giving practical support to improve the school grounds.

### **Physical Environment**

Care and respect for the physical environment of the school is an integral part of school life. It is important that teaching and non-teaching staff, learners and

visitors, all share a commitment to continuous monitoring of the care and appearance of the school environment. This will reflect in:

1. A pleasant welcoming reception area;
2. Door mats placed at strategic points;
3. Rooms, corridors and stairs which are clean and in good repair;
4. Adequate heating and ventilation;
5. Clean toilets and change rooms;
6. Well-managed school grounds; and
7. Evidence of learners' involvement in their environment through murals, vegetable patches, recycling bins and so on.

Sufficient litterbins need to be available in classrooms, toilets, corridors and playgrounds, so that learners are encouraged to keep these areas litter free. Learners can be motivated by opportunities to investigate issues for themselves, for example, concerns related to litter control and/or general improvement of the physical environment of the school (Shallcross 2004:59).

#### **2.4.1.3 School Involvement in Community Action**

##### **Local Projects**

Schools can avail themselves of opportunities to become involved in local action to improve the environment, such as helping to clean up a littered site or a local riverbank. Interested learners can volunteer, for example, to carry out a wild bird count, to conduct a survey of local pollution or to plant trees to enhance the environment.

## **Monitoring local issues**

Schools should become involved with monitoring the environmental impact of local developments, such as a new roadway, an extractive industry or a housing scheme. These can provide real life opportunities to evaluate differing viewpoints and conflicting interests.

It is important for schools to recognise that involvement in local issues require sensitive management. It will be important to:

1. Inform the School Governing Body (SGB) of the school's intention of getting involved;
2. Research carefully and consider all the aspects of the issue;
3. Invite interested parties to put forward their points of view;
4. Assess the implications for the environment and the local community;
5. Suggest possible solutions consistent with sustainable development of the environment; and
6. Ensure that action, such as writing to local councillors, Members of Parliament and/or obtaining media attention, is undertaken with the knowledge and support of school management (Shallcross 2004:59).

### **2.4.1.4 Extra-Curricular Activities**

#### **School Clubs**

Learners can be given the opportunity to develop their interest and understanding of the environment outside school hours through clubs that involve environmental activities, such as bird watching, fishing, hiking and camping.

## **Membership of National Societies**

Many voluntary bodies with interests in the environment organise clubs and encourage people to become members of their societies. Membership of these organisations can provide learners with opportunities to experience the natural world at first hand and also to become involved in worthwhile environmental activities (Shallcross 2004:60).

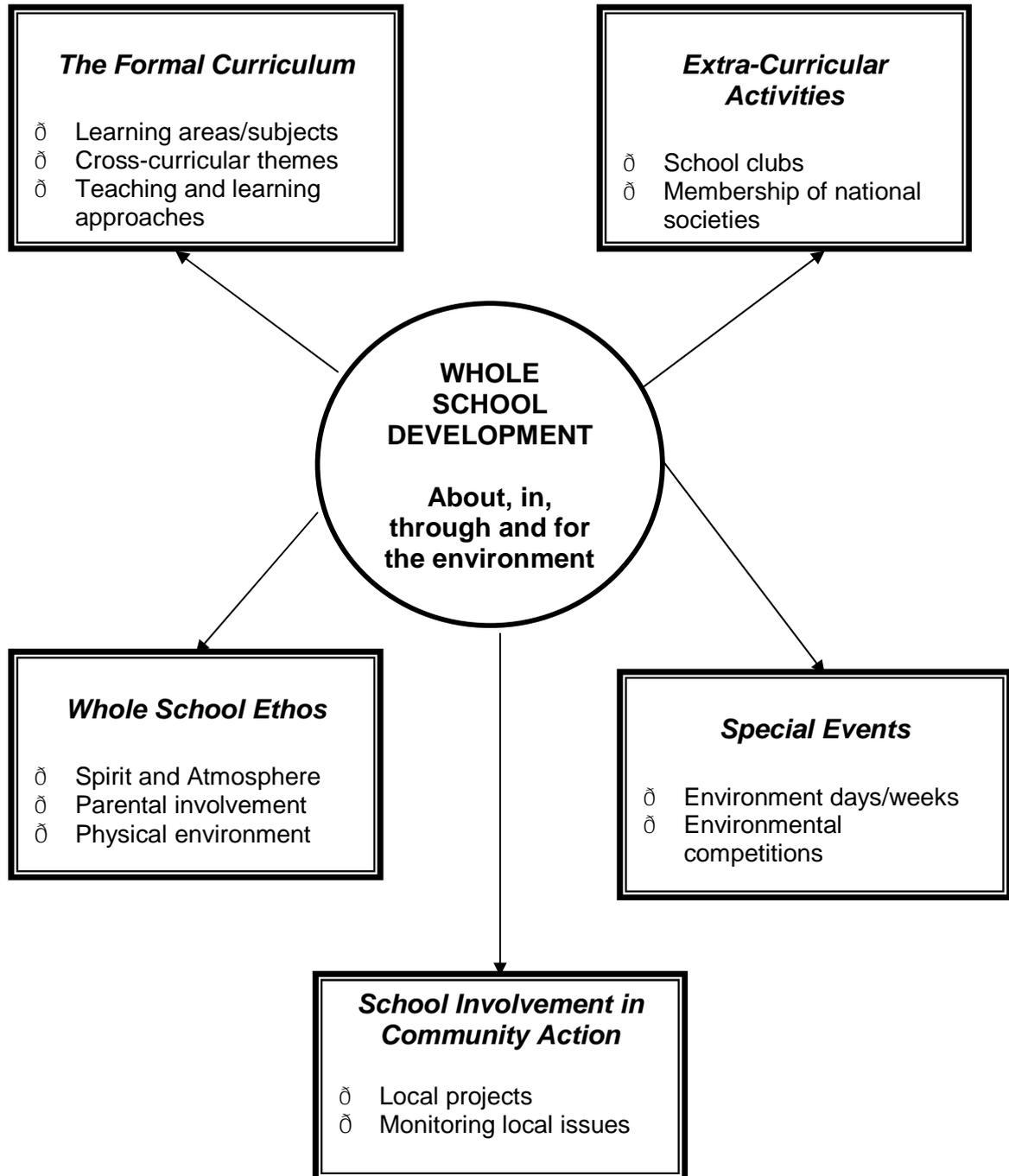
### **2.4.1.5 Special Events**

A number of organisations run special events. Schools can support such activities or initiate their own activities / events. A school can organise a short, intensive event, such as an environmental day or week based on a theme in which the whole school can participate.

## **Environmental Competitions**

A number of voluntary conservation bodies and local organisations organise competitions sponsored by local businesses. These can involve learners in activities such as collecting cans for recycling, making cards from recycled paper and so on. These can challenge learners to apply learning derived from a range of contexts to an environmental issue or problem (Shallcross 2004:60).

**Diagram 2.2 Schematic presentation of a Whole School Development Approach.**



## **2.5 Summary**

The timeline mapped out in this chapter on how environmental education has evolved over the past 30 years into education for sustainable development offers the blueprint of what needs to be done internationally, regionally and locally to implement education for sustainable development. The World Summit on Sustainable Development (WSSD) in its plan for implementation states: "Education is critical for promoting sustainable development." They viewed Education as a key agent for change (see paragraph 2.2.6).

The various declarations and resolutions from Stockholm (see paragraph 2.2.1) to the WSSD (see paragraph 2.2.6) have resulted in programmes and projects being developed to implement education for sustainable development at the local school level (see paragraph 2.3). One such programme is the Eco-Schools Programme that offers a flexible framework for the implementation of environmental and sustainability education (see paragraph 2.3).

The literature review further highlights legislation (see paragraph 2.2.9.2) passed in South Africa that supports environmental and sustainable education in our schools. It also identifies the strengths (see paragraph 2.2.9.1 & 2), the weaknesses (see paragraph 2.3.5), the opportunities (see paragraph 2.2.7, 2.2.8 & 2.3.4) and the constraints (see paragraph 2.3.5) in implementing environmental and sustainable education in South African schools.

The literature review gives a detailed overview needed for the research on the development of the environmental and sustainability education internationally. It also indicates its impact regionally and locally and shows how the Eco-Schools Programme will assist in achieving the resolutions adopted by the WSSD in Johannesburg, South Africa.

# 3

## RESEARCH DESIGN AND METHODOLOGY

***“Active involvement of communities in managing their environment must be the order of the day. Equality, access, accountability, transparency and sustainable living must be our watchwords.”***

**Nelson Mandela (Enviropaedia 2004: 260)**

### 3.1 Introduction

This chapter focuses on the research design and methods used to assess if Eco-Schools Programme can achieve whole school development through the implementation of sustainability education (see paragraph 1.4). In addition, the chapter evaluates how the Programme can achieve this (see paragraph 1.3) in its naturally occurring state at school, inside and outside the classroom and in its immediate school community.

Schools and communities form the basis for social reform or social degradation, depending on the nature, the context and the social will of a particular school or community. The Eco-Schools Programme recognises that schools and their immediate communities are central to sustainable education and calls on schools and communities to be actively involved in managing their environments (see paragraph 2:3).

### 3.2 Research Design

The research design is a plan or blue print of how the research will be conducted and focuses on the end product (Mouton 2006: 55).

The Evaluation Research Design, a qualitative (naturalistic) and empowerment evaluation design was used for this study because the aims of the research were to:

1. Assess if the Eco-Schools Programme can achieve whole school development by implementing sustainability education;
2. Evaluate awareness of sustainability education and Eco-Schools in public schools as well as at district office level with officials of the Department of Basic Education (DBE); and
3. Recommend that the Eco-Schools Programme be incorporated into the formal education system.

According to Patton (1990: 39), “qualitative designs are naturalistic in that the researcher does not attempt to manipulate the research setting. The research setting is a naturally occurring event, programme, community, relationship, or interaction that has no predetermined course established by and for the researcher”. Egon Guba (as cited in Patton 1990: 41) further defines “naturalistic inquiry” as a ‘discovery-orientated’ approach that minimises investigator manipulation of the study setting and places no prior constraints on what the outcome of the research will be”.

Patton (1990: 196) went on to say: “In qualitative inquiry, the problem of design poses a ‘paradox’. The term design suggests a very specific blueprint...” In order to support his statement he cited Lincoln and Guba (1985: 226) who maintained that, “design in the naturalistic sense...means planning for certain broad contingencies without, however, including what will be done in relation to each.” He stated further, “a qualitative design needs to remain sufficiently open and flexible to permit exploration of whatever the phenomenon being studied offers for inquiry. Qualitative designs continue to be *emergent* even after data collection begins.”

Hence it was important to note that qualitative research designs cannot be specified in detail in advance. As noted by Patton (1990: 61), “while the design will specify an initial focus, plans for observation and interviews, and primary questions to be explored, the naturalistic and inductive nature of the inquiry makes it both impossible and inappropriate to specify operational variables, state testable hypotheses, and finalize either instrumentation or sampling schemes. A qualitative design unfolds as fieldwork unfolds”.

Neuman (1997:25) states: “Evaluation research measures the effectiveness of a programme, policy, or way of doing something”. Babbie (1998:334) adds to the definition by saying that, “evaluation research refers to a research purpose rather than a specific research method. This purpose is to evaluate the impact of social interventions”. Therefore, “qualitative (or naturalistic) evaluation approaches involve the use of predominantly qualitative research methods to describe and evaluate the performance of programmes in their natural settings, focusing on the implementation rather than on (quantifiable) outcomes. Empowerment evaluation is the use of evaluation concepts, techniques and self-determination (Fetterman 1989 as cited in Mouton 2006:161).

### **3.3 Research Methodology**

Research methodology is a framework for action. It provides basic direction as to which activities need to be carried out to complete the research. The research methodology employed was based on the research design that provided guidance in selecting the appropriate tools to conduct the research study. The tools for the research study included individual interviews, focus group questionnaires and narrative paragraphs as well as essays.

The basis of this research design was Qualitative Evaluation Research based on qualitative, naturalistic and empowerment evaluation. However, the nature of the Eco-Schools Programme required a more holistic evaluation (see paragraph

2.3.4). Hence the research study employed more than one design and methodology. According to Schulze (2003: 11), “The quantitative design involves numerous respondents (a sample which is representative of a population); the aim is to explain causes or relationships and hence to generalise results to the whole population.” As a result triangulation was used to include an element from the quantitative research design.

Consequently, survey research was incorporated to enhance the reliability and the validity of the research, by getting teachers and learners to complete quantitative questionnaires. Neuman (1997:151) defines triangulation as follows: “In social research, *triangulation* means using different types of measures or data collection techniques, in order to examine the same variable. It is a special use of multiple indicators. The basic idea is that measurement improves when diverse indicators are used. As the diversity of indicators gets greater, our confidence in measurement grows because getting identical measurements from highly diverse methods implies greater validity than if a singular or similar method had been used.”

Patton (1990:187) concurs by saying, “One important way to strengthen a study design is through triangulation, or the combination of methodologies in the study of the same phenomena or programs. This can mean using several kinds of methods or data, including using both quantitative and qualitative approaches.” Denzin (1978b) (as cited by Patton, 1990:187) identified four basic types of triangulation: “(1) *data triangulation* – the use of a variety of data sources in a study; (2) *investigator triangulation* – the use of several different researchers or evaluators; (3) *theory triangulation* – the use of multiple perspectives to interpret a single set of data; (4) *methodological triangulation* – the use of multiple methods to study a single problem or program.”

Patton also advocates a paradigm of choices rather than believing that one must choose to align with one paradigm or the other. According to Patton (1990: 39),

“A paradigm of choice rejects methodological orthodoxy in favour of *methodological appropriateness* as a primary criterion for judging methodological quality. The issue then becomes not whether one has uniformly adhered to prescribed canons of either logical-positivism or phenomenology, but whether one has made sensible methods decision given the purpose of the inquiry, the question being investigated, and the resources available. The paradigm of choices recognizes that different methods are appropriate for different situations... But at the pragmatic level of making concrete methods decisions, the emphasis on strategic choices will help convey the idea that there are really a wide range of possibilities when selecting methods... All kinds of variations, combinations, and adaptations are available for creative and practical situational responsiveness.”

Given these advantages triangulation was therefore used to strengthen the research methodology for this study by incorporating:

- Qualitative interviews;

- Group interviews through quantitative questionnaires; and

- Narrative paragraphs or essays.

### **3.3.1 Qualitative Interviews**

Conducting Interviews opens up the channels of communication between the interviewer and the respondent. According to Patton (1990:278), “the purpose of interviewing is to find out what is in and on someone else’s mind”. Seidman (1991:03) adds a deeper dimension by noting, “...at the root of interviewing is an interest in understanding the experience of others and the meaning they make of that experience”. With regard to the characteristics of qualitative interviewing design Rubin and Rubin (1995:43) write: “Qualitative interviewing design is *flexible, iterative* and *continuous*, rather than prepared in advance and locked in stone”. Rubin and Rubin (1995: 46-47) explain the *iterative* characteristic of qualitative design as follows: “...that each time you repeat the basic process of

gathering information, analysing it, winnowing it, and testing it, you come closer to a clear and convincing model of the phenomenon you are studying... The continuous nature of qualitative interviewing means that the question is redesigned throughout the project.”

The research did not only try to evaluate the role of the Eco-Schools Programme in achieving whole school development by implementing sustainability education but to gain an understanding of how this process impacts on people’s lives in their context. Individual topical interviews were incorporated into the research to gain insight of the experiences of those involved with the implementation of the Eco-Schools Programme and sustainability education.

According to Rubin and Rubin (1995:195), “*topical interviews* are focused on subjects that the interviewer has chosen, involve more active questioning and rapid exchanges, and are more concerned with matters of fact and less concerned with eliciting shades of meaning than cultural interviews are. Most of the follow-ups are done within rather than between the interviews”. Babbie (1998: 290) describes qualitative individual interviews as, “an interaction between an interviewer and a respondent in which the interviewer has a general plan of inquiry... A qualitative interview is essentially a conversation in which the interviewer establishes a general direction for the conversation and pursues specific topics raised by the respondent. Ideally, the respondent does most of the talking.”

The respondents to the research comprised of people at different levels and of different status. Individual interviews were conducted with co-ordinators of the Eco-Schools Committees at the schools, the principals, Department of Basic Education officials and Eco-Schools officials. According to Bailey (1995:77), “researchers have to be aware about the effects of status characteristics on the interview process”. Fontana and Frey (1994:370) write: “...the emphasis is shifting to allow the development of a closer relationship between interviewer and

respondent, attempting to minimize status differences and doing away with the traditional hierarchical situation in interviewing. Interviewers can show their human side and answer questions and express feelings. Methodologically, this new approach provides a greater spectrum of responses and a greater insight into respondents – or “participants,” to avoid the hierarchical pitfall”.

For the purpose of this research standardised open-ended and closed fixed-response interview questions were used (see paragraph 3.3.1) in order to understand, gain insight and appreciate the respondents’ experiences in implementing the Eco-Schools Programme. Patton (1990: 278) explains: “Qualitative interviewing begins with the assumption that the perspectives of others are meaningful, knowable, and able to be made explicit. Interview data for the program evaluation purposes allow the evaluator to capture the perspectives of program participants, staff and others associated with the programme.”

Patton (1990:289), points out that the two types of interviews have the following characteristics, strengths and weaknesses.

Type of interview	Characteristics	Strengths	Weaknesses
<b>Standardized open -ended interview</b>	<ul style="list-style-type: none"> <li>- The exact wording and sequencing of questions are determined in advance.</li> <li>- All interviewees are asked the same basic questions in the same order.</li> <li>- Questions are worded in a completely open – ended format.</li> </ul>	<ul style="list-style-type: none"> <li>- Respondents answer the same question, thus increasing the comparability of the responses.</li> <li>- Reduces interviewer effects and bias.</li> <li>- Permits evaluation users to see and review the instrumentation used in the evaluation.</li> <li>- Facilitates organization and analysis of the data.</li> </ul>	<ul style="list-style-type: none"> <li>- Little flexibility in relating the interview to particular individuals and circumstances.</li> <li>- Standardized wording of questions may constrain and limit naturalness and relevance of questions and answers.</li> </ul>

<b>Closed, fixed response interview</b>	<ul style="list-style-type: none"> <li>- Questions and response categories are determined in advance.</li> <li>- Responses are fixed: respondent chooses from among the fixed responses.</li> </ul>	<ul style="list-style-type: none"> <li>- Data analysis is simple.</li> <li>- Responses can be directly compared and easily aggregated.</li> <li>- Many questions can be asked in a short time.</li> </ul>	<ul style="list-style-type: none"> <li>- Respondents must fit their experiences and feelings into the researcher's categories: may be perceived as impersonal.</li> <li>- Can distort what respondents really meant or experienced.</li> </ul>
---	---	---	--

### 3.3.2 Triangulation: Group Interviews through Quantitative Questionnaires

The Eco-Schools Programme is about teamwork and getting all the relevant role players involved. Hence, focus group interviews were held with teachers and learners in order to gain insight on how the working committees were formed and the demarcation of roles and responsibilities. Interviewing learners and teachers in the classroom setting provided an ideal environment to evaluate the involvement of all the learners in the Eco-School Programme and not only of learners and teachers who were members of the Eco-Club Committees. Empowerment and ownership are pivotal to any implementation project or programme and focus group interviews were used to evaluate the Eco-Schools programme in this regard.

In order to strengthen the research design, methodological triangulation was included in the research methodology (see paragraph 3.3). This meant that one segment of the respondents was interviewed using the qualitative design while another completed a quantitative questionnaire.

Patton (1990: 335) defines a focus group interview as, “an interview with a small group of people on a specific topic. Groups are typically six to eight people who participate in the interview for one-half to two hours.

Focus group interviewing was developed in recognition that many of the consumer decisions that people make are made in a social context, often growing out of discussions with other people. Thus market researchers began using focus groups in the 1950s as a way of simulating the consumer group process of decision-making in order to gather more accurate information about consumer product preferences.

The focus group interview is, indeed, an *interview*. It is not a discussion. It is not a problem-solving session. It is not a decision making group. It is an *interview*. Participants are typically a relatively homogeneous group of people who are asked to reflect on the questions asked by the interviewer. Participants get to hear each other's responses and to make additional comments beyond their own original responses as they hear what other people have to say. It is not necessary for people to reach any kind of consensus. Nor is it necessary for people to disagree. The object is to get high-quality data in a social context where people can consider their own views in the context of the views of others.

Focus group interviews have several advantages when used for program evaluation purposes. It is a highly efficient qualitative data collection technique. In one hour the evaluator can gather information from eight people instead of only one person. Thus the sample size can be increased significantly in an evaluation using qualitative methods through focus group interviewing. Focus group interviews also provide some quality controls on data in that participants tend to provide checks and balances on each other."

Patton also notes some weaknesses (1990:336): "Because the amount of response time to any given question is increased considerably by having a number of people respond, the number of questions that can be asked is limited... It can be difficult to take notes during a focus group interview while also facilitating. Unexpected diversions will occur in a focus group, particularly in an evaluation setting where participants know each other. Conflicts may arise,

power struggles may be played out, and status differences may become a factor.”

Krueger (1988:44–47), also noted the following advantages and disadvantages of using focus groups:

Advantages of focus groups	Disadvantages of focus groups
<ul style="list-style-type: none"> <li>- The technique is a socially orientated</li> <li>- Research method capturing real-life data in a social environment</li> <li>- It has flexibility</li> <li>- It has high face validity</li> <li>- It has speedy results</li> <li>- It is low in cost</li> </ul>	<ul style="list-style-type: none"> <li>- Focus groups afford the researcher less control than individual interviews</li> <li>- Data are difficult to analyze</li> <li>- Moderators require special skills</li> <li>- Differences between groups can be troublesome</li> <li>- Groups are difficult to assemble</li> <li>- The discussion must be conducted in a conducive environment</li> </ul>

The research study considered the strengths and the weaknesses mentioned above. Consequently it was decided to incorporate the use of a quantitative questionnaire to gather responses from learners and teachers in the classroom setting, especially where 30 to 50 learners had to be interviewed. The research ensured that the disadvantages were minimised as much as possible by incorporating triangulation.

The interviewer administered the questionnaire by explaining the procedure to the respondents who then individually completed the questionnaires and returned them to the interviewer. With regard to the role of an interviewer, Babbie (1998: 264) explains: “Interviewers can also serve as a guard against confusing questionnaire items. If the respondent clearly misunderstands the intent of a

question or indicates that he or she does not understand, the interviewer can clarify matters”.

The quantitative questionnaire for the focus group (Appendix A1 & A2) included questions similar to the ones used for the qualitative focus group interviews to verify the course of the implementation of the programme among the teachers, learners, parents, Department of Basic Education representatives and Eco-Schools officials. The Eco-Schools Programme encourages input from all these stakeholders as this is central to the whole school development approach (see paragraph 2.3.4.2). By using focus group interviews the researcher was able to assess the contributions made by the various stakeholders.

### **3.3.3 Narrative Inquiry**

Narratives can be seen as an important device in human communication. People use narratives to recapitulate past experiences. As cited by Speedy (2008: 46), “Webster’s Dictionary describes narrative as “a discourse or an example of it, designed to represent a connected succession of happenings” (1966:1503). In his descriptions of a more literary version of narrative, Abbott (2002) distinguishes between ‘stories’, which exist within the ether as folk stories, virtual stories, latent stories and untold stories, and ‘narrative’ as in the telling of stories. Abbot suggests (2002: 32), “Story is something that is delivered by narrative but seems to pre-exist it”, whereas “narrative always seems to come after, to be a representation.” Speedy (2008: 46) summarises narrative story telling as having, “a three-dimensional construct of discourse taking place over time, within space and in a context.”

The Eco-Schools Programme calls for active participation of all the stakeholders. In order to gain an understanding of their experiences, Teachers, NGO’s and Eco-Schools officials were asked to write narratives of their experiences. Writing

the narrative allowed them to write about their experiences without any inhibitions or predetermined parameters set by the researcher.

### **3.4 Research Sampling**

According to Patton (1990: 184): “There are no rules for sample size in qualitative inquiry.” He talks of the trade-off between breadth and depth and says, “With the same fixed resources and limited time, a researcher could study a specific set of experiences for a larger number of people (seeking breadth) or a more open range of experiences for a smaller number of people (seeking depth). In-depth information from a smaller number of people can be very valuable, especially if the cases are information-rich.” Therefore, the selection and size of the sample depends on what the researcher already knows, the purpose of the research, its location, the availability of resources, what’s at stake and what will make the research credible.

The purpose and the aim of the research were the main criteria used to select the sample for the research. The aim of the research was to:

1. Assess if Eco-Schools Programme can achieve whole school development through the implementation of sustainability education;
2. Evaluate whether public schools and district officials of the Department of Basic Education (DBE) are aware of the Eco-Schools Programme;
3. Recommend that the Eco-Schools Programme be incorporated into the formal education system.

Environmental education / sustainability education in terms of the White Paper on Education and Training (see paragraph 2.2.9.2.2) is a national priority and applicable to every school in South Africa. Hence the sample of the schools could have been chosen from any of the nine provinces. For this research the province of Gauteng was selected because it is representative of all the

population demographics of South Africa and the researcher resides in Gauteng. The sample below shows the categories that were decided upon to ensure the broadest possible representation of schools.

The sample was made up as follows:

**Table 3.1 Sample of Schools**

<b>Urban Schools</b>	<b>Township Schools</b>	<b>Schools in depressed areas</b>	<b>Private Schools</b>
1 Primary: Grade 6  1 Secondary: Grade 9 and 11	1 Primary: Grade 6  1 Secondary: Grade 9 and 11  1 Special School	1 Primary: Grade 6  1 Secondary: Grade 9 and 11	1 Primary: Grade 6  1 Secondary: Grade 9 and 11

**Table 3.2 Sample of Organisations**

<b>Department of Basic Education (DBE)</b>	<ol style="list-style-type: none"> <li>1. Gauteng: Tshwane South District Office</li> <li>2. Mamelodi Environmental Education Centre</li> </ol>
<b>Wildlife and Environmental Society of South Africa (WESSA): Eco-Schools</b>	<ol style="list-style-type: none"> <li>1. National Office</li> <li>2. Regional Offices</li> </ol>

### **3.5 Data Collection, Capturing and Analysis**

#### **3.5.1 Data Collection**

Data was collected through conducting qualitative interviews, group interviews through quantitative questionnaires and narrative paragraphs or essays. The

interview instrumentation and questionnaires consisted of standardised open-ended and closed, fixed response interview questions (see paragraph 3.3.1).

### **3.5.2 Data Capturing**

According to Patton (1990:347): "...no matter how carefully one words interview questions, it all comes to naught if the interviewer fails to capture the actual words of the person being interviewed". Hence, verbatim responses of respondents are essential. The interviews were audio-taped. Permission to record the interview was obtained when scheduling the interview (Appendix B & E).

Quantitative questionnaires were completed by the learners and teachers in the presence of the researcher. The questionnaires were collected immediately and analysed according to the respondents' input (Appendix C & D).

The narrative paragraphs or essays were to be returned via email or collected when the respondents completed their narratives (Appendix F: 90).

### **3.5.3 Data Analysis**

When analysing data the researcher looks out for similarities and differences and for those patterns that are generally common to what is being studied. Babbie (1998:297), urges one to ask, "What behaviour patterns do all the participants in a situation share...and in what other ways do they differ from the other participants?"

The strategy that was used to analyse the interviews was cross-case analysis. Patton (1990:376) describes cross-case analysis as, "...grouping together answers from different people to common questions or analyzing different perspectives to central issues".

The information was validated by comparing the input of respondents to records kept by the Eco-Schools' National Office, physical visits to the schools and portfolios of evidence.

### **3.6 Reflection on Limitations and Advantages of the chosen Research Design**

Mouton (2006:162), offers a cautionary word regarding the limitations of this research design by stating: "The emphasis on naturalistic forms of inquiry makes it difficult to evaluate programme outcomes systematically and rigorously. The result is that strong casual inferences regarding programme benefits and impacts are difficult, if not impossible, to make".

However, according to Patton (1990:118), "...The openness of naturalistic inquiry permits the evaluator to be especially sensitive to the differing perspectives of various stakeholders". He substantiates this further by saying (1990:124), "The personal nature of qualitative inquiry derives from its openness, the evaluator's close contact with the program, and the procedures of observation and in-depth interviewing, particularly the latter, which communicates respect to respondents by making *their* ideas and opinions (stated in their own terms) the important data source for evaluation...This means that, again, rather than imposing on the program some predetermined model or hypotheses, the program picture unfolds in a way that takes into account idiosyncrasies, uniqueness, and complex dynamics."

### **3.7 Summary**

This chapter focused on the research design and methodology. The planning of the research methodology was informed by Patton's paradigm of choices (see paragraph 3.3) and the nature of the Eco-Schools Programme. The chapter, furthermore, discussed how triangulation was used to strengthen the research

design (see paragraph 3.3.2) by combining qualitative interviews, group interviews through quantitative questionnaires and narrative paragraphs or essays in the research methodology.

The research sampling, data collection, data capturing and analysis were discussed taking into account the purpose and aim of the research.

# 4

## RESEARCH FINDINGS

***“The Eco-Schools programme fills one with hope for South Africa.”***

**(Kim Ward: WESSA)**

***“Working from existing action to better action and measuring outcomes in terms of local change makes this programme relevant in any socio-economic context, no matter how under-resourced and poverty stricken.”***

**(Jim Taylor: WESSA)**

### 4.1 Introduction

In this chapter the discussion will focus on the findings of the research conducted (also see Chapter 3) to show how the Eco-Schools Programme can play an important role in achieving whole school development through sustainability education. It includes the research sample, how the data was collected, the outcomes according to the research question and the challenges that need to be addressed.

### 4.2 Research Sample and Profile

Samples (see paragraph 3.4) for the research were drawn from the following:

1. Schools registered in 2009 with the Eco-Schools Programme in the Gauteng Province;
2. An official from the Department of Education, Tshwane South District;
3. Wildlife and Environmental Society of South Africa (WESSA) officials;

4. Eco-Schools Programme – National and Regional co-ordinators;
5. Mamelodi Environmental Education Centre; and
6. Environmental Education Consulting Agency.

One Department of Basic Education (DBE) official and nine schools were visited. A broad cross-section was sought by selecting primary and high schools from urban schools, township schools, and schools in depressed areas, special schools and private schools.

The profile of the research sample is included in Table 4.1 and Table 4.2.

### **4.3 Data Collection**

Data was collected through qualitative interviews (Appendix B1-B5 & E1), quantitative questionnaires (Appendix C1-C3 & D1) and narrative story telling (Appendix F1-F5).

Individual and group interviews were conducted with teachers, School Management Teams (SMTs), district officials, parents and members of the community. All learners and teachers completed the questionnaires except the blind learners who were interviewed. A few teachers and all members of the organisations included in the sample shared their Eco-School Programme experiences by writing narrative paragraphs or essays.

4.3.1 Questionnaires were completed by 260 learners and eight teachers.  
(Table 4.1).

4.3.2 Interviews were held with four parents and a total of 14 SMTs / teachers.  
(Table 4.1).

4.3.3 A total of 21 Narratives were received from three organisations and two schools. (Table 4.2).

**Table 4.1 Analysis of Schools and DBE District Office interviewed in Gauteng**

	<b>Name of School</b>	<b>Type of School</b>	<b>Address</b>	<b>Appendix</b>	<b>Questionnaires Learners</b>	<b>Questionnaires Teachers</b>	<b>Interviews SMTs &amp; Teachers</b>	<b>Interviews Parents</b>	<b>Narratives</b>
1	<b>Al Ghazali College</b> Grade 9 & 11	Private school	421 Van Leenhof Street, Erasmia, Tshwane	F3 C1 D1	36	2	-	-	4
2	<b>Anton Van Wouw Laerskool</b> Grade 6	Urban school	C/o Dey & Lange Street, Nieuw, Muckleneuk, Tshwane	B1 D1	17	-	1	4	-
3	<b>Brescia House</b> Grade 6	Private school	14 Slone Street, Bryanston, Johannesburg	F1 D1	21	-	1	-	1
4	<b>Ekukhanyisweni Primary</b> Grade 6	School in depressed area	330 Phase 2, Alexandra Township, Johannesburg	C2 D1	45	3	1	-	-
5	<b>Filadelfia Secondary</b> LSEN Grade 11	Township school	3167 College Drive, Block L, Soshanguve	B2 D1	6	-	2	-	-
6	<b>General Smuts High</b> Grade 8 -12	Urban school	C/o Boy Louw & Van Riebeeck Ave, Vereeniging	B3 D1	36	-	2	-	-
7	<b>Greyville Primary</b> Grade 6	Township school	C/o Anemone & Gardenia Street, Ext 2, Lenasia	B4 D1	36	-	3	-	-
8	<b>Lilydale Primary</b> Grade 6 & 7	School in depressed area	1301 Sandawani Street, Soweto	B5 D1	49	-	3	-	-
9	<b>Unity Secondary</b> Grade 11	Township school	1182 C/o Mathewson & Brits Street, Daveyton, Benoni	C3 D1	14	3	-	-	-
10	<b>DBE – Tshwane South District:</b> Mrs N Molala			E1			1		
			<b>Total</b>		<b>260</b>	<b>8</b>	<b>14</b>	<b>4</b>	<b>5</b>

Al Ghazali and Filadelfia earned their Eco-Flag status in 2007. Anton Van Wouw Laerskool earned its International Flag in 2009. Ekukhanyisweni Primary and General Smuts High received their Bronze Certificates in 2009.

**Table 4.2 Narratives**

	<b>Name of Organisation</b>	<b>Individuals who submitted narratives</b>
1	Wildlife and Environmental Society of South Africa (WESSA): Eco-Schools. (Appendix F5)	<p><b>WESSA</b>            Director: Mr J Taylor            Marketing Manager: Mr J L Holmes            Rhodes University: Ms K Ward            Curriculum Specialist: Mr S Walker – Gauteng</p> <p>World Wildlife Fund (<b>WWF</b>) Ms H Gets</p> <p><b>Eco-Schools National Co-ordinators:</b>            Mrs B Ringdahl            Ms C Physick</p> <p><b>Eco-Schools Regional Co-ordinators:</b>            Ms L Conde Eastern Cape            Mr D Mkhabela Gauteng            Mr L Barkhuizen Free State            Mr N Mshibe KwaZulu Natal            Ms C Dzerefos Limpopo            Ms Z de Beer Mpumalanga            Ms J April Western Cape</p>
2	Mamelodi Environmental Education Centre (Appendix F2)	<b>Manager:</b> Ms Christa Van Schalkwyk
3	Sue Ballinger Consulting (Appendix F4)	<b>Environmental Consultant:</b> Sue Ballinger
4	Brescia House (School) (Appendix F1)	<b>Natural Sciences/ Mathematics Teacher:</b> Ms A Jennings
5	Al Ghazali College: Ex teachers and Eco-Active Committee Members (Appendix F3)	<p><b>Manager:</b> Mrs S Mahomed  <b>Principal: Jolly Buddies</b>  <b>Nursery School:</b> Mrs A Schloss  <b>Senior Librarian –</b>  <b>National Library:</b> Mrs V Pillay  <b>DBE – LTSM Facilitator</b>  <b>Tshwane South District:</b> Mrs F Ebrahim</p>
	<b>Total: 5</b>	<b>21</b>

## **4.4 Outcome of the Research**

The findings are summarised according to the aims of the research question (see paragraph 1.4).

### **4.4.1 An assessment of whether Eco-Schools can achieve Whole School Development by implementing Sustainability Education**

It is important to note that in order to implement sustainability education within the whole school development approach (see paragraph 2.4), it is crucial to adopt a holistic approach that emphasises the inter-connectedness of every aspect of the school, its environment and all the stakeholders. A whole school approach to sustainability education means, “....working to make the educational institution a microcosm of the emerging sustainable society, rather than of the unsustainable society” (Sterling 2001: 33).

While doing the literature review The Eco-Schools Programme handbook (see paragraph 2.3.4) was benchmarked against the framework developed by Shallcross (see paragraph 2.4.1) and evaluated to see if it had incorporated the twelve principles for environmental education (see paragraph 2.2.3).

After analysing the Eco- Schools Programme handbook (see paragraph 2.3.4) in relation to the twelve principles (see paragraph 2.2.3) and comparing it to the Sustainability Education in European Primary Schools (SEEPS) framework (see paragraph 2.4.1), it was found that the Eco-Schools Programme incorporated both the criteria set by the twelve principles for environmental education and the learning contexts as set out in the SEEPS framework. Moreover, it successfully integrated them within the South African context.

#### **4.4.1.1 Responses from Teachers, Parents and Eco-School Co-ordinators**

Of the nine schools interviewed (Appendix B1-B5; C1-C3; D1; F1 & F3), eight schools demonstrated established models of whole school development within their local contexts. Five of the eight schools understood whole school development as a direct result of the Eco-Schools Programme. These schools had well established Eco-Schools committees with good representation of relevant role players which included school governing bodies, school management teams, teachers, learners, parents, the local community and local municipalities.

The respondents (Appendix B1-B5; C1-C3 & F1-F5) emphasised the importance of teamwork, effective communication, sharing of the Eco-Schools committee members' skills, planning, accountability as well as administrative and financial management skills. They also indicated that the Eco-Schools Programme helped to develop these skills and that the rate of achievement depended on the context of the school and the attitude of the School Management Team (SMT) towards the Programme.

One school did not know anything in terms of whole school development despite having been part of the Eco-Schools Programme since 2006. At this school, the Eco-School's district co-ordinator has taken on the full responsibility of the programme since there is minimum participation on the part of teachers and the SMT. Only three teachers from a staffing compliment of 65 have taken some interest but only at a minimal level. The Eco-School's district co-ordinator manages five schools in the area and according to her the interest and participation on the part of these schools is negligible.

The Mamelodi Environmental Education Centre (Appendix F2) cited similar challenges and stated that in township schools the Eco-Schools Programme is

normally driven by a single passionate educator who is normally not supported by his/her colleagues or the SMT.

#### **4.4.1.2 Responses from Learners**

The learners participated enthusiastically in the interviews and questionnaires. (Appendix B 2-5 & D1). Their experiences included taking minutes, writing letters, producing plays, writing poems, cleaning up, weeding and taking care of the school garden, planting and taking care of their food gardens at school, and using water, electricity and paper effectively and efficiently. Offsite learning included camping, hiking, excursions, rehabilitating wetlands, conducting youth awareness programmes in the community, starting community garden projects and donating vegetables grown from their food gardens at schools to nearby hostels and orphanages. Their responses demonstrated a sense of pride and ownership. Some learners from at least three schools started their own gardens at home and got their families and neighbours involved in recycling and anti-litter activities.

High school learners found that the Eco-Schools Programme helped them to develop their leadership skills and suggested that the Programme should have a special programme on local community radio stations, as this was still the best means of communication in rural, semi-rural and depressed township areas. The majority of the learners demonstrated ownership of the programme, particularly in schools where they were part of the decision-making process.

Almost all primary and high school learners were able to identify and discuss how environmental concepts and issues were integrated in their lessons. Most of the learners also indicated that they share their knowledge and information with their family and friends.

#### **4.4.2 Evaluate awareness of Sustainability Education and the Eco-Schools Programme in Public Schools and a District Office of the DBE**

The District official (Appendix E1) who was interviewed was fully aware of the Eco-Schools project and the National Environmental Education Project for General Education and Training (NEEP – GET) (see paragraph 2.2.9.1). She said in learning areas and subjects like Natural Sciences, Technology and Social Sciences, an entire learning outcome was dedicated to environmental and sustainability education and in others it was integrated through the Assessment Standards (See Table 1.1).

The District official said that the DBE works very closely with the Environmental Education Centre in Mamelodi to promote the Eco-Schools Programme in the Townships. The District, through its circulars to schools, communicated important environmental calendar dates, details of relevant government departments and NGO's and places of interest to take learners on excursions. The District Office also arranges Social Sciences, Natural Sciences and Geography teachers to attend workshops and excursions on environmental education once a term.

She is concerned that most of the District Offices give no attention to environmental education let alone know about the Eco-Schools Programme. Districts and Provinces work in silos. In many instances teachers are expected merely to integrate environmental education in their lesson plans as per the National Curriculum Statement (NCS) but there is no implementation.

In general, public schools are not aware of the Eco-Schools Programme. All the schools interviewed had learnt about the Eco-Schools Programme through other NGOs and through teachers who are studying environmental education at tertiary institutions.

#### **4.4.3. Incorporate the Eco-Schools Programme into the Formal Education System.**

With regard to incorporating the Eco-Schools Programme into the formal education system, the following are suggestions and comments from teachers and Eco-Schools' district coordinators (Appendix B2, 4, 5 & C1-3). The Department of Education should:

1. Focus on whole school curriculum, with strong emphasis on sustainability education and have facilitators at all levels. In other words, employ Chief Education Specialists for environmental/sustainability education at national, provincial and district levels;
2. Build on the success of the Eco-Schools Programme through networking and forming partnerships. This will help the Department broaden its base of support in terms of human and capital resources,
3. Acknowledge the Eco-Schools Programme and introduce it to schools through its structures. This would develop both trust and buy-in by the teachers and potential funders from the private sector;
4. Recognise the potential the Eco-Schools Programme had in implementing education for sustainable development and on changing attitudes towards the environment and the plight of indigenous people, especially amongst the learners, teachers, parents and other stakeholders;
5. Recognise that the Eco-Schools Programme has the potential to support and develop schools;
6. Realise that the Eco-Schools Programme brings like-minded people together;
7. Use the Eco-Schools Programme to enter into partnerships with relevant stakeholders;
8. Engage with Eco-Schools in developing the administration and project management skills of teachers and schools in general; and

9. Partner with Eco-Schools to improve classroom management and to develop teachers professionally.

#### **4.5 Challenges**

The research also indicated there are many challenges that still need to be addressed in terms of building the capacity of schools to participate in the Eco-Schools Programme. Some of these focus on the following:

##### **4.5.1 Teachers (Appendix B & C)**

1. Many of the teachers complained about their heavy teaching load, extra-curricular activities, lack of resources, and poor administrative and planning skills. This could be indicative of their negative attitude towards the Eco-Schools Programme, but it also highlighted their own lack of knowledge to do justice to the Programme.
2. Some teachers pointed out that they do not receive any support from the Eco-Schools' Regional Co-ordinators and that the Eco-Schools resource pack takes months to reach the school.
3. Teachers were also reluctant to participate because there was no directive from the Department of Basic Education. As such, even those who were eager to take part in the Eco-Schools Programme found they received no support from the School Management Team. It follows that teachers should re-affirm their commitment to motivate both the school management team and their fellow teachers to take part in the Eco-Schools Programme.

#### **4.5.2 Learners (Appendix D)**

1. Learners who were not members of an Eco Club felt that the Eco-Schools Programme was only for learners who belonged to the Eco Club and refused to participate in school projects.
2. They also pointed out that in most instances the teachers conducted the school audit and no feedback was given to learners on the outcome of the audit , whether members or non-members.
3. Learners also felt that teachers were very possessive of the Eco-Schools portfolios.
4. They complained about the poor communication and lack of enthusiasm on the part of teachers.
5. Learners from the township schools indicated that they wanted to attend camps and go on excursions but could not because their parents could not afford to pay for them.

#### **4.5.3 The Green Flag (Appendix B & C)**

1. The criteria for awarding the Green Flag raised serious concerns. Respondents felt that basing the award strictly on the strength of the portfolio at the end of the year marginalised schools with limited resources. These schools merited an award based on progress measured according to their pre- and post- registration record of achievement.
2. The respondents also pointed out that by not taking into consideration a pre-Eco-Schools registration baseline assessment, evaluation of post-

registration achievement could not provide a true reflection of the progress made by the School to merit a Green Flag.

#### **4.5.4 Management Skills (Appendix B, C & F)**

1. Township schools and schools from depressed and economically disadvantaged areas are unable to plan and organise themselves.
2. Time management is a challenge for teachers and SMTs in these areas as they battle to adhere to time frames.
3. Administrative skills are very basic and they are unable to prepare and compile their own portfolios.
4. They also require continuous support from the Eco-Schools regional facilitator and are unable to sustain the Eco-Schools Programme on their own.

#### **4.6 Summary**

The sample of schools used in the research demonstrated that the Eco-Schools Programme had the potential to bring about education for sustainable development. Also that it could facilitate the implementation of Resolution 1 and 2 adopted at the World Summit on Sustainable Development (WSSD) (see paragraph 2.2.6) and the UN Resolution 57/254 on the United Nations Decade of Education for Sustainable Development (DESD) (see paragraph 2.2.7) – thus changing the lives of their school communities. However, one has to take into account the context in which the majority of South African schools operate. The support being offered currently by the Eco-Schools Programme needs to be realigned, not only to meet the needs of schools but also to empower the teachers to take full ownership of the Eco-Schools Programme.

Furthermore, the involvement of the Department of Basic Education is crucial not only to support the Eco-Schools Programme but also to achieve its obligations of being a member of the United Nations Educational, Scientific and Cultural Organisation (UNESCO).

# 5

## TOWARDS A SUSTAINABLE SOCIETY: RECOMMENDATIONS AND CONCLUSIONS

The primary goal for the United Nations Decade of Education for Sustainability 2005 -2014 is laid out in the United Nations General Assembly resolution 59/237 in which the General Assembly:

*“encourages Governments to consider the inclusion ... of measures to implement the Decade in their respective education systems and strategies and, where appropriate, national development plans”*. Furthermore, the General Assembly, *“invites Governments to promote public awareness of and wider participation in the Decade, inter alia, through cooperation with and initiatives engaging civil society and other relevant stakeholders, especially at the beginning of the Decade”*.

### 5.1 Introduction

The aim of the research was to investigate how the Eco-Schools Programme can achieve whole school development by implementing sustainability education. This chapter provides a summary of the findings and offers recommendations to strengthen the implementation of the Eco-Schools Programme in terms of the statements on environmental education made at the Tbilisi Conference (see paragraph 2.2.3), the Rio Declaration on Environment and Development (sustainable development) as set out in Agenda 21 (see paragraph 2.2.5), the World Summit on Sustainable Development (see paragraph 2.2.6) and the United Nations General Assembly Resolution 57/254 (see paragraph 2.2.7).

## **5.2 Main Findings**

The main findings of the research in relation to the aims of the research are the following:

### **5.2.1 To assess if Eco-Schools can achieve Whole School Development by implementing Sustainability Education.**

1. The Eco-Schools Programme incorporated both the criteria set by the twelve principles for environmental education and the learning contexts as set out in the sustainability education in European Primary Schools (SEEPS) framework for whole school development (see paragraph 4.4.1). These were successfully integrated within the South African context.
2. Schools demonstrated established models of whole school development within their local contexts (see paragraph 4.4.1.1).
3. Learning activities promoted active and experiential learning. Learners enjoyed being actively involved in learning outside the classroom, thus taking ownership of their own growth and development (see paragraph 4.4.1.2).
4. Parents, teachers and Eco-School co-ordinators highlighted the importance of administrative skills and teamwork (see paragraph 4.4.1.1).
5. Learners' responses indicated the gaps in the teachers' knowledge and skills (see paragraph 4.4.1.2).

6. Teachers noted the need for the professional development of teachers (see paragraph 4.5.1).
7. Teachers underscored the lack of support from Eco-School co-ordinators (see paragraph 4.5.1).
8. Respondents raised concerns about the criteria for awarding the Green Flag (see paragraph 4.5.3).

**5.2.2 To Evaluate awareness of Sustainability Education and the Eco-Schools Programme in Public Schools and among officials at a District Office of the Department of Basic Education (DBE) (see paragraph 4.4.2)**

1. The District official was aware of the Eco-Schools project and the National Environmental Education Programme (NEEP).
2. The DBE and teachers perceived the Eco-Schools Programme as imposing an extra workload. They were not able to link environmental education to the curriculum.
3. Lack of consultation indicated a silo mentality throughout the Education System.
4. Without the support of the DBE and its provincial and district officers, Eco-School co-ordinators by-passed these structures and worked directly with schools. Teachers therefore did not view it as an important programme and were reluctant to get involved.
5. Lack of training and capacity among district officials made implementation of the Eco-Schools Programme difficult.
6. The underlying thread in all of the findings clearly pointed to the need for training and capacity building of the teachers and DBE officials in the system. Teachers' need for support in several areas surfaced constantly. Amongst these were: inability to work on their own;

inability to effectively unpack the National Curriculum Statement to ensure that environmental education is fully integrated; viewing the Eco-Schools Programme as extra work; complaining that the Eco-Schools Programme increased their already heavy work load; and inefficiency and ineffectiveness because of poor management and administrative skills (see paragraph 4.5.1).

### **5.2.3 To incorporate the Eco-Schools Programme into the Formal Education System (see paragraph 4.4.3)**

1. The DBE had to support the Eco-Schools Programme in partnership with relevant stakeholders.
2. With no directive from the DBE, teachers were reluctant to participate in the Programme. As such, even those who were eager to take part in the Eco-Schools Programme found they received no support from the School Management Team (SMT). This meant teachers had to make an extra strenuous effort to convince the SMT and their fellow teachers to take part in the Eco-Schools Programme.

### **5.3 Anomalies and surprise findings**

1. A special school for the blind, the deaf, the physically disabled and learners with severe barriers to learning (Appendix B2 & D1) was extremely successful in implementing the Eco-Schools programme. Despite the usual challenges experienced by other mainstream schools within the Eco-Schools Programme, this school has outperformed many of these mainstream schools to meet the performance criteria of Eco-Schools. For example, the school supports an orphanage from its food garden and uses the skills acquired from the Eco-Schools Programme to help them become

learners for life by developing entrepreneurial skills that would make them self-reliant and independent despite their disability. The learners interviewed were very knowledgeable about their environment and their role in sustainable development.

2. At an urban school (Appendix B1 & D1), the entire staff was part of the Eco-School Programme. To ease the teachers' workload, the entire programme is managed by the parents' committee. This arrangement has had the admirable result of helping the school earn the prestigious "International Flag" award.
3. The Department of Basic Education's lack of support and inefficient, ineffective programme delivery were creatively overcome by the Free State Regional Co-ordinator of the Eco-Schools Programme. This was done by working through the Free State Department of Tourism and Environmental Affairs to get all the disjointed environmental programmes streamlined and brought under the umbrella of the Eco-Schools Programme.
4. The discovery that teachers lack adequate content knowledge as well as an understanding of the National Curriculum Statement is so overwhelming that it is a major obstacle to the success of implementing the Eco-Schools Programmes in most schools.
5. The realisation that in the long run, the level of commitment and support provided by the DBE will be the most decisive and critical factor in determining the level of success or failure of the Eco-Schools Programme.

## 5.4 Recommendations

Considering the findings of the research, the following recommendations are suggested:

1. In order to promote and implement environmental / sustainable education, the Eco-Schools Programme must be incorporated into the formal education system.

Its incorporation into the formal education system is supported by the following legislation (see paragraph 2.2.9.2):

- (a) The White paper on Environmental Education (1989);
- (b) The White paper on Education and Training (1995); and
- (c) The Constitution of the Republic of South Africa (Act 108 of 1996).

Furthermore South Africa is a member of United Nations Educational, Scientific and Cultural Organisation (UNESCO) and United Nations Environment Programme (UNEP). Hence, the Department of Basic Education (DBE) is bound by its membership in these organisations to place environmental education / sustainable education and education for sustainable development at the centre of its educational policies (see paragraph 2.2). At policy level, the DBE has achieved this in the National Curriculum Statement (NCS) through the National Environmental Education Programme (NEEP) (see paragraph 2.2.9.1). The focus must now be on effectively implementing this policy.

### 2. Professional Development of Teachers and Officials:

- 2.1. The Department of Education must review its current teacher training programmes and align them to incorporate environmental education / sustainable education (see paragraphs 2.2.9.2.2 and 2.3.5).

- 2.2. Training and development of district officials is urgently needed for effective implementation of the Programme.
  - 2.3. DBE officials need to embrace the Eco-Schools Programme and provide the required support to make it successful.
3. Eco-Schools' Regional and District offices need to:
    - 3.1 Strengthen its support base and human capacity;
    - 3.2 Develop and implement a strategy to train-the-trainer;
    - 3.3 Evaluate schools that register for the first time by establishing their baseline and identify their strengths and weaknesses; and
    - 3.4 Identify interested individuals, organisations and tertiary institutions and enter into implementation partnerships with them.

## **5.5 Conclusion**

1. The formal education system is the best vehicle to bring about a paradigm shift. However, it must be emphasised that the system cannot do it alone. Sustaining one's world to encompass the right of survival for all living organisms requires everyone to lobby more aggressively to implement environmental and sustainability education.
2. Sustainable development and education can only take root if it becomes a way of life. This can be achieved through whole school development that is fundamental to the Eco-Schools Programme and the National Education Policy. Whole school development has the capacity to bring together local activists, traditional teachers, indigenous knowledge and non-government organisations that have gained knowledge through experience or personal interest in environmental issues. The Eco-Schools Programme is recognised by the United Nations Environmental Programme (UNEP) as among its "preferred school-based / children and

youth global model programmes for environmental education, management, sustainability and certification at the international level” (see paragraph 2.3.2).

3. One of the roles of teachers, as outlined in the Norms and Standards for Teachers of 2000 (Government Gazette No 20844), recognises teachers as leaders. Teachers are the proponents of change. Now, more than ever before, we have to affirm that teachers are leaders, but in order to fulfil their responsibilities teachers have to become “total leaders”. In their book, *Total Leaders*, Schwahn and Spady state (1998:17): “Total leaders are individuals who embody all the performance abilities and attributes needed to erect the pillars of productive change and carry out the essential processes that make successful systemic change happen.”
4. At the Fourth World Environmental Education Congress, Shallcross and Spinks (2007:4) affirmed: “...we will need leaders who put meaning before management, maxims before mandates and who value individuality while challenging individualism or personalisation. Leaders then become the essential integrators and synthesisers of shared meaning and organisational connectedness and...have much to offer if there is to be a synthesis of institutional practice with educational meaning.”
5. Given the advent of the UN Decade of Education for Sustainable Development (2005-2014), the provision of Continuing Professional Development (CPD) in environmental education is a critical issue and one that receives little attention. There are 60 million teachers in the world and if UNESCO (1997) is to achieve its aim of making education one of the top priorities in achieving sustainable development, consideration has to be given to appropriate models of CPD for different contexts. Professional development strategies that develop capacity within a school and its local community are a priority (Shallcross et al. 2007:7).

6. In his article, "Education For Sustainability: A Seductive Idea, But Is it Enough For My Grandchildren?"

([http://www.ec.gc.ca/education/ee\\_jickling\\_e.htm](http://www.ec.gc.ca/education/ee_jickling_e.htm).), Bob Jickling starts a conversation/debate around the meaning and interpretation of the word "*sustainability*" and how this impacts on sustainability education and education for sustainable development. The purpose of this research is not to deliver a critique on his views but to alert ourselves to current issues and developments around environmental education / sustainability education.

What we definitely do not need at this stage are distractions that focus on semantics of the terms sustainability / sustainability education as presented by Bob Jicklings. While thought provoking, close examination shows that the examples he cites are invalid and the arguments provided are somewhat hollow. If distracted to inaction by semantics we may so severely degrade our environment that we may not have any grandchildren to worry about.

7. Finally, collective responsibility is an important part of our heritage. Now more than ever before, the DBE and the Eco-Schools Programme must effectively implement strategies that will support education for sustainable development. Change is needed and must happen. We can no longer ignore the massive damage already inflicted on our fragile environment. Neglect or indifference to education for sustainable development will escalate the degradation of our planet to such a point that restoration may become impossible. Teachers must inculcate a sustainable way of life. They need to initiate the process and include every member of the school community in whole school development through the Eco-Schools Programme. Sustainable education is our only hope to halt or reverse the damage already done to our only home, mother Earth.

## BIBLIOGRAPHY

Babbie, E. 1998. *The practice of social research*, 8<sup>th</sup> ed. Belmont: Wadsworth.

Bailey, C.A. 1995. *A guide to field research*. Thousand Oaks, CA: Pine Forge.

Blaxter, L., Hughes, C. and Tight, M. 2001. *How to research*. Buckingham: Open University Press.,

Bonnet , M. 1999. Education for Sustainable Development: a coherent philosophy for environmental education. *Cambridge Journal of Education*, 29(3), pp.313-24.

Chen, P.J. 1997. Environmental teachers, it is time to design a whole new curriculum now. *Environmental Education Research* 3 (2):233-237.

Department of Education. 2000. *Curriculum 2005*. Pretoria: Government Printer.

Department of Education. 2000. *Norms and Standards for Teachers*. Pretoria: Government Printer.

Department of Education. 2002. *Revised National Curriculum Statement Grades R – 9*. Pretoria: Government Printer.

Department of Education. 2002c. (NCS) (R-9) *Overview Statement*. Pretoria: Government Printer.

Department of Education. 2005. *National Curriculum Statement. Grade 10 – 12 FET*. Pretoria: Government Printer.

Eco-Schools. Available from URL <http://www.eco-schools.org>.

Eco-Schools. 2005. WESSA. WWF-SA. Eco-Schools South Africa Handbook. Howick.

Eureta Janse van Rensburg. 2007. e.mail communication. *Potential Changes to Eco-School Process*. [eureta@worldonline.co.za](mailto:eureta@worldonline.co.za) / [bridget@wessa.co.za](mailto:bridget@wessa.co.za) 28/8/2007.

Foundation for Environmental Education. Available from URL <http://www.eco-schools/countries/natpages.htm>.

Fetterman, D.M., Kaftarian, S. & Wandersman, A. 1996. *Empowerment evaluation: knowledge and tools for self-assessment and accountability*. Thousand Oaks, CA: Sage.

Filho, W.L., Murphy, Z. & O'Loan, K. 1996. *A Sourcebook for Environmental Education. A Practical Review based on the Belgrade Charter*. New York: The Parthenon Publishing Group Inc.

Fontana, A. & Frey, J. 1994. Interviewing: The art of science. In Norman K. Denzin and Yvonne S. Lincoln (Eds), *Handbook of Qualitative Research* (pp. 361 – 376). Thousand Oaks, CA: Sage.

Jickling, B. 2005. Education for Sustainability: A Seductive Idea, But Is It Enough For My Grandchildren? Retrieved September 09, 2009 from the World Wide Web: [http://www.ec.gc.ca/education/ee\\_jickling\\_e.htm](http://www.ec.gc.ca/education/ee_jickling_e.htm).

Krueger, R.A. 1988. *Focus groups*. Newbury Park, CA: Sage.

Le Roux, C. & Maila, W. 2004. Issues and challenges regarding environmental education policy implementation. *African Education Review* 1 (2):234-244

Leroux, C., Loubser, C.P., Lupele, J., O'Donoghue, R., Schudel, I. and Shallcross, T. 2007. *Borrowed, translated or indigenous practice? Networking in international teacher education in environmental education. 4<sup>th</sup> World Environmental Education Congress 2007*

Lincoln, Y.S and Guba, E.G. 1985. *Naturalistic Inquiry*. Newbury Park. CA: Sage.

Lotz-Sisitka, H. 2005 Reflections on the '3rd World Environmental Education Congress: Educational pathways towards sustainability', Italy, 2005. *Southern African Journal of Environmental Education (22): 172 -176.*

McCulloch, G. 2004. *Documentary research in education, history and the social sciences*. London: RoutledgeFlamer.

Miller, G.J. 2002. *Living the environment*. 12<sup>th</sup> ed. Belmont: Wadsworth.

Mouton, J. 2006. *How to succeed in your Master's and Doctoral Studies: A South African Guide and Resource Book*. 10<sup>th</sup> impression. Pretoria: Van Schaik.

Naidu, R. & Sanpath, A. 2007. Teachers told to get Radical. *Daily News*, 6 July 2007.

National Environmental Education Programme (NEEP). [Online], Available from: [www.environment.gov.za/ProjProg/2003NEEP/capcity-building-21052003.html](http://www.environment.gov.za/ProjProg/2003NEEP/capcity-building-21052003.html), [Accessed 26 October 2007].

Neumann, W.L. 1997. *Social research methods: Qualitative and quantitative approaches*, 3<sup>rd</sup> ed. Boston, MA: Allyn & Bacon.

Parker, B. & Murray, S. 1999. SADC/REEP mid-term review report July 1999. SADC-REEC, Howick.

Parry-Davis, D. (Eds). 2004. *The Enviropaedia: Environmental Encyclopaedia and Networking Directory for Southern Africa*. Simonstown: Eco-Logic.

Patton, M.Q. 1990. *Qualitative evaluation and research methods*. London: Sage.

Posch, P. 1993. Approaches to Values in Environmental Education, in OECD/ENSI  
*Values in Environmental Education Conference Report*, SCCC, Dundee.

Rubin, H.J & Rubin, I.S. 1995. *Qualitative interviewing: The art of hearing data*. London: Sage.

Republic of South Africa. 1996. *The Constitution of the Republic of South Africa*. Pretoria: Government Printer.

SADC REEP, 2002. SADC Regional Environmental Education Programme Document. Howick: Share Net.

Schwahn, C.J and Spady, W.G. 2002. *Total Leaders: Applying the best Future-Focused change strategies to Education*. Lanham, Maryland and Oxford: Scarecrow Press Inc.

Seidman, I.E. 1991. *Interviewing as qualitative research: A guide for researchers in education and social sciences*. New York: Teachers College Press.

Shallcross, A. and Moorcroft, R. 2004. *Report on the formative evaluation of the NCSL's CSBM module; Creating a Better Environment in Our Schools*, Manchester, MMU.

Shallcross, T. (ed). 2004. *The SEEPS Project (Sustainability Education in European Primary Schools)*. Manchester Metropolitan University: Manchester.

Shallcross, T. and Spink, E. 2007. Emergent properties of change: the business of sustainable development in schools. *4<sup>th</sup> World Environmental Education Congress 2007*

Speedy, J. 2008. *Narrative Inquiry and Psychotherapy*. New York: Palgrave Macmillan.

Sterling, S. 2001. *Sustainable Education Revisioning Learning and Change*, Dartington: Green Books.

South African Development Community (SADC). Regional Environmental Education Programme (REEP). [Online], Available from: <http://www.sadc-reep.org.za>, [Accessed 27 December 2007]

South Africa (Republic) 1989. *White Paper on Environmental Education*. Pretoria: Government Printer.

South Africa (Republic) 1995. *White Paper on Education and Training*. Pretoria: Government Printer. [www.info.gov.za/whitepapers/1995/educational.htm](http://www.info.gov.za/whitepapers/1995/educational.htm).

South Africa (Republic) 1998. *The National Environmental Management Act*. Pretoria: Government Printer.

Taylor, J. 2006. Education for Sustainability: The United Nations Decade of Education for Sustainability is probably the last co-ordinated opportunity, at a global level, that we have to save our planet. *African Wildlife* 60 (1):2-5.

UNESCO/UNEP, 1977. *Inter-governmental Conference on Environmental Education: Final Report*. [http://www.gdrc.org/uem/ee/EE-Tbilisi\\_1977.pdf](http://www.gdrc.org/uem/ee/EE-Tbilisi_1977.pdf).

UNCED, 1992. Agenda 21 London. Regency Press, *World Commission on Environment and Development (1987). Our Common future*. Oxford: Oxford University Press.

UNESCO, 2003 *UN Decade of Education for Sustainable Development (2005 – 2014): Education for Sustainable Development Information Brief*. Paris: UNESCO.

UNESCO, 2005. *United Nations Decade on Education for Sustainable Development. Annex. 1 Draft consolidated international implementation Scheme*. [Online], Available from: [www.unesco.org/education/desd](http://www.unesco.org/education/desd), [Accessed 29 December 2007]

United Nations, New York. 2002. *Report of the World Summit on Sustainable Development. Johannesburg, South Africa, 26 August – 4 September 2002*. [http://www.un.org/jsummit/html/documents/summit\\_docs.html](http://www.un.org/jsummit/html/documents/summit_docs.html).

Uys, C. 2006. *Evaluation of the Old Mutual “Out of the Box” Project*. Braamfontein: Maths Centre for Professional Teachers.

Vallabh, P. 2005. WESSA/WWF-SA Eco-Schools South Africa – Internal Evaluation Report October 2005. Howick.

Ward, K., Vallabh, P. & Archery, S. 2005. Eco-Schools Programme WWF Funding Report: Howick.

WEEC, 2007. *How do we ensure learning in a changing world?* [Online], Available from: URL <http://www.bgci.org/worldwide/news/0394/>, [Accessed 28 December 2007].

**APPENDIX: A 1**

Name of School: \_\_\_\_\_ Date: \_\_\_\_\_

Address: \_\_\_\_\_

Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

*We must “prepare each student to lead a sustainable lifestyle” and “place ecosystems concepts at the intellectual centre of all disciplines” (Dininger. 1993).*

**Interview questions: Focus Groups and Teachers**

1. Tell me about your experience with the Eco-Schools Programme?

---

---

---

---

---

1.1 When did you register? \_\_\_\_\_

2. Have you heard about whole school development? (Yes/No) Explain:

---

---

---

---

3. How does the National Curriculum Statement encourage environmental education and sustainable development?

---

---

---

---

4. How does your school manage its Eco-Schools Programme?

---

---

---

---

---

5. Tell me about the school audit?

---

---

---

---

5.1 Who was involved?

---

---

---

6. Is the Eco-School Programme sustainable and easy to manage? Explain your response

---

---

---

---

---

---

7. How did the support from your Co-ordinator help you with the implementation of the Eco-Schools Programme?

---

---

---

---

---

8. Does the Eco-Schools Programme place an extra load on the teachers and school management team? Yes/No? Explain.

---

---

---

---

---

---

9. How has the Eco-Schools Programme impacted on the attitude of the school and all the role players towards creating a sustained awareness of respect for the environment?

---

---

---

---

---

---

10. Currently the participation of a school on the Eco-Schools Programme is voluntary. Would you like to see it incorporated into the formal education system? Why?

---

---

---

---

---

---

11. Any other comments or advice?

---

---

---

---

---

---

Name of School: \_\_\_\_\_ Date: \_\_\_\_\_

Grade: \_\_\_\_\_

*We must “prepare each student to lead a sustainable lifestyle” and “place ecosystems concepts at the intellectual centre of all disciplines” (Dininger. 1993).*

**Interview Questionnaire: Learners**

1. What do you like about the Eco-Schools Programme?

---

---

---

---

2. What don't you like about the Eco-Schools Programme?

---

---

---

---

3. Are you part of the Eco-Schools working group/club? Yes/No? \_\_\_\_\_  
How are you involved?

---

---

---

4. Do you know what is a school audit? Yes/No \_\_\_\_\_

4.1 How was the audit conducted at your school?

---

---

---

---

4.2 What did you learn from the audit?

---

---

---

5. Are environmental issues included in your lessons? Yes/No? \_\_\_\_\_  
Give an example.

---

---

6. What is a portfolio?

---

---

---

6.1 Did you help with compiling the Eco-Schools portfolio? Yes/No?  
\_\_\_\_\_

6.2 How did you collect the evidence for the portfolio?

---

---

---

7. Did your school earn the Green Flag? Yes/No? \_\_\_\_\_  
How do you feel about it?

---

---

8. Do you practise at home what you learn about the environment at school?

Yes/ No? \_\_\_\_\_ Give an example.

---

---

9. Do you share the knowledge or information with your friends and family?

Yes/No? \_\_\_\_\_

10. Please share any other thoughts or suggestions about the Eco-Schools Programme.

---

---

*We must “prepare each student to lead a sustainable lifestyle” and “place ecosystems concepts at the intellectual centre of all disciplines” (Dininger. 1993).*

### **Interview questions: Department of Education Official**

1. Are you aware of the Eco-Schools Programme? Yes/No? Explain.
2. The Department of Education established the National Environmental Project for General Education and Training (NEEP-GET) in 2000. The aim of the project was to strengthen environmental learning in the South African curriculum. The project was funded by Danida, the Department of Education and partner groups. A consortium of South African Higher Education Institutions participating in this project were The University of South Africa (UNISA), Rhodes University, Stellenbosh University, University of Kwa-Zulu Natal (UKZN) and Venda University.

The report conducted in 2004 which was circulated to you cited many challenges in terms of the 7 outputs of the project. Please discuss the progress made to date with regards to these challenges and the recommendations given in the report.

3. One of the aims of this research is to find ways to incorporate the Eco-Schools Programme into the formal Education System so that all schools move towards whole school development through sustainability education.

Do you think the Department of Education would work towards adopting such a policy? Yes/No? Discuss.

Name of School: **Laerskool Anton Von Wouw**

Date: 20/02/09

**APPENDIX: B 1**

Address: cnr. Dey & Lange Street, Nieuw Muckleneuk, Tshwane, Gauteng. Tel: 012 460 3024

Fax: 012 346 4847

Eco-Schools Co-ordinator: Ms Cornia Sadie

Interview questions: Focus Groups and Educators

<b>Professor Reanna:</b>	<b><u>Concepts</u></b>	<b><u>Themes / other</u></b>	<b><u>Notes</u></b>
<p>: Looking around you can see this is not only a <b>green school</b> but also the <b>top (green) school in Gauteng</b>. But we could not achieve this without the <b>involvement of Parents</b>. Including the <b>teacher</b>, all of us are parents. We are <b>proud</b> of our school and we also have a <b>member on the governing body</b> of the school. When it comes to <b>sustainable environment</b> we do need <b>advocates</b> ... they call us <b>bunny huggers</b> ... what ever you call us but we need people like that to run a project. Now, we have our <b>International Flag</b> and we also <b>reach out to our immediate neighbouring schools to help them achieve sustainable development</b>.</p> <p>Our <b>recycling project</b> started 8 years ago and it <b>started on a small scale</b> where we asked the different classes at different levels to come and recycle. And it went like that <b>for 6-7 years</b> until now our new system where every <b>individual recycles</b> on an individual basis. And we have a <b>point system</b>. <b>If you have a bin full you get 50 points and you get a sticker to wear normal clothes (not the uniform)</b>. We <b>encourage</b> them <b>not to recycle just to get a reward but to do so on a regular basis</b> through our <b>news letter</b> but we also want the to see the result, for example, today we saved <b>80 trees with the paper we recycled or things like that</b> but they get <b>feedback</b> on a <b>regular basis on the recycling but also on the sustainability of the project</b>. There also a lot of <b>other projects</b> we are involve in when it come to the Enviro, for instance we have a <b>vegetable garden</b> done by the <b>Grade 5s</b> where each (Gr. 5) child has a <b>patch of the vegetable garden</b> where they take <b>responsibility</b> for that garden for the season and <b>they make little plaques with their names (for their patch of garden.)</b></p>	<ul style="list-style-type: none"> <li>∅ <b>green school</b></li> <li>∅ <b>involvement of Parents &amp; teachers</b></li> <li>∅ <b>member on the governing body</b></li> <li>∅ <b>sustainable environment</b></li> <li>∅ <b>proud</b></li> <li>∅ <b>advocates</b></li> <li>∅ <b>International Flag</b></li> <li>∅ <b>sustainable development</b></li> <li>∅ <b>recycling project</b></li> <li>∅ <b>individual recycles</b></li> <li>∅ <b>point system</b></li> <li>∅ <b>encourage</b></li> <li>∅ <b>news letter</b></li> <li>∅ <b>feedback</b></li> <li>∅ <b>other projects</b></li> <li>∅ <b>vegetable garden</b></li> <li>∅ <b>responsibility</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Involvement of Stakeholders</li> <li>∅ Clubs</li> <li>∅ Learners take Ownership</li> <li>∅ Empowering stakeholders</li> <li>∅ Sustainable progress (6-7 years)</li> <li>∅ Acknowledgement and affirmation</li> </ul>	<ul style="list-style-type: none"> <li>∅ <b>Top Eco School in Gauteng</b></li> <li>∅ <b>One club member serves on the SGB – good networking and communication</b></li> <li>∅ <b>Out reach programme: supporting neighbouring schools</b></li> <li>∅ <b>Started recycling on a small scale.</b></li> <li>∅ <b>A meaningful Award system</b></li> <li>∅ <b>Communicate impact of recycling and sustainability</b></li> <li>∅ <b>Planning very important; e.g Grade 5 Vegetable garden</b></li> <li>∅ <b>Making of plagues integrated with Arts &amp; Culture LA</b></li> </ul>

	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p>Yesterday was the 19<sup>th</sup> of February, it was the Principal's birthday and all the children had to bring <b>one flower from their own garden</b> for the principal and this is the collection (<i>all the flowers on the stoep</i>). As you can the <b>school is divided into different kinds of biomes</b> where we teach them about the different kinds of plants. And here we are standing now you can see we have <b>shady plants</b> and <b>indigenous plants</b> ... we try to have most of plants that are <b>indigenous</b> to South Africa because <b>they do not use a lot of water</b>... the wooded area. Over there you find the more <b>arid plants</b> that do not need a lot of <b>water</b>. And there we have another <b>biome</b> where we have another kind of plants. In this way we can <b>incorporate the study of plants in the curriculum</b> so that when the <b>teacher speaks about succulent plants</b> he can come out into the garden and show them what it is (<i>Many of the trees and plants had labels</i>).</p>	<ul style="list-style-type: none"> <li>∅ <b>Biomes</b></li> <li>∅ <b>shady plants</b></li> <li>∅ <b>indigenous plants</b></li> <li>∅ <b>arid plants</b></li> <li>∅ <b>water</b></li> <li>∅ <b>succulent plants</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Home gardens</li> <li>∅ Integration using school grounds</li> <li>∅ Creating awareness alien plants vs indigenous plants</li> <li>∅ Food webs /biomes</li> </ul>	<ul style="list-style-type: none"> <li>∅ <b>Bring flowers from home not buying – Sustainable living</b></li> <li>∅ <b>Action and experiential learning, using school grounds</b></li> <li>∅ <b>Integrating curriculum – all LA's use the grounds</b></li> </ul>
<p>Over there they make <b>bird feeders</b> and they hang it in different places. In this way they learn about the <b>different birds</b>, what <b>kind of food they eat and what kinds of trees they live and so on</b>. And for us this is extremely important and we also identify all the trees (with labels). And now again we ask them to go and look for certain trees and you can't teach them without them (able to see those trees).</p>	<ul style="list-style-type: none"> <li>∅ <b>bird feeders</b></li> <li>∅ <b>different birds</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Attracting bird life to the school</li> <li>∅ Generating practical experience – appreciate nature</li> </ul>	<ul style="list-style-type: none"> <li>∅ <b>Labelling of trees done in partnership with "National Parks" – Networking</b></li> </ul>
<p>Our next project is an <b>owl box</b>. We have spoken to the people and <b>we want the owls back at the school because here and there we have seen rats again and we don't want them here</b>. So we are busy arranging for an owl box. And you will see most of the trees that need <b>fertiliser</b>... we have our <b>own compost box</b> over there and we also spray our plants with <b>sunlight liquid</b> and <b>lavender</b> so it does not kill natural (beneficial) insects. It's a <b>good repellent</b> but they don't die of it.</p>	<ul style="list-style-type: none"> <li>∅ <b>owl box</b></li> <li>∅ <b>fertiliser</b></li> <li>∅ <b>compost box</b></li> <li>∅ <b>sunlight liquid</b></li> <li>∅ <b>lavender</b></li> <li>∅ <b>good repellent</b></li> </ul>		<ul style="list-style-type: none"> <li>∅ <b>Focus on endangered spices (owl) and importance of food chain</b></li> <li>∅ <b>Natural repellents –</b></li> </ul>
<p>Now we are going to show you our <b>recycling plant</b> where we do the re-cycling. It's a pity you couldn't be here yesterday because yesterday it was full. But you can see</p>	<ul style="list-style-type: none"> <li>∅ <b>recycling plant</b></li> </ul>		<ul style="list-style-type: none"> <li>∅ <b>Forming Sustainable habits</b></li> </ul>

<p>the pictures of it.</p> <p>We are going to show you the <b>vegetable garden</b> now. It's a pity it's not in season right now but you will get an idea. The also the <b>recycling</b> and then we'll just walk around the school grounds so you get a general idea.</p> <p>We are now at the place which we call "klippie" it is a <b>cafeteria</b> for the children when they have their first break and second break. We have tried to change the <b>menu</b> so they have a lot of <b>healthy food</b> as well. We have <b>chicken and mayonnaise and salads and milk shakes</b> because of a lot of international research done about bad (eating) <b>habits and very bad diets on concentration in school</b>. So we also gave our input here and it seems it has helped.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>Vegetable garden</b></li> <li>∅ <b>recycling</b></li> <li>∅ <b>cafeteria</b></li> <li>∅ <b>menu</b></li> <li>∅ <b>healthy food</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Healthy Living – cafeteria sells healthy meals</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ Own research done to understand health and nutrition in term of learners development and performance in the classroom</li> </ul>
<p>My name is <b>Anna Grobler</b>. I'm on the <b>Governing body</b> of Anton Von Wouw. <b>We are in the process of building a new Recycling Centre</b> which we are doing as Green building project and with the project we are also putting a <b>platform for our recycling</b> where we will recycle paper specifically and we going to get a <b>container</b> where we can <b>recycle our glass</b>. <b>Plastic</b> is recycled separately and we also <b>recycle cans</b>. The building project started at this point (where we were standing) and again <b>we involve the children as we go along with the process and show them how we can erect a building while using Eco-friendly material</b>.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>Governing body</b></li> <li>∅ <b>Recycling Centre</b></li> <li>∅ <b>Container</b></li> <li>∅ <b>Glass</b></li> <li>∅ <b>Plastic</b></li> <li>∅ <b>Cans</b></li> <li>∅ <b>Eco-friendly material</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Recycle, reuse</li> <li>∅ Sustainable use of resources</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ Building of recycling centre and recreation centre</li> <li>∅ Involve learners</li> <li>∅ Use eco friendly material and reuse old material. Sustainable use of resources</li> </ul>
<p><b>PROFESSOR Reanna:</b> We are going to move the <b>recycling area</b> to show you how the <b>different materials</b> are <b>separated into plastic, paper, tins and glass</b>. Last year the <b>school earned about R43,000 out of the paper</b> and the others we must still calculate but usually <b>per month we get about 3-4 thousand Rands</b> and this is out of <b>waste (material)</b>. And this is what makes it so ironic that you get <b>money out of waste</b>. And</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>recycling area</b></li> <li>∅ <b>plastic, paper, tins and glass</b></li> <li>∅ <b>waste</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Entrepreneurial opportunity</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ Generate Sustainable Income, money out of waste</li> </ul>

<p>we can move over there as you can see there is truck now loading the plastic. And yesterday it was the paper and it was covering this whole part of the rugby field which was collected yesterday and the glass and the tins are in those bins over there.</p> <p>To do this and to start with the <b>Recycling Centre</b> we had to <b>draw a plan</b> and we had to <b>get approval from the Tshwane Metro Council</b>. And one of the <b>fathers here was an architect</b> and so the plans was for free and then a mother who called and arranged all the legal stuff for us. The <b>City Council</b> approved everything and the plans and this is why we have started the building now. You will also see that just to keep everything <b>clean</b> we have built this cage, this wall here and for the past three weeks the person collecting the <b>plastic</b> did not come and one <b>of the fathers has started a recycling business</b> and he will be collecting the <b>plastic</b> this morning. And we also got our <b>teachers involved</b>. The only <b>problem</b> is that if we don't get the material collected immediately it <b>attracts rats and the tins or glass can be dangerous for the children</b> and this is only negative thing if the waste is not removed on a regular basis. <b>There is a lot of Awards</b> for trying to keep the City clean and I know the mayor of Tshwane and they want to be involved in a <b>cleaning project for 2010 World Cup</b> and they just showed me the "Record" our local paper with the Competition where there quite big prizes for the school.</p> <p>As you can see <b>there were two or three big trees that had to be cut off to create this Recreation Centre</b> and also for the area where we going to recycle and caused quite astir on the Enviro-Committee because a lot of us said you can't chop off those trees. Then we got in the experts and the people who know trees and the architects and whatever and at the end of the day only one big tree had to go. But it also caused a lot a problem for us in building in this area but only one tree was removed and as you can see only some branches from the other tree. Unfortunately with development this will happen and <b>it is give and take</b>.</p>	<p><b>(material)</b></p> <p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>Recycling Centre</b></li> <li>∅ <b>draw a plan</b></li> <li>∅ <b>clean</b></li> <li>∅ <b>plastic</b></li> <li>∅ <b>teachers involved</b></li> <li>∅ <b>Awards</b></li> <li>∅ <b>Recreation Centre</b></li> <li>∅ <b>it is give and take</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Collective responsibility</li> <li>∅ Whole school involvement</li> <li>∅ Getting stakeholders involved and take ownership</li> <li>∅ Team work</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ <b>Networking parents and city council</b></li> <li>∅ <b>Empowering parents to start own business ( one of the fathers started a recycling business)</b></li> <li>∅ <b>Waste must be collected regularly – health and safety issue</b></li> <li>∅ <b>Entering competitions – via local paper</b></li> <li>∅ <b>Give and take – negotiations and consultations with stakeholders</b></li> </ul>
---	--	---	---

<p><b>Grobler:</b> In <b>cutting the trees</b> and clearing the place for the <b>Recycling area</b> which was causing a lot of <b>damage to our field</b> so fortunately we went half way. Unfortunately we lost one big tree, it was a Doring Boom. We are not going to lose it. We are going to <b>replant</b> the tree. And this tree we are going to use as key feature of our Recreation Centre and we are going to cut around it and pave it and make it a key feature of our recreation centre. And the tree that we had to cut down we are going to use its wood for our <b>fund raising</b> project.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>cutting trees</b></li> <li>∅ <b>Recycling area</b></li> <li>∅ <b>damage to field</b></li> <li>∅ <b>Replant</b></li> <li>∅ <b>fund raising</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ recycle, reuse, restore</li> <li>∅ Entrepreneurial activities</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ <b>Recreation Centre – getting school community involved</b></li> <li>∅ <b>Using natural resources effectively</b></li> </ul>
<p><b>Reanna:</b> This our netball area but we were <b>damaging</b> it so much with our <b>recycling</b> that we had to put here the pavilion stand (as a barrier) so that we can't get on this side anymore. And the trucks and the building that is going on there don't destroy this (basketball) area here. The recycling plant that will be built will be on the street side so that the trucks can easily come in and just pick up the material.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>Damaging</b></li> <li>∅ <b>recycling</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Caring for the environment</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ <b>Taking precautionary measures</b></li> </ul>
<p><b>Grobler:</b> As Reanna said the project started 8 years ago on a very small scale. So this is 8 years of learning and growing bigger and only at this stage we are having a formal structure. It is not possible for a school that is starting to have all these which we have achieved after 8 years. It is 8 years of <b>growing</b> and <b>planning</b> before we have our own recycling area. It's <b>developmental</b> and <b>sustainable</b>.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>Developmental</b></li> <li>∅ <b>Growing</b></li> <li>∅ <b>planning</b></li> <li>∅ <b>Sustainable</b></li> </ul>	<p><b>Themes / other</b></p>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ <b>Started off small continuous growth</b></li> </ul>
<p><b>Reanna:</b> It was very <b>heart-warming</b> for us to see the other day a guy with a big pick-up truck came in and it was full of <b>paper</b> and <b>plastic</b> and whatever and we immediately he was not part of the school. And we asked him who he was and he said I am one of the <b>businessmen</b> in the area I saw your recycling project and I've got the people to recycle and they are on their way. Yesterday morning about 7-8 people came to recycle but they are not even part of the school. So <b>a lot of parents not from the school also recycle here</b>. This is <b>whole school development</b>. And this is why we encourage children to recycle on a weekly basis and make it a way of living and not to recycle once a month because they want a sticker to put on normal clothes.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>heart-warming</b></li> <li>∅ <b>paper</b></li> <li>∅ <b>plastic</b></li> <li>∅ <b>businessmen</b></li> <li>∅ <b>parents</b></li> <li>∅ <b>whole school development</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Wholes school development</li> <li>∅ Community involvement – networking</li> <li>∅ Recycling a way of life</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ <b>Getting Support from the local business community by setting an example.</b></li> <li>∅ <b>Learners encouraged to recycle weekly – rewarded</b></li> </ul>

<p><b>Lydia:</b> We want the children to become <b>aware</b> of the importance of <b>recycling</b> as my children do at home by asking, "Mom, can we recycle this item?" This is already in their mind. Is this a recyclable item or not?. And then they learn what is a <b>recyclable</b> item and what is not.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>Aware</b></li> <li>∅ <b>Recycling</b></li> <li>∅ <b>Recyclable</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Instilling awareness thus changing behaviour</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ Children are thinking about recycling. (Lydia's children are at Anton Van Wouw</li> </ul>
<p><b>Reanna:</b> We have also started the <b>recycling</b> of <b>batteries and cartridges</b>. The children know if they have those items they immediately bring to me or Cornia Sadie in the morning and we put it separately because we take it to a separate place where they handle those <b>toxic materials</b>. As Lydia said we are trying to make this project a <b>sustainable project</b>.</p> <p>The <b>pre-school</b> is also adjacent to our school and their <b>teachers</b> also get them to bring their <b>material</b> to our school to <b>recycle</b>. We also get them to come here once a month on a Friday to the big hall so that the Gr. R kids see the big children and they know the building and they know the grounds so that they are not tense when they arrive here. Unfortunately not all our children come from this pre-school so there are others there as well.</p> <p>This is a <b>vegetable garden</b>. Every Grade 5 pupil has their own piece of garden and there is an old man, he is about 80 now, he is very good with the garden, and he helps the children. In January we take out all the vegetables and clean the garden because there were a lot of unwanted plants because of this rain. They <b>plant</b> <b>cabbage</b> and <b>potatoes</b> and we have a list and every child get a certain vegetable. Starting in March they come in at certain periods and they come and <b>plant</b> their <b>vegetables</b> and <b>they get points</b>. If their <b>garden</b> is <b>raked</b> and they look after it so it looks nice. Some take their stuff home. Some bring little <b>plants</b> from home and plant them in their garden and during break they come and water it and normally few of us</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>Recycling</b></li> <li>∅ <b>batteries and cartridges</b></li> <li>∅ <b>toxic materials</b></li> <li>∅ <b>sustainable project</b></li> <li>∅ <b>pre-school</b></li> <li>∅ <b>teachers</b></li> <li>∅ <b>material</b></li> <li>∅ <b>recycle</b></li> <li>∅ <b>vegetable garden</b></li> <li>∅ <b>plant</b></li> <li>∅ <b>cabbage</b></li> <li>∅ <b>potatoes</b></li> <li>∅ <b>get points</b></li> <li>∅ <b>garden</b></li> <li>∅ <b>raked</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Start instilling awareness at grade R level</li> <li>∅ Learners are rewarded for their efforts</li> <li>∅ Rewards are used only to encourage.</li> <li>∅ Repetition of tasks and starting at a young age is used to instil values and cultivate sustainable behaviour</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ Members are focused on starting sustainable projects</li> <li>∅ Create awareness about toxic waste</li> <li>∅ Pre-school learners also involved. Good foundation even it learners go to other schools</li> <li>∅ The vegetable garden is part of the grade 5 Curriculum. Learners look forward to coming to grade 5. Learners are rewarded</li> <li>∅ Teaches the learners responsibility</li> </ul>

<p>come in the afternoon and water it sometimes. We want irrigation system because it is difficult to come and water it every day especially on holidays and if you don't water it the plants go down. All the children want to get to Gr 5 to do their garden. My child was in Gr. 5 last year and he was very proud of his garden. The children bring their vegetables home and they cook it and it comes from the school to the parents. A lot of the parents mention that since they started the garden here they started their garden at home. They grow their own spinach and others at home and they have the know-how. And the parents also begin to investigate and get involved.</p> <p><b>Reanna:</b> You mentioned that each Gr 5 is responsible for a garden, but we also have each and every child responsible for something. For example the Gr 1 and Gr 4 were responsible for the seedlings which our biomes need. And we have other grades responsible for earthworms ...the bigger children do more complicated tasks, but hand in hand we also boys and girls scouts where we take the Enviro-responsibility much further. For instance my older group is responsible for the Grade 1's and every Wednesday afternoon every child has a plant or a herb for their parents but it started with showing them how to prepare the soil, how to plant it in a pot, giving it water and if they can't sustain that plant for two months they not going to get their sign. One of the learning outcome areas is to look at weeds and remove the weeds . The curriculum is integrated at our school in a great way.</p> <p>We are also getting the parents of Gr. 1 children involved in aiding the teacher and also in preparing the portfolio. One of the parents helps the teacher to incorporate everything that we need for our Enviro- files. The teachers have so much to do that we going to have this done with every teacher.</p> <p><b>Reanna:</b> Now that we have our Permanent Flag we were told we must not stop the good work but get more deeper into it.... And reach out to the other adjacent schools. So we have already assisted 2 or 3 schools and we are trying and we also advertise that schools approach us.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ water</li> <li>∅ irrigation system</li> <li>∅ garden</li> <li>∅ vegetables</li> <li>∅ home</li> <li>∅ proud</li> <li>∅ school</li> <li>∅ parents</li> <li>∅ spinach</li> <li>∅ know-how</li> <li>∅ seedlings</li> <li>∅ biomes</li> <li>∅ responsible</li> <li>∅ earthworms</li> <li>∅ herb</li> <li>∅ prepare the soil</li> <li>∅ learning outcome</li> <li>∅ weeds</li> <li>∅ curriculum is integrated</li> <li>∅ portfolio</li> <li>∅ Permanent Flag</li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Taking ownership – taking care of garden at school, taking vegetables home, starting a garden at home and getting parents involved.</li> <li>∅ Getting parents to help teachers administratively e.g compile and collect data for Eco - portfolios</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ Teachers/ members play a supportive role e.g help learners with their gardens after school</li> <li>∅ Children take their vegetables home, start their own gardens at home and parents also get involved.</li> <li>∅ Wholes school involvement in that even though grade 5 learners have their own garden other grades are responsible for bringing seedlings and earthworms for the other biomes - take environment responsibilities further.</li> <li>∅ Reach out to other schools</li> </ul>
---	--	---	--

<p><b>Lydia:</b> This is our <b>building project</b> where we use all <b>recyclable material</b>. One of our parents have gone around to building sites and identified the bricks we can use for building our recreation centre. So we are using <b>recycled bricks</b> and other <b>recycled material</b>. This is <b>cost effective</b>. This is not supported or funded by the DoE it is totally a parent project. That is why we have to use our recycled material.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>building project</b></li> <li>∅ <b>recyclable material</b></li> <li>∅ <b>recycled bricks</b></li> <li>∅ <b>cost effective</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ recycle, reuse, restore</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ No funding from DoE for project - Parent initiative</li> </ul>
<p><b>Reanna:</b> The <b>Enviro-Committee</b> had a meeting two weeks ago and we looked at the <b>calendar</b> and <b>identified all Environmental National Days</b> to be sure that we are going to do something with the children at the school. And we also have an <b>Enviro Week</b> where we <b>different colour days</b> for instance a <b>Green Day</b>, a <b>Yellow Day</b>, a <b>Brown Day</b> and these days we have experts to come in an do something with the children. For instance last Year I had the <b>Blue Day</b> where I taught the children about <b>water</b> and the use of water. For instance if you are in the desert and you are stuck without water how you can make your own water without having water. And how you can use urine to make water. And they were totally amazed. We had a lady here who taught about <b>sun spots</b> about <b>sun cancer</b> and why <b>sun</b> is so important in <b>nature</b>. So we can a point of it to mark these on the calendar and use these days and we have a lot of <b>expertise</b> in our community and we get the Department of Health and the Dept. of Water Affairs and Education to come and do a survey.</p> <p><b>Reanna:</b> We use the calendar to identify Days. For instance we have a <b>Wetlands Day</b>, <b>World Heritage Day</b>, we got <b>Arbour Day</b> when we <b>plant trees</b> and so on. And what is nice is that we have a tremendous Committee and Principal that supports our activities. In some schools they see the Green program as a nuisance but at this school we are pampered and that makes a difference.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>Enviro-Committee</b></li> <li>∅ <b>Calendar</b></li> <li>∅ <b>Enviro Week</b></li> <li>∅ <b>Water</b></li> <li>∅ <b>sun spots</b></li> <li>∅ <b>sun cancer</b></li> <li>∅ <b>sun</b></li> <li>∅ <b>nature</b></li> <li>∅ <b>expertise</b></li>   <li>∅ <b>Wetlands Day</b></li> <li>∅ <b>World Heritage Day,</b></li> <li>∅ <b>Arbour Day - plant trees</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Planning</li> <li>∅ Networking with experts</li>   <li>∅ Some see the Green Programme as a nuisance</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ Committee involved in planning Environmental Calendar and for co-ordinating activities.</li> <li>∅ Strong committed committee and support of the Principal</li> </ul>



<p><b><u>How did your school do the audit?</u></b></p> <p><b>Lydia:</b> We have our grade 7s, they are very much involved. We <b>Environmental leaders</b>... there are 12 of them who are very busy doing <b>recycling</b> from the <b>classes</b>. They separate the material and dump it in our recycling area. They are involved on Thursday mornings, we recycle all the <b>material brought from their homes</b>. They sort out all the material and they are very much involved.</p>	<p><b><u>Concepts</u></b></p> <ul style="list-style-type: none"> <li>∅ <b>Environmental leaders</b></li> <li>∅ <b>recycling</b></li> <li>∅ <b>classes</b></li> <li>∅ <b>material brought from their homes</b></li> </ul>	<p><b><u>Themes / other</u></b></p> <ul style="list-style-type: none"> <li>∅ The parents and home is very involved</li> </ul>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ <b>Grade 7 Environmental Leaders are responsible for conducting the school audits and also for monitoring and managing the recycling form the classes.</b></li> </ul>
<p><b>Mr G Meyer: Principal.</b> We have a wonderful <b>relationship</b> between <b>the community</b> and <b>the school</b></p> <p>One of the great things is how you engage the community in the school. Everybody benefits with this kind of relationship. The parents now buy in....(<i>Waheeda: the school is the heart of the change.</i> )</p> <p>The parents want to know now where they can get these four separate bins because the children take the message home. ... <b>The little ones take ownership.</b></p> <p>The <b>parents are champions</b> driving this process if we don't have champions you get no where. ... We have quite a few champions here at this school. <b>A deaf girl, after the campaign to pick up garbage on the street, said, "Dad do you know how much tins you can pick up at Loftus?" -- The Rugby Ground in Pretoria. Loftus have people who come to clean up but the material is not recycled!</b></p>	<p><b><u>Concepts</u></b></p> <ul style="list-style-type: none"> <li>∅ <b>Relationship</b></li> <li>∅ <b>the community</b></li> <li>∅ <b>the school</b></li> <li>∅ <b>The little ones take ownership</b></li> <li>∅ <b>parents are champions</b></li> </ul>	<p><b><u>Themes / other</u></b></p> <ul style="list-style-type: none"> <li>∅ All role players need to be involved</li> <li>∅ Everyone benefits</li> <li>∅ Learners and parents take ownership</li> <li>∅ Awareness changes attitudes</li> </ul>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ <b>Inclusive education – Deaf Girl</b></li> <li>∅ <b>Lotus is a potential for job creation</b></li> </ul>

Name of School: **Filadelfia Secondary**

Date: 17/02/09

**APPENDIX: B 2**

Address: 3167 College Drive, Block L, Soshanguve, Gauteng.

Tel: 012 793 1204

Fax: 012 793 1358

Eco-Schools Co-ordinator: Ms Lydia Makhubela

Interview questions: Focus Groups and Educators

<b>Willem van der Merwe: (Principal)</b>	<b>Concepts</b>	<b>Themes / other</b>	<b>Notes</b>
<p>Lydia works directly with the kids. She is a beautiful lady. You'll love her working with the children. We sometimes have a problem with our academic program ...this is not a special school it is a <b>LSEN (Learners with Special Educational Needs) school</b>. The school was started in 1985. It was the first secondary LSEN School for Black disabled learners in South Africa. LSEN means Learner with Special Education Needs. There is a difference between <b>Special school</b> and LSEN School. <b>Special school is a school for children with learning disability. Learners who will not easily make it to Gr 12. But ours is disabled in terms of being physically impaired, visually impaired or hearing impaired. (Disabled, Blind and Deaf)</b> In those years the Minister would come from all over S.A. He is now bit limited. <b>What makes our school unique is that we are the only school in the world that offers 9 official languages up to Gr 12. We provide 7 African languages but English is the language of instruction and we have Afrikaans because it is a very easy language to learn and pass and some of our learners come from an Afrikaans environment and we have sign language... this is the extra language we have. This makes us very multi-cultural.</b> This does make it a little difficult because we have Venda people here and Xhosa people and Zulu people and Tswana and Swazi, Sotho and ..... all language people are here coming from all over the country. All these children stay here in the <b>hostel</b>. We get a grant for that. <b>There are 475 learners currently enrolled ... lot of hearing impaired physically impaired all eager to learn. In general we get good results. We average sometimes we 65% sometimes we 79% depends on the ability of the child. When the Minister comes out and says we are under-performing, I sometimes disagree with the Minister and the Department because I say if I can take a disabled child and get him the</b></p>	<ul style="list-style-type: none"> <li>∅ <b>LSEN</b></li> <li><b>(Learners with Special Educational Needs) school.</b></li> <li>∅ <b>Special school</b></li> <li>∅ <b>multi-cultural</b></li> <li>∅ <b>hostel</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ planting a seed in the child</li> </ul>	<ul style="list-style-type: none"> <li>∅ An LSEN School I had to adapt questionnaire according to learners' needs. I was not aware that Filadelfia Secondary was an LSEN School as the list used to select schools just gave the name and contact details.</li> <li>∅ The Principal's interview gives insight to the many challenges faced by the learners'; teachers' and staff. It helps one to understand and appreciate their achievements in Eco-Schools Programme</li> </ul>

<p>maximum pass ... if that child can pass 3 learning areas I jump through the roof because these are disabled. Last year we had 10 learners and they failed in one area so they can write their supplementary and the possibility is that they can pass this again brings my pass rate to over 80%. But we will never achieve 100%. But in the old days when we started we selected the strong learners we had many disabled learners and in those years we got three or four distinctions but now we don't do that. I mean I can still select the top learners and throw out the others and get 100% pass. Other schools do that but I don't do that at our school. If they say I am under-performing that is fine. I mean we have problems of <b>ill-health</b>, and teachers who don't want to teach and late coming and <b>human resource problems</b> and all that but in general I'm very proud of my school. We have <b>inclusion</b> in our class in terms of having in one class the hearing impaired and the physically impaired and that teacher has a one hour period and in some learning areas they have to teach the blind learner in Braille be able to sign (language) this learner ...the teacher faces a lot of challenges but the people never come to see this... I mean the National Minister of Education never visited our school. I think we are the best school in S.A. But she was never here. The only MEC that we worked with was Nancy Jacobs /Davids ?? We are one of the most <b>unique schools</b> in the country, why are we not visited by the Minister? That is our problem. There is no reason for a school to say we cannot do <b>Eco School program</b>. We do just a little bit at a time. .. because you are just <b>planting a seed in the child</b> and we look at the whole environment of the school. But what we are also trying to do at this school is to bring in the <b>vocational training</b> for the disabled... right now we only have Hair Care here and we have 17 learners in it. We can have the best vegetable garden the best fruit garden but <b>we need more people involved</b>. You know what is the problem we can't get our Hair Care Saloon registered with SETA because we are a school. Previously, we were registered and we meet all the requirements but now we cannot because we are a school and not a college. In the past we could do all the training we had <b>workshops</b> for <b>teacher training, learner</b></p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>ill-health</b></li> <li>∅ <b>human resource problems</b></li> <li>∅ <b>inclusion</b></li> <li>∅ <b>unique schools</b></li> <li>∅ <b>Eco School program</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ we need more people involved</li> <li>∅ workshops for teacher training, learner training.</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ "There is no reason for a school to say we cannot do <b>Eco School program</b>. We do just a little bit at a time. .. because you are just <b>planting a seed in the child</b> and we look at the whole environment of the school..." <i>Principal</i></li> </ul>
--	--	--	--

<p><b>training.</b> We went to Port Elizabeth with all the LTN schools to train in crafts and art work etc. and under the new dispensation that lapsed. I taught brick laying and plastering and taught many children ... if you can train a child in a proper food garden then one or two disabled children can go back in the community and they will be able to look after themselves. Lets face it the majority of my learners never read because of lack of parent involvement, lack of money... if the parent is not involved that is our biggest challenge.. we call for two parent meetings a year. Out of 475 the maximum we can get is eighty, the others don't come. So there is no parent involvement in our school. And that is heartbreaking. Last year we had a blind child she had 75% for language in African language she had 76% and in Afrikaans she had 83% and we helped her to get into University and have her registered because the parents were not involved. But we can't help this. You know many of our children can do brilliantly but we do not have the support. There is Company, PICO, which takes some of our deaf learners ... they have taken 6 learners in window painting and the Momentum Group took 8 learners for cabinet making and that is what I want for our learners. Train the child and put the child in there in a job. But we can't put everyone in a job. Its impossible. ( Can you put this in a formal letter so I can do something at the National Office?) We can do that. All the LSEN schools we met in George .. Doctor from a ...a ....he was working with us... we want learners to take the LSEN program or the general program ...the LSEN program is interesting ...we are registering learners in the LSEN program who are not registered and last year out of the 6 that registered 4 of them passed and 2 of them passed LSEN and 1 of them failed and 1 of them had a sub. We brought the learning areas to five and the learner can get a pass or walk away with an LSEN Certificate.</p> <p>In our District Offices the challenges we face we don't get the support we need. The problem we have since we started in April last year with the new District Office we moved over from DC to D15. I have not met Milimane???? His view makes it for</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ food garden</li> <li>∅ learners never read</li> <li>∅ lack of parent involvement</li> <li>∅ lack of money</li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Need stakeholders to get involved</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ School has many challenges. Unique in the sense that it is and LSEN School.</li> </ul>
--	--	--	---

the LSEN schools more difficult because he has to learn about the needs of our school. Remember, in the secondary schools there are only 2 LSEN schools. We are still a minority we are a small fry and someone has to have the knowledge to stand up and say you can't do this and this in these schools because of this and that is the support that is wanting from the District. These are the challenges, I mean there is an improvement but it is not the quality we want. If I have a problem in a learning area and I want them to send a facilitator as soon as possible because my result is poor and that is not happening. Other challenges we have is when they changed the curriculum from the old Nated 550 to the NCS OBE they did not think about the education for the blind and that is a national problem. How do you replace textbooks overnight in Braille if the two main printing shops in S.A. cannot give us the textbooks in time. So we are still waiting for textbooks from them. No, no it will come. So what I did, with a lot of support from Anglo-American and Momentum and PICO etc. a lot of donors... it cost us 2 million rands, we got our own printing machine. So now I ask them to give me more staff to do my own Braille printing, currently I only have two staff members and we need 8 people to help me then we will also be able to supply other schools. We don't have a place to sit and tell them we need this and this. We had long meetings with National Office and LTN schools and at that stage they told us the National Office will allocate funds to start a printing shop. That never realized. So in Gauteng only Filadelfia and another school are able to do this. We are understaffed and we cannot do this and it is high cost and we do not get adequate funding and it is very expensive. Those kinds of things and so we have to raise our own. I don't think the Minister is aware. I have a lot of respect for Pandor, she is not aware. She makes promises and politicians make promises but I don't think she is aware. I would love to talk with her for an hour. We need the funding for the blind. We can't do it alone. The Private sector would give us the equipment we want the Dept to give us the manpower. Dr. Louwan is responsible. But we don't get a response. We just continue with our work. But it is not right. Too many incompetent

**Concepts**

**Themes / other**

**Notes**

<p>people sitting there are earning a salary. They close their doors. Its important to have a good salary and to have a good standard of life but you must deliver. I earn a salary I must make sure I work time to time I must make sure the money allocated is correctly spent I must make sure that the children at my school get the best education and they get the best support as far as possible and then if do all those things and I go home at night I know I did my best. Then I can retire. My deputy is well trained to take over. He will be able to run the school. One of the tasks is to get all the cultures together</p> <p>and that is not the easiest. It is also possible that the Dept wants a lady. I don't have any lady in mind to take over. I have others who want me to take over their school I told my wife there is no way I will move from Filadefia. Made this a beautiful school.... As long you give your best. I want to take you on a tour and show you the vegetable garden.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ beautiful school</li> <li>∅ vegetable garden</li> </ul>	<p><b>Themes / other</b></p>	<p><b>Notes</b></p>
<p><b><u>TOUR:</u></b></p> <ol style="list-style-type: none"> <li>1. Braille Office: Braille printing machines where they print their own Braille textbooks. (8:33)</li> <li>2. Walk through the school premises</li> <li>3. See the extensive garden (Got the Green Flag once last year)</li> <li>4. Get learners involved in the garden.</li> <li>5. Visit the Library – each area caters for specific learning impairment of learners.</li> <li>6. Discussed funding problems ... the way student disability grants are utilized by parents.</li> <li>7. Dept of Agriculture and Water works have been engaged.</li> <li>8. Minister of Land Affairs scheduled to visit school over the weekend.</li> <li>9. Lost 2 epileptic learners because the Dept was unwilling to provide a night nurse.</li> </ol>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ Braille printing</li> <li>∅ extensive garden</li> <li>∅ garden</li> <li>∅ Library</li> <li>∅ Funding</li> <li>∅ Agriculture</li> <li>∅ Water works</li> <li>∅ Land Affairs</li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Networking with stakeholders such as Dept of Agriculture and Land Affairs.</li> <li>∅ Local municipality – water works</li> <li>∅ Poverty – parents using disability grants for other needs</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ Very good learner resource centre. Learners have access to internet, books etc</li> <li>∅ Lack of support from Prov. Dept of Ed.</li> <li>∅ The school did achieve its Eco-Schools Flag (Green Flag)</li> </ul>

	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p><b>LYDIA:</b> (9:33) We have 3 <b>educators</b> on the <b>Committee</b>. Difficult to focus on <b>Eco School</b> , most of the time we are here or there. <b>One of the problems is to get support from other staff members. But they do help when needed. ....</b></p> <p><b>Principal:</b> Lydia is one of my active members, Anything you ask her to do she does it with a <b>passion</b>.</p> <p><b>LYDIA:</b> <b>Most of the time the workload falls on the shoulders of one person.</b></p> <p><b>Principal:</b> Once we had a <b>Competition</b> on who can build the best car using only <b>RECYCLED material</b>. This learner won making this Opal Cadet car. It has everything, doors, wheels, boot, suspension, carburettor, lights everything—even the name of the car. All with recycled material made in 3 weeks. There many ways to build capacity. In the <b>rural community</b> they don't have the knowledge to build capacity for the people. There are people available to do that but no one is going out there to do it. That is why we have <b>farms</b> going down because the people who take over don't have the skills. That goes back to the National minister of Education -- it is their responsibility.</p> <p>We have a <b>garden</b> and we send the <b>products</b> to the <b>orphanage</b>. <b>With the learners it is always what is in it for me.</b></p>	<ul style="list-style-type: none"> <li>∅ <b>Educators</b></li> <li>∅ <b>Committee</b></li> <li>∅ <b>Eco School</b></li> <li>∅ <b>Passion</b></li> <li>∅ <b>Competition</b></li> <li>∅ <b>RECYCLED material</b></li> <li>∅ <b>rural community</b></li> <li>∅ <b>farms</b></li> <li>∅ <b>garden</b></li> <li>∅ <b>products</b></li> <li>∅ <b>orphanage</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Accountability and responsibility of DoE in terms of capacity building and training.</li> <li>∅ Sharing and giving the less fortunate.</li> </ul>	<ul style="list-style-type: none"> <li>∅ <b>Support from staff members not consistent</b></li> <li>∅ <b>Most of the time the workload falls on the shoulders of one person</b></li> <li>∅ <b>Learners have the creativity to use recycled material</b></li> <li>∅ <b>“What’s in it for me” - For the learners at Filadelfia it not only about them but what joy they can derive by giving to less fortunate children. They want to contribute in a meaningful way</b></li> </ul>

<p><b><u>LEARNER INTERVIEW:</u></b></p> <p>My name is John. I am in Gr. 11</p> <p>Most of the time it is hard to find a <b>blind person</b> like me to know most of the things about the <b>environment</b>, usually we find people who have good vision or good sight they mostly tell you what kinds of <b>plants</b> we have in <b>Africa</b> what kinds of <b>trees</b> we have so it is rare to find blind people explaining the kinds of plants we have around our country. So it would be quite interesting to find someone as blind as I am to explain a wattle tree or a mopani tree. It would be of much interest. .... As blind people it would be much appreciated.</p>	<p><b><u>Concepts</u></b></p> <ul style="list-style-type: none"> <li>∅ <b>blind person</b></li> <li>∅ <b>environment</b></li> <li>∅ <b>plants</b></li> <li>∅ <b>Africa</b></li> <li>∅ <b>Trees</b></li> </ul>	<p><b><u>Themes / other</u></b></p> <ul style="list-style-type: none"> <li>∅ Setting the example for able-bodied people</li> </ul>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ Disabled people teaching able-bodied people to respect and appreciate the environment and use resources sustainably.</li> </ul>
<p><b><u>TEACHER INTERVIEW: LYDIA</u></b></p> <p>12. <u>Tell me about your experience with the Eco-Schools Programme?</u></p> <p>My experience began in 2005 when we were invited by the Eco Expo. We went there and they told us a lot about <b>Eco Schools</b>. We went to the <b>WESSA Offices</b> in Durban and they told us why we must become an Eco School (ES) and gave us a lot of idea about what ES were doing. At that time I was working for Filadefia SS but I was new. I came here in 2004 and the trip we took was in 2005. Getting the program <b>off the ground was very difficult. You are and individual yet we have a group we have to sit with them and talk to the staff and you only concentrate on the few that are positive. There are few that are interested in the garden.</b> We got <b>learners involved</b>, we struggled to get a name for the club. We called it <b>the GREEN CLUB</b>. We threw around a few names and we let the <b>kids decide. I want the kids to take responsibility.</b> When I am not around the kids must be able to <b>continue</b>. One thing we agreed that whatever stuff we going to get from the <b>garden</b> we will take to the <b>orphanage</b>. Most of them were <b>enthusiastic</b> about it especially people like John. He was very interested. Most of them have left as you can see in the pictures. <b>John showed that if we do something for other</b></p>	<p><b><u>Concepts</u></b></p> <ul style="list-style-type: none"> <li>∅ <b>Eco Schools</b></li> <li>∅ <b>WESSA Offices</b></li> <li>∅ <b>garden</b></li> <li>∅ <b>learners involved</b></li> <li>∅ <b>continue</b></li> <li>∅ <b>orphanage</b></li> <li>∅ <b>enthusiastic</b></li> <li>∅ <b>responsibility</b></li> </ul>	<p><b><u>Themes / other</u></b></p> <ul style="list-style-type: none"> <li>∅ Work with those who are interested</li> <li>∅ Team work</li> <li>∅ Learners must take ownership</li> <li>∅ Sustained Involvement</li> <li>∅ Learners have to be interested</li> </ul>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ Getting started was difficult</li> <li>∅ Support from other teachers a challenge</li> </ul>

	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p>people it shows we are important. We don't like when people say "Shame on them". We want to show them that we can also do something.</p>			
<p>12.1 <u>When did you register?</u>            ∅ We <b>registered</b> in 2006 and renew every year. We put together a <b>portfolio</b> in 2006 and we got our <b>Green Flag</b> in 2007. 2008 was very hectic. We had a lot of problems. <b>We did our garden</b> but most of the stuff was eaten by the chickens from the <b>informal settlements</b> near by. We tried to keep the project alive but there were lots of <b>curriculum demands</b> and other <b>challenges</b>, by the time it was September, we realized we had done very little. With little support we decided to leave it last year and started again this year. We had our first <b>meeting</b> last Thursday and we went to the office to ask for a <b>camera</b> to take <b>pictures</b>.</p>	<ul style="list-style-type: none"> <li>∅ <b>registered</b></li> <li>∅ <b>portfolio</b></li> <li>∅ <b>Green Flag</b></li> <li>∅ <b>Garden</b></li> <li>∅ <b>informal settlements</b></li> <li>∅ <b>curriculum demands</b></li> <li>∅ <b>challenges</b></li> <li>∅ <b>meeting</b></li> <li>∅ <b>camera</b></li> <li>∅ <b>pictures</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Showing compassion</li> <li>∅ Dignity of disabled people</li> </ul>	<ul style="list-style-type: none"> <li>∅ Persevered despite many challenges, particularly curriculum</li> </ul>
<p>13. <u>Have you heard about whole school development?</u>      Yes.  <u>Explain:</u> <b>WSD</b> is about the development of the whole school that it encourages everyone to be involved but it is not easy. But it helps because people should not see themselves as stagnant.</p>	<ul style="list-style-type: none"> <li>∅ <b>whole school development</b></li> <li>∅ <b>English</b></li> </ul>		
<p>14. <u>How does the National Curriculum Statements encourage Environmental Education and sustainable development?</u>            In <b>English</b>, in Comprehension the NCS encourages EE – we have <b>critical outcomes</b> about EE ... it is <b>integrated</b> but <b>when it comes to compiling the portfolios</b> the teachers see it as extra work when we have to do this and that, but if <b>we are working with the kids and others</b> it becomes easy. To put it together afterwards is a <b>lot of work</b> so we must <b>start early</b>.</p>	<ul style="list-style-type: none"> <li>∅ <b>critical outcomes</b></li> <li>∅ <b>integrated</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Start early to compile portfolio</li> </ul>	<ul style="list-style-type: none"> <li>∅ Teachers see portfolio as extra work.</li> </ul>
<p>15. <u>How does your school manage its Eco-Schools Programme?</u>            The <b>learners are involved</b>. We go outside on ventures we <b>take pictures</b></p>	<ul style="list-style-type: none"> <li>∅ <b>learners are involved</b></li> <li>∅ <b>take pictures</b></li> </ul>		

	<b>Concepts</b>	<b>Themes / other</b>	<b>Notes</b>
<p>16. <u>Tell me about the school audit?</u></p> <p>We normally call them and check if this is done. We're supposed to have monthly meetings and at the monthly meeting ask what is done. We do it at the beginning and end of year to know where we are going.</p>	<p>∅ school audit</p> <p>∅ monthly meetings</p>		<p>∅ Audits done at the beginning and end of the year.</p> <p>Learners are involved</p>
<p>16.1 <u>Who was involved?</u></p> <p>Learners are involved</p>			
<p>17. <u>Is the Eco-School Programme sustainable and easy to manage? Explain your response.</u></p> <p>Teachers I'm working with it will be difficult. There was this lady who made sure we were registered and other things now she left and the teacher who took her place, with the work load I'm afraid the new person may not take over. But there are people who are helping me ... they would come to you and say this is supposed to be done and want to know what is happening. I invite others to come and get involved but it is difficult.</p>	<p>∅ difficult</p> <p>∅ work load</p>		<p>∅ Continuity a challenge</p>
<p>18. <u>How did the support from your Coordinator help you with the implementation of the Eco-Schools Programme?</u></p> <p>There is a guy there now but there is only phone contact with him. No don't know about the Conference in March.</p>			
<p>19. <u>Does the Eco-Schools Programme add extra work on the educators and school management team?</u></p> <p>Yes</p>			
<p>20. <u>How has the Eco-Schools Programme impacted on the attitude of the school and all the role players towards creating a sustained awareness of respecting the environment?</u></p>			

	<b>Concepts</b>	<b>Themes / other</b>	<b>Notes</b>
<p><b>Good attitude.</b> Before we start I <b>motivate</b> the learners... the good learners are <b>passionate</b> about what we do. We start the <b>tin collection</b> so that at the end of the year there will be something. <b>Kids are really motivated they do love doing things.</b> I tell them if you really want to do something you must be prepared to get dirty and they tell me they are not afraid to get dirty.... They are <b>highly motivated.</b></p> <p>21. <u>Currently the participation of a school on the Eco-Schools Programme is voluntary. Would you like to see it incorporated into the formal education system? Why?</u></p> <p>I think it would be good if it is <b>incorporated</b> into the <b>formal education system</b> because we have <b>disabled learners</b> who are not coping and it is not only disabled ones that are not coping and they end up in <b>ABET</b>. <b>But if it is formal, good, I may not be good at academic but I can have a skill ... I can start my own garden.</b> I think it would be good. Thinking of <b>learnership</b>... if we have something like that it would be good to help them. If they are not good in class but they are good at something. One of them told me why don't we <b>plant seeds and sell flowers</b> – these learners can benefit if it is formal. They can be taught how to <b>prepare soil</b> and know what to do and this way they can <b>keep themselves alive and independent.</b></p>	<p><b>Good attitude</b></p> <p><b>motivate</b></p> <p><b>passionate</b></p> <p><b>tin collection</b></p> <p><b>highly motivated</b></p> <p><b>incorporated</b></p> <p><b>formal education system</b></p> <p><b>disabled learners</b></p> <p><b>ABET</b></p> <p><b>Learnership</b></p> <p><b>prepare soil</b></p>	<p>∅ incorporated into the formal education system</p>	<p>∅ Learners are keen and motivated. Teacher is very confident about them</p> <p>∅ Can help to learners to achieve important skills to survive - Entrepreneurship</p>
<p>22. <u>Any other comments or advice?</u></p> <p>Regarding the Conference. <b>If we have someone speak to us as colleagues and tell them the importance of ES.</b> Normally we have our meetings on Monday, tell them the importance of the garden ... <b>if they have more information they may become interested. Maybe we can also expand to the mainstream schools. They can come here to see and to motivate their interest.</b></p> <p>END : 15:33</p>		<p>∅ Communication is very important</p>	<p>∅ Share information and build capacity</p>

Name of School: **General Smuts High School**

Date: 27/02/09

**APPENDIX: B 3**

Address: C/o Boy Louw & Van Riebeeck Ave, Vereeniging, Gauteng.

Tel: 016 421 4130

Eco-Schools Co-ordinator: Mrs Gwen Bartie

Interview question: Focus Groups and Educators

	<b>Concepts</b>	<b>Themes / other</b>	<b>Notes</b>
<p>1. <u>Tell me about your experience with the Eco-Schools Programme?</u></p> <p><i>LOOKING AT THE PHOTOGRAPHS OF BEFORE AND AFTER</i></p> <p>I got involved in 2003 and how it happened I read an article in the newspaper about two teenagers that landed in prison and in the prison they got raped and got aids and my heart just bled and I thought why did these children land in prison. <i>Is it because they don't have food, or skills ... what is the reason they land in prison?</i> They go in for petty crimes and they come out with death sentence and their lives is ruined. So in my heart I felt I wanted to <b>empower people</b> because a hungry man is a angry man, a dangerous man and if we don't give them some skills they cannot help themselves. If I feed them today I will have to feed them tomorrow but if I can teach them how to fish they will be <b>self sufficient</b>, they will improve their self image and they will be able to help others. It's like a pebble in the pool it circles out and out and more and more people can be helped. And so I looked at the area where we are and it used to be a shooting range and now the law changed they are not allowed to use guns anymore so there was this land this <b>wasteland area</b> and then I decided to use this land. We drew up some ideas we went to the <b>governing body</b> <i>I drew up plans I stuck it up in the staff room any one saw it</i> we put out an <b>action plan</b> who will be <b>responsible</b> for what and made plans for an</p>	<ul style="list-style-type: none"> <li>∅ <b>empower people</b></li> <li>∅ <b>self sufficient</b></li> <li>∅ <b>wasteland area</b></li> <li>∅ <b>governing body</b></li> <li>∅ <b>action plan</b></li> <li>∅ <b>responsible</b></li> <li>∅ <b>agricultural garden</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Awareness created by an article.</li> <li>∅ Need to empower poor / disadvantaged communities</li> <li>∅ Used vacant land which used to be a shooting range on the school grounds</li> <li>∅ One concerned individual</li> <li>∅ Communication</li> <li>∅ Planning</li> <li>∅ Inclusive approach</li> </ul>	<ul style="list-style-type: none"> <li>∅ <i>Is it because they don't have food, or skills ... what is the reason they land in prison?</i></li> <li>∅ <i>I drew up plans I stuck it up in the staff room any one saw it</i></li> </ul>

<p>agricultural garden and the governing body gave us the green light to go ahead. And I entered a competition with a prima culture plan and it won the first prize for the best environmental plan and won R500 and with the R500 I put the first tap in for water. Then I also compiled a text book and set up a food garden and did a cookery book and I took the Gr 8 we went in the garden and we were literally planting from egg boxes and we used the textbook and I would take them for period everyday and our Environmental Club was started and then we can see how the OBE lesson is related and then we discovered we have very poor soil.... We bring in the curriculum, how do you analyze the soil how do you change the soil and we got the community involved there and we got a bulldozer and we started to clean and that year I won some money from Bontikiboot and from that money I put in a system to get water and if you don't have water it is very difficult to really get the things going. We used the curriculum and we started to get beautiful vegetables as you can see there ..... and we gave this needy learners and needy families to poor children and we also try to sell some of those vegetables and we had some posters made and with that money I bought seed again.</p> <p>Then in 2005 we started to .... Here we can see young scientist and we started to teach them about science. And the students started to win gold medals and they began to use that knowledge. Here we can see how the children are taught to how to search information and we had a committee and we had a good committee going and there in 2006 we see learners recording information. And then we didn't have a fence and we one of the learners on the Representative Council he collected money worth a R1000</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ competition</li> <li>∅ prima culture plan</li> <li>∅ text book</li> <li>∅ food garden</li> <li>∅ cookery book</li> <li>∅ planting</li> <li>∅ egg boxes</li> <li>∅ Environmental Club</li> <li>∅ Posters</li> <li>∅</li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Entered into competitions.</li> <li>Used prize money to get projects started</li> <li>∅ Sold vegetables to buy more seeds</li> <li>∅ Supported needy families and learners</li> <li>∅ Integrated with NCS</li> <li>∅ Developed a love for science and EE in learners</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ first tap in for water</li> <li>∅ OBE lesson is related</li> <li>∅ We bring in the curriculum, how do you analyze the soil how do you change the soil</li> <li>∅ put in a system to get water</li> <li>∅ we started to teach them about science</li> <li>∅ students started to win gold medals and they began to use that knowledge</li> <li>∅ Representative Council he collected money worth a R1000 and with this R1000 we built a little cement house and everything we built it is with prize money, donations and our garden</li> </ul>
---	---	---	--

and with this R1000 we built a little cement house and everything we built it is with prize money, donations and our garden.

Because we have **clay soil**, when it rains a lot your feet actually so deep (just below the knee) So we put some **cement slabs** on either side so if you go there now you can walk on the slabs and work on either side in the garden. Yesterday we couldn't do much **weeding** because we had a lot of rain. The weeding we have club that does that. In the beginning I didn't have anyone just me and the kids and now we have a full-time gentleman who looks after and he helps to keep it going because I can't do it because **there is exam time and I the parents on my back**. The **parents are involved**. We sent out **letters** and every class has a **theme**. We had a very interesting development last year we had people from the **community**... we had a co-op and we even registered the **co-op and they had agreement with the school that they would use the water and the ground and grow their own vegetables and all the money would go to them**. And that was very interesting concept we had with the community. The **Environmental Committee** does **work-shopping** for other schools and in the second year we were involved in prima-culture we were blessed to have a **fence** put up around the school. We have a very big **squatter area** and what was happening is that they were **stealing the tools** and now with the fence it is secure and we don't have that problem anymore.

We use **natural pesticides** and we use **natural mulching** to keep the bugs moving correctly. We also have a big **re-cycle project** for the **paper** and the **Welfare Committee use that money for food or to help those who do not have bus money and things like that**. We also use some of our products in home

**Concepts**

- ∅ **clay soil**
- ∅ **cement slabs**
- ∅ **weeding**
- ∅ **parents**
- ∅ **letters**
- ∅ **theme**
- ∅ **community**
- ∅ **co-op**
- ∅ **Environmental Committee**
- ∅ **work-shopping**
- ∅ **fence**
- ∅ **squatter area**
- ∅ **stealing the tools**
- ∅ **natural pesticides**
- ∅ **natural mulching**
- ∅ **re-cycle project**
- ∅ **paper**
- ∅ **herb garden**

**Themes / other**

- ∅ All stakeholders are involved
- ∅ Communication
- ∅ Empowerment
- ∅ Training
- ∅ Security
- ∅ Social responsibility

**Notes**

- ∅ **there is exam time and I the parents on my back.**
- ∅ **parents are involved**
- ∅ **co-op and they had agreement with the school that they would use the water and the ground and grow their own vegetables and all the money would go to them**
- ∅ **the Welfare Committee use that money for food or to help those who do not have bus money and things like that.**
- ∅ **use some of our products in home economics for cooking**

economics for cooking. We also have a herb garden and one of the children had a septic sore on his leg and we use the herbs and his sore was cured in no time. The parents were so pleased they came to me and said what can I buy you. You know natural things are best.

So in 2007 we build the pond and we also teach the children to rotate crops so you don't have to use pesticides and we introduce falafie, an indigenous plant.

This is the way it looked like in 2007 but you look at it now we got some ducklings ..they are so cute and some of the children have never touched a duck. When I pick the duck up I tell them to touch it and feel it... nothing to be afraid of. And the big thing that happened last year was our Peace Garden. . I don't think I have pictures but here are some pictures of the Peace Garden. And here again we used recycled stuff. The kids got involved and people from the nursery got involved and we got stuck into the project ... In a way I feel we have come a full circle.

We can give the children skills but we cannot leave the emotions out so we have deal with the heartache in life and we have to appreciate the link with nature and that we are part of nature.

And here some of the ladies are helping with the re-cycling.

On this side (of the picture poster) .... How did we go about it. We looked at our aim. Our aim is to put up this garden. This is how we did it. We drew up

<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
Ø pond	Ø Human touch	Ø we have deal
Ø rotate crops	Ø Empowerment	Ø with the
Ø indigenous plant	Ø Appreciation	Ø heartache in life
Ø Peace Garden	Ø Link with nature	Ø and we have to
Ø recycled stuff		Ø appreciate the
Ø skills		Ø link with nature
Ø emotions		Ø and that we are
Ø aim		Ø part of nature.
Ø plans		
Ø staff room		

<p>plans... we took photos which we put up in the staff room and then we looked at how we can make money from recycling ... and the lesson we did to teach the children marketing. Now that we have the pond we don't have to go and collect water. My next thing I would like to have is a weather station and look at the weather so that the geography people can look at the weather and the pressure and how did this happen and so we have real life hands-on situation. It's a real life lab. Life orientation ... you can go out there in the Peace garden and show the children vegetables and how to grow it ... so it is a multifaceted thing that really grew out of a simple idea of helping children to get skills so they don't land in prison. What you can do is give Hope and that's what I have been doing. Give Hope.</p> <p>It doesn't take too much of an effort you just have to take a different focus. When you are going to teach a lesson you just incorporate it into your lesson.</p> <p>If it wasn't for God I wouldn't be able to do this. The thing is that people sometimes don't have the same vision as you have and the work in the garden is 7 days a week and you have to get people to on the same side as you. We sell a lot of the vegetables to the staff and they can't wait for the fresh spinach, no pesticide used. Its just that the work is an on-going and that is the down side of it. I find a lot of the competition the schools that win are the primary schools. The work load here is so much more than the primary school. You got a 3 hour paper and you have a 100 three-hour papers to mark then you are very stressed for time. Time is a big issue and the work load is very heavy. This is critical but it is not impossible.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ marketing</li> <li>∅ weather station</li> <li>∅ geography</li> <li>∅ Life orientation</li> <li>∅ Multifaceted</li> <li>∅ Hope</li> <li>∅ competition</li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Active participation</li> <li>∅ Integrate NCS</li> <li>∅ Lobby and network</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ It's a real life lab</li> <li>∅ It doesn't take too much of an effort you just have to take a different focus.</li> <li>∅ When you are going to teach a lesson you just incorporate it into your lesson.</li> <li>∅ you have to get people to on the same side as you</li> <li>∅ Time is a big issue and the work load is very heavy. This is critical but it is not impossible</li> </ul>
---	---	---	---

	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p>Would a <b>co-ordinator</b> help to ease the work load and make the project sustainable if the person who <b>is passionate</b> about this project were to leave? (Like a Librarian)</p> <p>I am teaching <b>Life Sciences</b> and <b>natural Science</b>. It would help because the person could look at the <b>whole curriculum</b> and give them ideas and show how to integrate ... .. with life orientation <b>we can go and fix the country</b>. <b>Sometimes the teachers are so demoralized they don't want to go to school.</b></p> <p>CTA research ..... teachers and learners stressed out.</p> <p>We have an <b>Environmental Register</b>... each child has his own register and they sign what activity they are busy with and then they are given a <b>Merit Certificate</b>.</p>	<ul style="list-style-type: none"> <li>∅ <b>co-ordinator</b></li> <li>∅ <b>passionate</b></li> <li>∅ <b>Life Sciences</b></li> <li>∅ <b>natural Science</b></li> <li>∅ <b>Environmental Register</b></li> <li>∅ <b>Merit Certificate</b></li> <li>∅ <b>whole curriculum</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Need for more human resource</li> <li>∅ Focused project manager</li> </ul>	<ul style="list-style-type: none"> <li>∅ <b>can go and fix the country</b></li> <li>∅ <b>Sometimes the teachers are so demoralized they don't want to go to school.</b></li> </ul>

Name of School: **Greyville Primary School**

Date: 18/02/09

**APPENDIX: B 4**

Address: Corner Anemone and Gardenia Streets, Lenasia, Ext 2, Gauteng. Tel: 011 852 2343

Fax: 011 854 7027

Eco-Schools Co-ordinator: Mrs V Pillay

Interview questions: Focus Groups and Educators

1. Tell me about your experience with the Eco-Schools Programme?	Ø <b>Concepts</b>	<b>Themes / other</b>	<b>Notes</b>
<p><b>V Pillay:</b> In the latter part of 2007 we were invited by our <b>local Community Organization</b>, Art of Living. Other schools were invited but our school was the only one that responded. In 2008 we applied for the <b>Eco School package</b>. The first topic we did was <b>Water Month</b> how to <b>save water</b> ... All grades, our <b>entire school</b> went on an excursion to Delta Park ... <b>every grade</b> had a <b>project</b> that they had to complete and they were each given different criteria and it was judged by the Art of Living as well .... This project brought home to the <b>learners</b> the <b>importance of water</b>. There was <b>active participation</b> ...learning ...got <b>awareness</b> and <b>this had a great impact on our learners and this also brought home the issues we have about the use of water and cleanliness</b> around here and in the homes. We also had our <b>National Days</b> which we celebrated... <b>Aids awareness, the Heritage Day, Arbour Day, Human Rights Day</b> ... we informed our <b>parents</b> about them they were well aware about our projects and how we were going about it.</p>	<ul style="list-style-type: none"> <li>Ø <b>local Community</b></li> <li>Ø <b>Organization</b></li> <li>Ø <b>Eco School package</b></li> <li>Ø <b>Water Month</b></li> <li>Ø <b>save water</b></li> <li>Ø <b>entire school</b></li> <li>Ø <b>every grade</b></li> <li>Ø <b>project</b></li> <li>Ø <b>learners</b></li> <li>Ø <b>importance of water</b></li> <li>Ø <b>use of water</b></li> <li>Ø <b>National Days</b></li> <li>Ø <b>Aids awareness</b></li> <li>Ø <b>Heritage Day</b></li> <li>Ø <b>Arbour Day</b></li> <li>Ø <b>Human Rights Day</b></li> <li>Ø <b>Parents</b></li> <li>Ø <b>Saving Energy</b></li> <li>Ø <b>subject areas</b></li> <li>Ø <b>outcomes</b></li> <li>Ø <b>assessment standards</b></li> <li>Ø <b>planted</b></li> <li>Ø <b>litter</b></li> <li>Ø <b>bins</b></li> </ul>	<ul style="list-style-type: none"> <li>Ø <b>Involve role players</b></li> <li>Ø <b>Communicate</b></li> <li>Ø <b>Integrate with NCS</b></li> <li>Ø <b>Share</b></li> <li>Ø <b>School neighbourhood</b></li> <li>Ø <b>Creating awareness</b></li> <li>Ø <b>On-going</b></li> </ul>	<ul style="list-style-type: none"> <li>Ø <b>this had a great impact on our learners and this also brought home the issues we have about the use of water</b></li> <li>Ø <b>We look at outcomes and assessment standards and that's how we plan for the month</b></li> <li>Ø <b>We planted 62 trees and we had to give away others because we had no place. The surrounding areas of the school</b></li> </ul>
<p><b>S Seedat:</b> This year we are going to be doing a <b>project</b> on <b>Saving Energy</b>. Also once a term we attend a <b>Greening Meeting</b>. <b>Parents</b> are involved with this as well. We had all our grades and <b>subject areas</b> actively involved. <b>We look at outcomes and assessment standards and that's how we plan for the month</b>. In September we did the <b>Spring Week</b>. We started with the Foundation Phase and Grade 7's <b>we planted 62 trees</b> and we had to give away others because we had no place. <b>The surrounding areas of the school</b> were also used. We also have a program where they <b>pick up all the litter in the mornings</b> and they have <b>bins</b> where to put the litter. Even in our</p>			

<p>classroom we make them aware about the importance of trees and the environment. This is an on-going program nothing is done in isolation.</p> <p>1.1 <u>When did you register?</u> V Pillay: 2008</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ Aware</li> <li>∅ importance</li> <li>∅ trees</li> <li>∅ environment</li> <li>∅ on-going</li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Importance of environment</li> <li>∅ Inclusive and intergrated</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ aware about the importance of trees and the environment. This is an on-going program nothing is done in isolation.</li> </ul>
<p>2 <u>Have you heard about whole school development?</u></p> <p><b>S Seedat:</b> Yes, We went through the process. In fact our school was evaluated in Sept last year by WSE – (Whole School Evaluation) about whole school development focusing on all nine areas. Everyone is involved. We also had the community involved. We looked at the wetlands area ... it is called Oupa Fats. We also did the opening of Rose Park. We also involved in a number of developmental projects.... Greening projects and the conservation of energy....workshops done over the weekend... And these projects are done through the Art of Living</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ School</li> <li>∅ Evaluated</li> <li>∅ Whole School Evaluation</li> <li>∅ Wetlands</li> <li>∅ Developmental projects</li> <li>∅ Workshops</li> <li>∅ Weekend</li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Everyone is involved</li> <li>∅ Partnerhsips</li> <li>∅ NCS</li> <li>∅ Developmental projects</li> <li>∅ Training and development – workshops over weekends</li> <li>∅ Community development</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ (Whole School Evaluation) about whole school development focusing on all nine areas. Everyone is involved</li> <li>∅ these projects are done through the Art of Living</li> </ul>
<p>3 <u>How does the National Curriculum Statements encourage Environmental Education and sustainable development?</u></p> <p><b>V Pillay:</b> Mostly involve the Gr. 7s in the Wetlands project ... National Statement. So that's how the kids got involved in making an eco-system. Want to get the Foundation phase involved as well.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ Wetlands project</li> <li>∅ eco-system</li> <li>∅ Foundation phase</li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Getting learners involved</li> </ul>	<p><b>Notes</b></p>

<p>4 <u>How does your school manage its Eco-Schools Programme?</u></p> <p><b>V Pillay:</b> We have a <b>Committee</b> it was formed at the end of last year. We covered areas like Conservation of Energy as the <b>theme</b>. <b>Each and every person is involved in deciding on Themes</b>. When we start we do <b>phone and find out if there are resources available for our themes</b> .. that's how the <b>Water department</b> provided us with <b>resources</b> on water. Informed them about <b>resources</b> available from Scott ... <b>lesson plans</b> etc.</p> <p><i>Sept. Pledge by all learners to conserve energy and use it wisely.</i></p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>Committee</b></li> <li>∅ <b>Theme</b></li> <li>∅ <b>Water department</b></li> <li>∅ <b>Resources</b></li> <li>∅ <b>lesson plans</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Collective decision making process</li> <li>∅ Communicate</li> <li>∅ Research</li> <li>∅ Committing via pledge</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ <b>Each and every person is involved in deciding on Themes</b></li> <li>∅ <b>phone and find out if there are resources available for our themes</b></li> <li>∅ <i>Pledge by all learners to conserve energy and use it wisely.</i></li> <li>∅</li> </ul>
<p>5 <u>Tell me about the school audit?</u></p> <p><b>Z Akoojee:</b> When we did water we looked at <b>conserving water</b>. We looked at how we use our <b>Taps</b> and the <b>toilets</b>. With the <b>Foundation Phase</b>, instead of leaving the tap open, we have a <b>Jug for water</b>. That was our <b>audit</b> when we did our Water month. We haven't done yet for this year yet.</p> <p>5.1 <u>Who was involved?</u></p> <p><b>V Pillay:</b> Because it was so vast a <b>project</b> we <b>divided ourselves into groups</b>. One group did Curriculum one did activities we <b>planned and we drew up an ECO CODE</b>. By dividing ourselves into <b>groups</b> the <b>task</b> did not become too burdensome.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>conserving water</b></li> <li>∅ <b>Taps</b></li> <li>∅ <b>Toilets</b></li> <li>∅ <b>Foundation Phase</b></li> <li>∅ <b>Audit</b></li> <li>∅ <b>Project</b></li> <li>∅ <b>Groups</b></li> <li>∅ <b>Planned</b></li> <li>∅ <b>Task</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ group work</li> <li>∅ sharing responsibilities</li> <li>∅ tapping on experiences of members</li> <li>∅ Planning and managing</li> <li>∅ Communication</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ <b>divided ourselves into groups</b></li> <li>∅ <b>planned and we drew up an ECO CODE</b>.</li> </ul>

<p>6 <u>Is the Eco-School Programme sustainable and easy to manage? Explain your response</u></p> <p><b>V Pillay:</b> It is not easy but we manage... it does become <b>overwhelming</b>. We try to make it manage but if we had <b>proper resources</b> it would make it easier. Unfortunately we don't only get involved in Eco Schools, we are <b>also involved with sports and evaluation and also fund raising</b> ... we had two new classes which we wanted to make <b>Eco friendly</b> so we had to look at how to <b>raise funds</b> and <b>get the SGB on board</b>.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>Overwhelming</b></li> <li>∅ <b>proper resources</b></li> <li>∅ <b>Eco friendly</b></li> <li>∅ <b>raise funds</b></li> <li>∅ <b>SGB</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ View processes in isolation</li> <li>∅ Net working</li> <li>∅ New building project to be Eco-friendly</li> <li>∅ Managing despite challenges</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ <b>also involved with sports and evaluation and also fund raising</b></li> <li>∅ <b>get the SGB on board</b></li> </ul>
<p>7 <u>How did the support from your Coordinator help you with the implementation of the Eco-Schools Programme?</u></p> <p><b>V Pillay:</b> (Did not know there is a <b>Regional co-ordinator</b>) We work with Priya and she is part of Eco Schools. <b>She is linked with Art of Living they have helped us a lot with the Eco project. I think she was involved with WESSA</b> and so we didn't really look for Scott or anyone.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>Regional co-ordinator</b></li> <li>∅ <b>Art of Living</b></li> <li>∅ <b>WESSA</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Unaware of Eco-School's regional office</li> <li>∅ Uncertain about who runs the Eco-Schools project</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ <b>She is linked with Art of Living they have helped us a lot with the Eco project.</b></li> <li>∅ <b>I think she was involved with WESSA</b></li> </ul>
<p>8 <u>Does the Eco-Schools Programme add extra work on the educators and school management team?</u></p> <p><b>V Pillay:</b> Yes it does. Definitely. <b>Initially it was very tough</b>. We had to <b>adjust</b> our <b>work schedule</b> and <b>time-table</b>. There is a fair amount of <b>planning</b> required.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>Adjust</b></li> <li>∅ <b>work schedule</b></li> <li>∅ <b>time-table</b></li> <li>∅ <b>planning</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Does and extra work</li> <li>∅ Need to be integrated</li> <li>∅ Planning and teamwork</li> <li>∅</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ <b>Initially it was very tough</b></li> <li>∅ <b>planning</b> required</li> </ul>

<p>9 <u>How has the Eco-Schools Programme impacted on the attitude of the school and all the role players towards creating a sustained awareness of respecting the environment?</u></p> <p><b>V Pillay:</b> We ourselves have become so much aware not only us but SGB also and the Water Month was very effective. Something as simple as newspapers .... Collect and recycle newspapers. Attitudes have changed even though it is difficult because influences outside the school. Attitudes are ingrained so it is difficult.</p> <p><b>S Seedat:</b> It also depends on how much the local government is involved. Some areas there is no dumping because there is a fine but other areas there is a lot of dumping and nothing is done about it. We had a meeting with local government but its all talk and nothing happens. We can pick it up but our resources are also limited. We had so much positive help from the local Organizations and also from the ANC Councillor, Shaeda Kazi.</p> <p>We also have a an emerging project on Drug Awareness because we have a big problem in our community and 702 was here and we had formed subcommittees so no one is over-burdened.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ aware</li> <li>∅ Attitudes</li> <li>∅ Changed</li> <li>∅ difficult.</li> <li>∅ influences</li> <li>∅ outside the school</li> <li>∅ ingrained</li> <li>∅ local government</li> <li>∅ local</li> <li>∅ Organizations</li> <li>∅ Drug Awareness</li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ May have changed at school but cannot be measured outside of school.</li> <li>∅ Ingrained habits are difficult to change</li> <li>∅ Requires continuous effort</li> <li>∅ Collective effort</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ We ourselves have become so much aware not only us but SGB</li> <li>∅ Attitudes have changed even though it is difficult because influences outside the school.</li> <li>∅ Attitudes are ingrained so it is difficult.</li> <li>∅ its all talk and nothing happens</li> </ul>
<p>10 <u>Currently the participation of a school on the Eco-Schools Programme is voluntary. Would you like to see it incorporated into the formal education system? Why?</u></p> <p><b>S Seedat:</b> Definitely. Right now it is not part of the formal program it is part of conservation. We need the support of DoE. Yes, we can do the Water month but are all schools doing that. Tree planting and Arbour Day is important for us but are other schools doing it as well. Have to be curriculum based so that the entire</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ DoE.</li> <li>∅ OBE outcome</li> <li>∅ practical</li> <li>∅ solutions</li> <li>∅ justice</li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Collective responsibility</li> <li>∅ Teachers are unable to identify EE / ESD in NCS</li> <li>∅ DoE needs to train the system –</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ not part of the formal program it is part of conservation. need the support of DoE.</li> <li>∅ It must be part of</li> </ul>

<p>country becomes involved ... it's not just one person's problem, its all of us. It must be part of the curriculum because it is part of your OBE outcome. It must not only be part of the national Curriculum ... Parliament must also take it up because Global Warming and pollution affects all of us and they must come up with solutions. We need practical solutions. The Dept. is not doing justice to this program.</p>		<p>National, province and district in unpacking ESD in NCS</p>	<p>the curriculum because it is part of your OBE outcome          ∅ The Dept. is not doing justice to this program.</p>
<p>11 <u>Any other comments or advice?</u></p> <p><b>V Pillay:</b> Until we got involved in this program we were never aware of the problems. And that was an eye-opener for us. There was one school in Natal where learners were involved in exchanging light bulbs with Eskom. Last year we were too busy but this year we want to tackle the problem of exchanging bulbs. We went to a recycling workshop. For us recycling was a paper here a plastic there and some rubbish here. But there are so many levels of recycling and we want everyone in our community to become aware of it. These are the kinds of projects that must be funded by the Dept. and relevant stakeholders. We called others to launch a project "Lenasia go Green" but they said they were unavailable.</p> <p><b>S Seedat:</b> The reason why the schools are reluctant to get involved is because it just another layer of work. The Dept must look at its own policies instead of just burdening us.</p> <p>Dept. should also provide us with a database of resources and service providers who can help us because we do not have all the information needed. Who do we contact to change light bulbs and so forth. We must also get the private sector more involved. We are only one school in the corner ... we have to get all schools involved if we want to have an impact ... the Dept must be more involved</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ Recycling</li> <li>∅ everyone</li> <li>∅ community</li> <li>∅ projects</li> <li>∅ Dept</li> <li>∅ relevant</li> <li>∅ stakeholders</li> <li>∅ database of resources</li> <li>∅ service providers</li> <li>∅ private sector</li> <li>∅ all schools involved</li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Eco-Schools have not reached out directly, schools have found out through other NGOs</li> <li>∅ Effective training and capacity building needed by Eco-Schools and DoE</li> <li>∅ Trainers must be experts in Eco-Schools programme and NCS, must understand the context of the school</li> <li>∅ Develop partnerships</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ an eye-opener for us</li> <li>∅ we want everyone in our community to become aware of it</li> <li>∅ funded by the Dept. and relevant stakeholders</li> <li>∅ schools are reluctant to get involved is because it just another layer of work.</li> <li>∅ get the private sector more involved.</li> </ul>

<p>and it is only going to come from Dept. policies that support this. Right now teachers are so overburdened and we can add to their burden. Dept must provide the extra resources and it must provide the <b>training</b>. We did a workshop on OBE and people are fumbling... you have to have people who know what they are talking about. There is nothing coming from the Dept. and environmental issues are global. We are involved because somebody approached us. We didn't know about it and we were not aware these issues are real although it is in the media and everyone is talking about it but no one knows how critical it is. Here our school is like a bubble. We are so isolated. We are fortunate to have <b>Art of Living</b> to help us and we are fortunate that our SGB supported us.</p>	<p><b><u>Concepts</u></b></p> <ul style="list-style-type: none"> <li>∅ <b>training</b></li> <li>∅ <b>Art of Living</b></li> </ul>	<p><b><u>Themes / other</u></b></p>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ We did a workshop on OBE and people are fumbling... you have to have people who know what they are talking about.</li> <li>∅ We are so isolated</li> <li>∅ We are fortunate to have <b>Art of Living</b> to help us and we are fortunate that our SGB supported us.</li> </ul>
---	---	-------------------------------------	--

Name of School: **Lilydale Primary**

Date: 16/02/09

**APPENDIX: B 5**

Address: 1301 Sandawani Street, Soweto, Gauteng.

Tel/Fax: 011 984 1034

Eco-Schools Co-ordinator: Mchunu Bennie

Interview questions: Focus Groups and Educators

	<b><u>Concepts</u></b>	<b><u>Themes / other</u></b>	<b><u>Notes</u></b>
<p>1. <u>Tell me about your experience with the Eco-Schools Programme?</u></p> <p>Only middle school (gr 5-7). Primary School: Hlakaniphani Lower Primary. Gr 1-4) <b>Implementation of curriculum</b> a bit of a nightmare. There is another guy who works with me but he is not available today. Two years ago some <b>NGO</b> people came from Kliptown proposed we become a <b>member</b> of the <b>Eco School</b>. <b>At first it did not work. Teachers felt they had too much work.</b> Then last year in mid 2008 <b>we revived it again.</b> We <b>prepared lessons</b> and they came for <b>inspection</b> and the lady said we are doing quite well and we got our <b>bronze certificate</b>. I worked with my <b>Gr 7 class</b> in 2008. They are gone now. This year (2009) we have a new group.</p> <p>1.1 <u>When did you register?</u> 2008</p>	<ul style="list-style-type: none"> <li>∅ <b>Curriculum</b></li> <li>∅ <b>NGO</b></li> <li>∅ <b>Member</b></li> <li>∅ <b>Eco School</b></li> <li>∅ <b>prepared lessons</b></li> <li>∅ <b>inspection</b></li> <li>∅ <b>bronze certificate</b></li> <li>∅ <b>Gr 7 class</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Learnt about Eco-Schools through an NGO</li> <li>∅ Had to get teachers interested</li> <li>∅ Hard work</li> </ul>	<ul style="list-style-type: none"> <li>∅ <b>Implementation of curriculum</b> a bit of a nightmare</li> <li>∅ <b>At first it did not work. Teachers felt they had too much work.</b></li> <li>∅ <b>we revived it again</b></li> </ul>
<p>2 <u>Have you heard about whole school development?</u> Yes <u>Explain:</u></p> <p>We were asked to identify areas e.g. <b>Cleanliness</b>. We also engage with the <b>Water Conservation</b> – <b>teach responsible behaviour</b> with water use. Only with Gr. 7 learners. <b>We want to now also involve other grades.</b></p>	<ul style="list-style-type: none"> <li>∅ <b>Cleanliness</b></li> <li>∅ <b>Water Conservation</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Expand include other grades – Wholes school</li> </ul>	<ul style="list-style-type: none"> <li>∅ <b>teach responsible behaviour</b></li> <li>∅ <b>We want to now also involve other grades</b></li> </ul>

<p>3 <u>How does the National Curriculum Statements encourage Environmental Education and sustainable development?</u></p> <p>The mere fact that it is a <b>global</b> issue it is incorporated because of <b>international policies</b>.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>international policies</b></li> <li>∅ <b>global</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ must adhere it is law</li> </ul>	<p><b>Notes</b></p>
<p>4 <u>How does your school manage its Eco-Schools Programme?</u></p> <p>Teachers feel it's a lot of <b>extra work</b>. <b>One teacher</b> is involved with learners and <b>2 members from the NGO</b> and they come and check how we are doing</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>extra work</b></li> </ul>	<p><b>Themes / other</b></p>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ Teachers feel it's a lot of <b>extra work</b></li> <li>∅ One teacher</li> <li>∅ 2 members from the NGO</li> </ul>
<p>5 <u>Tell me about the school audit?</u></p> <p>We identified <b>untidiness</b> around the school and lack of power—we have only one person working on the garden we <b>lack human resources</b>. Used the <b>audit tool</b>, yes it was helpful. Hope this year we can have more close <b>support from the NGO because this help is not constant</b>.</p> <p>5.1 <u>Who was involved?</u></p> <p>Two guys from the <b>NGO</b>. <b>Learners were not involved</b>. There was no strict order (<b>No structure</b>)</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>Untidiness</b></li> <li>∅ <b>lack human resources</b></li> <li>∅ <b>audit tool</b></li> <li>∅ <b>NGO</b></li> </ul>	<p><b>Themes / other</b></p>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ <b>support from the NGO because this help is not constant</b></li> <li>∅ <b>No structure</b></li> <li>∅ <b>Learners were not involved</b></li> </ul>
<p>6 <u>Is the Eco-School Programme sustainable and easy to manage? Explain your response</u></p> <p><b>Not easy to manage depending on workload</b>. Quite hectic but we try. Only 2 people driving the process. To continue with the program – one person will be going on pension – we <b>need new blood to continue</b>, but we are trying.</p>	<p><b>Concepts</b></p>	<p><b>Themes / other</b></p>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ <b>Not easy to manage depending on workload</b></li> <li>∅ <b>need new blood to continue</b></li> </ul>

<p>7 <u>How did the support from your Coordinator help you with the implementation of the Eco-Schools Programme?</u> Not aware of the <b>co-ordinator</b></p>	<p><b><u>Concepts</u></b> ∅ <b>co-ordinator</b></p>	<p><b><u>Themes / other</u></b></p>	<p><b><u>Notes</u></b></p>
<p>8 <u>Does the Eco-Schools Programme add extra work on the educators and school management team?</u> Yes (Provided name of Scott Walker and his Phone number.)</p>	<p><b><u>Concepts</u></b></p>	<p><b><u>Themes / other</u></b></p>	<p><b><u>Notes</u></b></p>
<p>9 <u>How has the Eco-Schools Programme impacted on the attitude of the school and all the role players towards creating a sustained awareness of respecting the environment?</u> Yes there is a <b>slight change</b> in <b>behaviour</b>. They now <b>take care of school grounds</b>, though <b>we have to keep telling them</b>, <b>encourage</b> them. Yes we try to make them all aware that the <b>environment</b> belongs to us and we have to take care of it. We started a <b>garden</b> with the Gr.7 learners.</p>	<p><b><u>Concepts</u></b> ∅ <b>slight change</b> ∅ <b>behaviour</b> ∅ <b>encourage</b> ∅ <b>garden</b> ∅ <b>environment</b></p>	<p><b><u>Themes / other</u></b></p>	<p><b><u>Notes</u></b> ∅ <b>take care of school grounds</b> ∅ <b>we have to keep telling them</b></p>
<p>10 <u>Currently the participation of a school on the Eco-Schools Programme is voluntary. Would you like to see it incorporated into the formal education system? Why?</u> <b>Participation</b> is <b>voluntary</b>. If incorporated, it might <b>have an impact on teachers. Teachers would resist less.</b></p>	<p><b><u>Concepts</u></b> ∅ <b>Participation</b> ∅ <b>Voluntary</b></p>	<p><b><u>Themes / other</u></b></p>	<p><b><u>Notes</u></b> ∅ <b>have an impact on teachers. Teachers would resist less.</b></p>

	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p>11 <u>Any other comments or advice?</u></p> <p>I would request some people from the <b>regional office</b> to come and address us and speak to us and <b>encourage teachers</b> to be part of the Eco program (<b>capacity build</b>) Help teachers overcome the problem that this is an extra job. One needs prepared lessons to give to the others.</p> <p><i>(Informed them of Conference which they did not know.)</i></p> <p>Teachers need capacity building</p> <p>Teachers need help to interpret the curriculum and how Eco School program can be integrated.</p>	<ul style="list-style-type: none"> <li>∅ <b>regional office</b></li> <li>∅ <b>encourage teachers</b></li> <li>∅ <b>capacity build</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Training needed</li> <li>∅ Human resource</li> </ul>	<ul style="list-style-type: none"> <li>∅ Teachers need capacity building</li> <li>∅ Teachers need help to interpret the curriculum and how Eco School program can be integrated</li> </ul>
<p><b>Role of Eco schools in Whole School development and Sustainable development.</b></p> <p><b>MAPULE SHAYI:</b> One issue do not have support of all the teachers. Main concern is that we have a <b>lot of work</b> to do and the Department wants us to do even more work. <b>Eco school program is not coming from the Dept but if it came from the Dept teachers would be more willing to participate.</b></p> <p><b>PRINCIPAL: F. MOHAMED:</b> Organizations like Bird Life South Africa and WWF had a person by the name of Martin who came in here and did a few things with the school, had a <b>workshop</b> with us and things like that but the <b>follow-up is limited</b>. It is not on a continuous basis because they also have a <b>funding problem</b>. For example we ordered a kit from them, it is from Durban, we paid for it but it never arrived. Things like that shows there is no continuity of the program. And to get stakeholders – parents are reluctant to get</p>	<ul style="list-style-type: none"> <li>∅ <b>lot of work</b></li> <li>∅ <b>workshop</b></li> <li>∅ <b>follow-up is limited</b></li> <li>∅ <b>funding problem</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Battling to get relevant role players involved</li> </ul>	<ul style="list-style-type: none"> <li>∅ Eco school program is not coming from the Dept but if it came from the Dept teachers would be more willing to participate</li> </ul>

<p>involved in a program like this. The first thing that parents would ask me is how much are you going to pay me. It is not as a volunteer—you find very few may do so as a volunteer. This is a serious drawback. We don't have funds. We are a non-paying school so we don't have any funds. The Dept gives us a grant but that goes for textbooks and things like that. So we have a very small budget for things like Eco school programs and things like that. If the Dept made Eco School program part of the curriculum, then support would be available from the Dept and the District Office then it would be different. We use the garden to crops which we give to those learners in need. Now what the Dept is asking is that what we grow in the garden must be given to the Parents feeding scheme to feed the needy learners. We also got involved in a group called "Hope", now they call themselves "Olive Leaf" - - one of the persons involved in this organization is Chris Rock, I think he is one of the Directors of this organization and we are working with them and they invite other schools and even invite other countries to participate, but they are more involved in poetry, drama – supporting the arts.</p> <p><b>MAPULE:</b> I agree with the principal. Eco school program must become part of the Dept.</p> <p>Regional Office has a lot of resources which they could provide you so you do not have to re-invent the wheel and also reduce the work load for the teachers. Also provide Scott Walker's contact info.</p> <p><b>PRINCIPAL: F. MOHAMED:</b> I was not aware that there is a Regional Office where we could get guidance and I don't' even know who is in charge at the District level of the Dept.</p>	<p><b><u>Concepts</u></b></p>	<p><b><u>Themes / other</u></b></p>	<p><b><u>Notes</u></b></p>
--	-------------------------------	-------------------------------------	----------------------------

<p>You see the wetlands we have here. At one stage we got the learners to go out and clean the wetlands area and here too we got very limited support. We also went to the sanitation plant to see how the water is purified and visited the waste dump and the learners found people staying around the waste dump and they wanted to know why people are staying there, isn't there a home for them, it is such a filthy environment and why are they staying there and they noticed all the waste that spills into the streets and they want to know who picks that up. (Create awareness). We had a call from the Dept of Agriculture and we had a chat with them and showed them what we are doing and they agreed to support us with implements and things like that. And we called the SGB and we want the SGB to get more involved in this and they could have meetings with the parents and they can inform the parents to get more involved with the Eco program.... I will follow-up in contacting Scott at the Regional Office. Thank you for coming here. If we get the support needed I think we would do well.</p> <p><b>MAPULE:</b> No, I don't have anything more to add. I will be retiring end of the year.</p> <p><b>PRINCIPAL: F. MOHAMED:</b> If Canton Naidoo still at the Department, give him my regards. He was one of my students.</p> <p>When I came here the school had nothing, not even a telephone. I organized donations from the Muslim community and now we are fully equipped. The local community are very very pleased with what I have done for the school and the community.</p>	<p><u>Concepts</u></p>	<p><u>Themes / other</u></p>	<p><u>Notes</u></p>
--	------------------------	------------------------------	---------------------

Name of School: **Al Ghazali College**

Date: 19/02/09

APPENDIX: C 1

Address: 421 Van Leenhof Street, Erasmia, Tshwane, Gauteng. Tel: 012 370 1049 Fax: 012 370 1057

Eco-Schools Co-ordinator: Karen Brits and Farzana Ebrahim ( 1 = Ms Brits and 2 = Mrs Ebrahim)

Interview questions: Focus Groups and Educators

	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p><b>1. Tell me about your experience with the Eco-Schools Programme?</b></p> <p>1: Very interesting and exciting. We learned about new <b>plants, animals, insects</b> and <b>frogs</b>.</p> <p>2: <b>All our subjects</b>. E.g. (<b>Life Orientation, Natural Science</b>) are linked to this aspect (<b>environment, sustainability and Technology</b>)</p> <p><b>22.1 When did you register?</b></p> <p>1: 2005                      2: 2005</p>	<ul style="list-style-type: none"> <li>∅ <b>Plants</b></li> <li>∅ <b>Animals</b></li> <li>∅ <b>insects</b></li> <li>∅ <b>frogs</b></li> <li>∅ <b>Life Orientation</b></li> <li>∅ <b>Natural Science</b></li> <li>∅ <b>Environment</b></li> <li>∅ <b>Sustainability</b></li> <li>∅ <b>Technology</b></li> </ul>		<ul style="list-style-type: none"> <li>∅ <b>Natural environment</b></li> <li>∅ <b>Applicable to NCS</b></li> </ul>
<p><b>23. Have you heard about whole school development? (Yes/No) Explain:</b></p> <p>1: Yes. The school is not focusing on academic performance only; we are looking at environmental issues and started to <b>form many committees</b> to address these issues.</p> <p>2: Yes -- <b>Formation of committees</b> -- <b>Action</b> and <b>community development</b> and <b>education</b> (involving <b>learners – posters, questionnaires</b>)</p>	<ul style="list-style-type: none"> <li>∅ <b>Committees</b></li> <li>∅ <b>Action</b></li> <li>∅ <b>community development</b></li> <li>∅ <b>education</b></li> <li>∅ <b>learners</b></li> <li>∅ <b>posters</b></li> <li>∅ <b>questionnaires</b></li> </ul>		<ul style="list-style-type: none"> <li>∅ <b>Identify role players</b></li> <li>∅ <b>Active involvement</b></li> </ul>
<p><b>24. How does the National Curriculum Statements encourage Environmental Education and sustainable development?</b></p> <p>1: Each lesson focuses on issues such as <b>cleanliness, clean-up projects, water conservation</b> and we looked at the <b>socio-economic factors</b> that have an effect on the environment.</p> <p>2: <b>All subjects integrated</b> to make learners aware of <b>sustainability, global warming etc.</b></p>	<ul style="list-style-type: none"> <li>∅ <b>Cleanliness</b></li> <li>∅ <b>clean-up projects</b></li> <li>∅ <b>water</b></li> <li>∅ <b>conservation</b></li> <li>∅ <b>sustainability</b></li> <li>∅ <b>global warming</b></li> </ul>		<ul style="list-style-type: none"> <li>∅ <b>All subjects integrated</b></li> </ul>

<p><b>25. How does your school manage its Eco-Schools Programme?</b></p> <p>1: Excursions, wetlands projects, clean-up campaigns, tree planting etc.</p> <p>2: Mostly excursions e.g. to the wetlands, recycling projects, educating learners about recycling organic waste.</p>	<p><b>Concepts</b></p> <p>∅ Excursions ∅ Wetlands ∅ Projects ∅ clean-up ∅ campaigns ∅ tree planting ∅ recycling ∅ projects</p>	<p><b>Themes / other</b></p> <p>∅ Active Learning</p>	<p><b>Notes</b></p> <p>∅ Offsite activities</p>
<p><b>26. Tell me about the school audit?</b></p> <p>1: Portfolio was submitted</p> <p>2: Some details / a portfolio was submitted</p> <p><b>26.1 Who was involved?</b></p> <p>1: W. Carvello and the eco-club members</p> <p>2: All Eco-Club members and W. Carvello</p>	<p><b>Concepts</b></p> <p>∅ Portfolio</p>	<p><b>Themes / other</b></p>	<p><b>Notes</b></p> <p>∅ Eco-club members involved in audits</p>
<p><b>27. Is the Eco-School Programme sustainable and easy to manage? Explain your response</b></p> <p>1: Yes, each lesson lends itself to an environmental topic. Many excursions take place and learners and teachers are actively involved.</p> <p>2: Yes. Lessons are linked to environmental health and factors (each academic subject is integrated to this topic) so all teachers are actively involved.</p>	<p><b>Concepts</b></p>	<p><b>Themes / other</b></p>	<p><b>Notes</b></p> <p>∅ Integrated in all lessons ∅ Learners and teachers actively involved</p>
<p><b>28. How did the support from your Coordinator help you with the implementation of the Eco-Schools Programme?</b></p> <p>1: They guided and informed us on all the steps needed to implement it.</p> <p>2: Guidance. The experience gave us the know-how and therefore made it easier to implement the programme.</p>	<p><b>Concepts</b></p>	<p><b>Themes / other</b></p>	<p><b>Notes</b></p> <p>∅ Received support this helped with implementation</p>

<p><b>29. Does the Eco-Schools Programme add extra work on the educators and school management team? Yes/No? Explain.</b></p> <p>1: Yes. We had to go on excursion and implement lessons with environmental topics. It takes a lot of planning.</p> <p>2: Yes, to a small extent. However most of the work (lessons on environmental topics) are done on the excursion but requires much planning and use free non-school time.</p>	<p><b><u>Concepts</u></b></p>	<p><b><u>Themes / other</u></b></p>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ Affirmed that it entails extra work</li> <li>∅ Requires a lot of planning</li> <li>∅ Done after school hours</li> </ul>
<p><b>30. How has the Eco-Schools Programme impacted on the attitude of the school and all the role players towards creating a sustained awareness of respecting the environment?</b></p> <p>1: The school has an environmentally friendly attitude and the kids are positively involved.</p> <p>2: I believe that all learners have awareness of respecting the environment because of the curriculum. This programme helps us to link academics and class work to reality.</p>	<p><b><u>Concepts</u></b></p> <ul style="list-style-type: none"> <li>∅ friendly attitude</li> <li>∅ respecting</li> <li>∅ curriculum</li> </ul>	<p><b><u>Themes / other</u></b></p>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ kids are positively involved.</li> <li>∅ helps us to link academics and class work to reality.</li> </ul>
<p><b>31. Currently the participation of a school on the Eco-Schools Programme is voluntary. Would you like to see it incorporated into the formal education system? Why?</b></p> <p>1: Yes, it will make planning and teaching easier. We will know what is expected at all times.</p> <p>2: Yes. Links and provides experience to real life situations.</p>	<p><b><u>Concepts</u></b></p>	<p><b><u>Themes / other</u></b></p>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ Would like to see it as part of the formal education system</li> </ul>
<p><b>32. Any other comments or advice?</b></p> <p>1: More information for other participants, like glass recycling, wild life care of sick animals.</p> <p>2: We need more info/visits from various recyclers, animal care-givers, solar technology and making of projects / devices like hybrid car models etc.</p>	<p><b><u>Concepts</u></b></p>	<p><b><u>Themes / other</u></b></p>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ Need to network.</li> </ul>

Name of School: Ekukhanyisweni Primary School

Date: 19 February, 2009

APPENDIX: C 2

Address: 330 Phase 2, Alexandra Township, Johannesburg, Gauteng. Tel: 011 443-5183 Fax: 011 882-0473

Teacher: RESPONSE RECEIVED FROM THREE TEACHERS (T1, T2 and T3)

Interview questions: Focus Groups and Educators

	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p><b>33. <u>Tell me about your experience with the Eco-Schools Programme?</u></b></p> <p><b>T1:</b> It has been a success and the <b>co-ordinator</b> has been coming to our school very often and <b>projects</b> were made and the <b>evidence</b> is still there.</p> <p><b>T2:</b> Only started last year but I think is a good thing we have experience many good things from the Alex Eco-Schools Co-ordinator who was assisting us in my school</p> <p><b>T3:</b> It has been a success and the Co-ordinator has been coming to our school very often and projects were made and the evidence is still there.</p> <p><b>33.1 <u>When did you register?</u></b></p> <p><b>T1:</b> 2008  <b>T2:</b> 2008  <b>T3:</b> 2008</p>	<ul style="list-style-type: none"> <li>∅ <b>co-ordinator</b></li> <li>∅ <b>projects</b></li> <li>∅ <b>evidence</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Train teachers</li> <li>∅ Build human capacity</li> </ul>	<ul style="list-style-type: none"> <li>∅ Support from co-ordinator</li> <li>∅ Teachers need to become self-sufficient</li> </ul>
<p><b>34. <u>Have you heard about whole school development? (Yes/No) Explain</u></b></p> <p><b>T1:</b> Yes. The school as a whole with all the <b>stake holders</b> are developed.</p> <p><b>T2:</b> Yes. It deals with the need of our environment in our school the <b>strengths</b> and <b>weakness</b> what we mostly need for <b>development</b>.</p> <p><b>T3:</b> Yes. The school as a whole with all the stake holders are developed.</p>	<ul style="list-style-type: none"> <li>∅ <b>stake holders</b></li> <li>∅ <b>strengths</b></li> <li>∅ <b>weakness</b></li> <li>∅ <b>development</b></li> </ul>	<p><b>Themes / other</b></p>	<p><b>Notes</b></p>

<p><b>35. <u>How does the National Curriculum Statements encourage Environmental Education and sustainable development?</u></b></p> <p><b>T1:</b> When they come to school and help the learners with <b>environment projects</b>.</p> <p><b>T2:</b> It encourage Environmental Education in a sense that it is <b>integrated</b> in all the <b>learning areas</b> thus improving <b>Sustainability</b>.</p> <p><b>T3:</b> When they come to school and help the learners with environment projects.</p>	<p><b><u>Concepts</u></b></p> <ul style="list-style-type: none"> <li>∅ <b>environment projects</b></li> <li>∅ <b>integrated</b></li> <li>∅ <b>learning areas</b></li> <li>∅ <b>Sustainability</b></li> </ul>	<p><b><u>Themes / other</u></b></p>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ “They” refers to Eco-School coordinators.</li> <li>∅ Identifies EE in NCS</li> </ul>
<p><b>36. <u>How does your school manage its Eco-Schools Programme?</u></b></p> <p><b>T1:</b> By following any programme which is introduced by the Co-ordinator.</p> <p><b>T2:</b> By involving many educators as we can.</p> <p><b>T3:</b> By following any programme which is introduced by the Co-ordinator</p>	<p><b><u>Concepts</u></b></p>	<p><b><u>Themes / other</u></b></p> <ul style="list-style-type: none"> <li>∅ Currently teachers cannot work independently</li> </ul>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ Relies on mentoring and coaching</li> <li>∅ Only one teacher is actively involved</li> </ul>
<p><b>37. <u>Tell me about the school audit?</u></b></p> <p><b>T1:</b> So far I understand that the school audit is the monitoring of financial accounts by the manager of the school</p> <p><b>T2:</b> We have done it but some of the questions have not been answered.</p> <p><b>T3:</b> We have done it but some of the questions have not been answered</p> <p><b>37.1 <u>Who was involved?</u></b></p> <p><b>T1:</b> The Principal, the SGB and the treasurer of the school.</p> <p><b>T2:</b> All stakeholders</p> <p><b>T3:</b> All stakeholders</p>	<p><b><u>Concepts</u></b></p>	<p><b><u>Themes / other</u></b></p>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ Not familiar with school audit.</li> <li>∅ Generic definition and understanding of audit in the school SGB context.</li> </ul>

<p><b>38. <u>Is the Eco-School Programme sustainable and easy to manage? Explain your response</u></b></p> <p><b>T1:</b> It is <b>sustainable</b> but <b>not easy to manage</b> because of <b>many commitments the educators</b> are involved in but the <b>school ground staff is helping</b> the educators to manage the school gardens.</p> <p><b>T2:</b> It is easy but need most of our time.</p> <p><b>T3:</b> Very easy but needs more of our time.</p>	<p><b><u>Concepts</u></b></p> <p>∅ <b>sustainable</b></p>	<p><b><u>Themes / other</u></b></p> <p>∅ Need to train on management skills</p>	<p><b><u>Notes</u></b></p> <p>∅ <b>not easy to manage</b></p> <p>∅ <b>teacher's work load</b></p> <p>∅ <b>school ground staff is helping</b></p>
<p><b>39. <u>How did the support from your Coordinator help you with the implementation of the Eco-Schools Programme?</u></b></p> <p><b>T1:</b> He came several times to <b>assist</b> the school with <b>trees planting</b> and <b>garden</b>. He is the one who started the school garden.</p> <p><b>T2:</b> By having <b>meetings</b> with him encouraging, guiding us on certain issues.</p> <p><b>T3:</b> By having meetings with him <b>encouraging</b>, guiding us on matters related to the environment.</p>	<p><b><u>Concepts</u></b></p> <p>∅ <b>Assist</b></p> <p>∅ <b>trees planting</b></p> <p>∅ <b>garden</b></p> <p>∅ <b>meetings</b></p> <p>∅ <b>encouraging</b></p>	<p><b><u>Themes / other</u></b></p>	<p><b><u>Notes</u></b></p> <p>∅ <b>Require constant support</b></p>
<p><b>40. <u>Does the Eco-Schools Programme add extra work on the educators and school management team? Yes/No? Explain.</u></b></p> <p><b>T1:</b> Yes the educators are involved in many other programmes therefore that hinders the involvement.</p> <p><b>T2:</b> Yes as I have said in question 6 but it is important for us.</p> <p><b>T3:</b> Yes, but it is important to us and our learners to know about this.</p>	<p><b><u>Concepts</u></b></p>	<p><b><u>Themes / other</u></b></p>	<p><b><u>Notes</u></b></p> <p>∅ <b>Involved in many projects cannot focus on all</b></p>

	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p><b>41. <u>How has the Eco-Schools Programme impacted on the attitude of the school and all the role players towards creating a sustained awareness of respecting the environment?</u></b></p> <p><b>T1:</b> The school is now beautiful with <b>flowers</b>, the <b>garden</b> and the <b>trees</b> therefore the programme has impacted much on the <b>attitude of the school</b>.</p> <p><b>T2:</b> The <b>environmental managers</b> are taking care of the garden cutting the grass, looking after the flower garden. <b>Learners</b> making sure that the <b>school is free from littering</b>.</p> <p><b>T3:</b> The environmental managers are taking care of the garden cutting the grass, looking after the flower garden. Learners making sure that the school is free from littering.</p>	<p>∅ <b>Flowers</b></p> <p>∅ <b>Garden</b></p> <p>∅ <b>Trees</b></p> <p>∅ <b>environmental managers</b></p> <p>∅ <b>Learners</b></p>		<p>∅ <b>attitude of the school</b></p> <p>∅ <b>school is free from littering.</b></p>
<p><b>42. <u>Currently the participation of a school on the Eco-Schools Programme is voluntary. Would you like to see it incorporated into the formal education system? Why?</u></b></p> <p><b>T1:</b> Yes because it is not given enough recognition especially by the <b>SMT</b> because it is always questioning the activities.</p> <p><b>T2:</b> Yes because most of the Eco-Schools Programme are done only by those who are involved in it. The managers sometimes give us hard time when implementing the activities.</p> <p><b>T3:</b> Yes because most of the Eco-Schools Programme are done only by those who are involved in it. The managers sometimes give us hard time when implementing the activities.</p>	<p>∅ <b>SMT</b> (School Management Team)</p>		<p>∅ <b>Does not have support from the SMT.</b></p>

	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p><b>43. <u>Any other comments or advice?</u></b></p> <p><b>T1:</b> The school management team to be informed about all the projects and the programme officially so that it would be easier for the Co-ordinator to conduct his projects easier.</p> <p><b>T2:</b> Eco-School Co-ordinator must inform the Co-ordinator of the School or the Head of the School about environmental issues not discussing issues with individual who then do their own decisions without informing the Co-ordinator or the committee.</p> <p><b>T3:</b> The Programme workshops to be conducted from Top down so that all stakeholders should be on board on what is happening in the Eco-Schools Programme.</p>			<p>∅ Need for effective communication about Eco-Schools</p> <p>∅ Need to work as a team</p>

Name of School: **Unity Secondary School**

Date: 02/03/09

**APPENDIX: C 3**

Address: 1182 Corner Mathewson and Brits Street.

Tel: 011 424-1471

Fax: 011 424-1662

Teacher: 1. Mr. M. W. Mampuru 2. Mr. U. V. Tshikouhele 3. Ms. Jabulile Makeleni (Daveyton Enviro Youth Counsel) NODE Co-ordinator

(1 = Mr Mampuru 2 = Mr Tshikouhele 3 = Ms Makeleni)

Interview questions: Focus Groups and Educators

	<b>Concepts</b>	<b>Themes / other</b>	<b>Notes</b>
<p><b>44. Tell me about your experience with the Eco-Schools Programme?</b></p> <p>1: Learners and Educators are now able to look at our environment better than before. They <b>value papers</b>, they put them in <b>plastics bag</b> for <b>recycling</b> than <b>just throwing them</b>.</p> <p>2: To make my learners to be <b>aware about the environment in our school</b>. To make that our school is <b>neat</b> and <b>green</b>.</p> <p>3: I've experienced that <b>not all educators understand the process</b> so it makes it very difficult to involve the <b>whole school</b>. I'm working with a certain group of learners (<b>Eco Committee Learners</b>) and 3 <b>educators</b> only. The <b>principal</b> is very supportive.</p> <p><b>44.1 When did you register?</b></p> <p>1: 2006, 2007, 2008 and 2009 2: 2006, 2007, 2008, 2009 3: - - - -</p>	<ul style="list-style-type: none"> <li>∅ <b>value papers</b></li> <li>∅ <b>plastics bag</b></li> <li>∅ <b>recycling</b></li> <li>∅ <b>neat</b></li> <li>∅ <b>green</b></li> <li>∅ <b>whole school</b></li> <li>∅ <b>Learners</b></li> <li>∅ <b>Educators</b></li> <li>∅ <b>Principal</b></li> <li>∅ <b>Eco Committee</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Lack understanding of Eco-School Process</li> <li>∅ Difficult to involve teachers</li> </ul>	<ul style="list-style-type: none"> <li>∅ <b>just throwing them.</b></li> <li>∅ <b>aware about the environment in our school</b></li> <li>∅ <b>not all educators understand the process</b></li> <li>∅ <b>School registered for 4 years</b></li> </ul>
<p><b>45. Have you heard about whole school development? (Yes/No) Explain:</b></p> <p>1: Yes, during school holidays we use to hold <b>Bosberad</b> to look at how <b>SWOT Analysis</b>. We discuss strength, weakness, opportunity and Threats.</p> <p>2: Yes. 2007 I attended a Bosberaad whereby issues such as strengths, weakness have been addressed.</p> <p>3: Yes its part and parcel of the Eco Schools programme. The school has to develop Environmentally through the <b>curriculum</b> and action <b>taking to sustain Enviro-Education</b> and <b>taking action</b> as well.</p>	<ul style="list-style-type: none"> <li>∅ <b>Bosberad</b></li> <li>∅ <b>SWOT Analysis</b></li> <li>∅ <b>Curriculum</b></li> <li>∅ <b>taking action</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Sustaining the programme</li> <li>∅ School has to develop through the curriculum</li> </ul>	<ul style="list-style-type: none"> <li>∅ <b>taking to sustain Enviro-Education</b></li> </ul>

<p><b>46. How does the National Curriculum Statements encourage Environmental Education and sustainable development?</b></p> <p>1: It is there in their <b>curriculum</b>. People must understand that <b>recycling</b> and <b>reuse</b> is important. As the little <b>resources</b> need to be <b>sustain for the future generation</b>.</p> <p>2: Because <b>environment is very important</b> we need to take care of it, because it provides us with a lot of <b>resources</b>.</p> <p>3: By <b>having sections about Environment in every learning area</b>.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>Curriculum</b></li> <li>∅ <b>Recycling</b></li> <li>∅ <b>Reuse</b></li> <li>∅ <b>Resources</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Sustainable use of resources</li> <li>∅ Integration of EE in curriculum</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ <b>sustain for the future generation.</b></li> <li>∅ <b>environment is very important</b></li> <li>∅ <b>have sections about Environment in every learning area.</b></li> </ul>
<p><b>47. How does your school manage its Eco-Schools Programme?</b></p> <p>1: Learners and Educators are busy recycling plastic bottles and papers. And the <b>money is used to buy food for needy learners</b>.</p> <p>2: We make sure we work with neighbouring <b>community</b>.</p> <p>3: The management is not well since we have <b>minimum participation</b> so far but it can improve.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>Community</b>.</li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Poor management</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ <b>money is used to buy food for needy learners</b></li> <li>∅ <b>minimum participation</b></li> <li>∅ <b>Room for improvement</b></li> </ul>
<p><b>48. Tell me about the school audit?</b></p> <p>1: It was about selecting <b>themes</b>.</p> <p>2: It was about selecting themes.</p> <p>3: Not all the learners got involved when the school <b>audits</b> were conducted. Only <b>a few members of the Eco Club</b> audited using audits from the EcoSchool <b>portfolio guidelines</b>.</p> <p><b>48.1 Who was involved?</b></p> <p>1: Mr Tshikouhele and learners</p> <p>2: Educator and learners.</p> <p>3: Jbulile (Node Coordinator) Principal Mr. Makhubu (Technical supporter) Mr. Tshikouhele (Teacher Coordinator) Mr. Mampuru and Mr. Masikela (assistant teacher co-od) and a group of learners (Eco Club Members).</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>Themes</b></li> <li>∅ <b>Audits</b></li> <li>∅ <b>portfolio</b></li> <li>∅ <b>guidelines</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ School audit important process in Eco-School Programme</li> <li>∅ Lack of interest from rest of the school</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ <b>Learners, principal, coordinator and two educators involved in audit.</b></li> <li>∅ <b>Audit used to identify themes for the portfolio</b></li> </ul>

<p><b>49. <u>Is the Eco-School Programme sustainable and easy to manage? Explain your response</u></b></p> <p>1: Yes, teachers who had bakkies used to fetch <b>rubbles</b> for <b>recycling</b>.</p> <p>2: No, it is not easy to manage because as a teacher I find it very difficult to be actively involved due to my working load.</p> <p>3: The programme is sustainable but not easy to manage. Educators don't want "extra curricular" work so they haven't given the programme a chance. Some learners don't even know about some of the environmental activities because only the learners from the Eco Committee are involved (Eco Club) Very few understand that the programme is curriculum based.</p>	<p><b><u>Concepts</u></b></p> <ul style="list-style-type: none"> <li>∅ Rubbles</li> <li>∅ Recycling</li> </ul>	<p><b><u>Themes / other</u></b></p> <ul style="list-style-type: none"> <li>∅ No "buy in" from teachers and learners</li> </ul>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ Teaching work load</li> <li>∅ Programme sustainable but not easy to manage</li> <li>∅ Only Eco committee involved</li> </ul>
<p><b>50. <u>How did the support from your Coordinator help you with the implementation of the Eco-Schools Programme?</u></b></p> <p>1: She is doing everything actually as teachers are always committed.</p> <p>2: She is a wonderful lady, very helpful. We manage to plant some trees in our school yard. Manage to put some rubbish bins around our school.</p> <p>3: I have been assisting them with compiling their Eco Schools portfolio, learning supporting materials (when needed) typing and filing. Organising some environmental excursions.</p>	<p><b><u>Concepts</u></b></p>	<p><b><u>Themes / other</u></b></p>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ The external coordinator is doing everything. No support from staff</li> </ul>
<p><b>51. <u>Does the Eco-Schools Programme add extra work on the educators and school management team? Yes/No? Explain.</u></b></p> <p>1: Yes, but it is good learners now are appreciating that cleanliness (or) environment.</p> <p>2: Yes, because as an Educator I find it difficult because of my work load.</p> <p>3: No because it requires them to follow the curriculum and take actions, then file everything they did. I help with the filing and I collect all evidence with the help of Learner Eco Committee members (lesson plans, learners work etc.) because educators are complaining about the paper work. The learners do the audits so there's no extra work for the educators.</p>	<p><b><u>Concepts</u></b></p>	<p><b><u>Themes / other</u></b></p> <ul style="list-style-type: none"> <li>∅ Lack of interest</li> <li>∅ No planning skills</li> <li>∅ Reluctant to read</li> </ul>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ Teachers feel it adds extra work. Coordinator states that it is part of the curriculum hence not extra work.</li> <li>∅ Teachers don't read and plan</li> <li>∅ Learners who are part of the team appreciate cleanliness and their environment</li> </ul>

<p><b>52. <u>How has the Eco-Schools Programme impacted on the attitude of the school and all the role players towards creating a sustained awareness of respecting the environment?</u></b></p> <p>1: The <b>attitude</b> now is so <b>positive</b>, everybody now understand that the papers belong to the dustbin</p> <p>2: Everybody in our school knows about how is it to <b>keep our environment clean</b>.</p> <p>3: It is <b>very difficult to change the attitude</b> but we are trying very much and the learners within to Eco Committee.</p>	<p><b><u>Concepts</u></b></p> <ul style="list-style-type: none"> <li>∅ <b>Attitude</b></li> <li>∅ <b>Positive</b></li> </ul>	<p><b><u>Themes / other</u></b></p> <ul style="list-style-type: none"> <li>∅ Teachers' response does not agree with coordinator, working with Eco Committee</li> </ul>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ <b>keep our environment clean</b></li> <li>∅ <b>very difficult to change the attitude</b></li> </ul>
<p><b>53. <u>Currently the participation of a school on the Eco-Schools Programme is voluntary. Would you like to see it incorporated into the formal education system? Why?</u></b></p> <p>1: Yes, because it will decrease our work load as it will be regarded as a work.</p> <p>2: Yes, because it is <b>our responsibility as a nation to take care of our environment</b>.</p> <p>3: Yes because the programme is curriculum based and assists the schools to achieve the requirements of the RNCS to include environmental education in all the learning areas. This will also assist us the Co-ordinators to be well recognised in the schools because we are here to help improve environmental sustainability.</p>	<p><b><u>Concepts</u></b></p>	<p><b><u>Themes / other</u></b></p> <ul style="list-style-type: none"> <li>∅ Decrease work load...teachers are not aware that it is part of the curriculum...</li> </ul>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ <b>All of them would like it to be part of the formal education system</b></li> <li>∅ <b>EE is included in the Curriculum</b></li> <li>∅ <b>Give recognition to coordinators</b></li> <li>∅ <b>our responsibility as a nation to take care of our environment</b></li> </ul>
<p><b>54. <u>Any other comments or advice?</u></b></p> <p>1: <b>I think there must be someone from the non-governmental organisation to come and work with our learners as that is more good.</b></p> <p>2: - - - -</p> <p>3: It will be great if the D.O.E. will look at it properly and review if it is curriculum based and the Co-ordinators should be known by the D.O.E. to help them gain entry in schools because other schools refuse to let us in during school hours and the work must be done during those same hours. Co-ordinators of the programme should go and attend the curriculum trainings so that we also clearly understand everything that educators do.</p>	<p><b><u>Concepts</u></b></p>	<p><b><u>Themes / other</u></b></p>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ <b>More support from NGO's</b></li> <li>∅ <b>DoE must get involved</b></li> </ul>

**CONSOLIDATED ANALYSIS OF LEARNERS RESPONSES**

**APPENDIX: D 1**

<b>Themes emerging from questions</b>	<b>General Smuts High Gr 8 - 12</b>	<b>Anton van Wouw Gr 6</b>	<b>Filadelfia High LSEN Gr 11</b>	<b>Lilydale Primary Gr 6 &amp; 7</b>	<b>Greyville Primary Gr 6</b>	<b>Alexandra Gr 6 Ekukhanyisweni</b>	<b>Unity Secondary School Gr 11</b>	<b>Brecia Gr 6</b>	<b>Al Ghazali College Gr 9 &amp; 11</b>	<b>Total</b>
Number of learners	36	17	6	49	36	45	14	21	36	260
1. What do you like about the Eco-Schools Programme?	10	6			5	25				46
∅ Plant and produce food	7					6			1	14
∅ Feeding and caring for the poor	16	11	3	18	3					51
∅ Appreciate nature	12	6	2		6	5	4			35
∅ Become more responsible	8	8			4	6	6	14	3	49
∅ Improve school environment	7									7
∅ Use resources sustainably	14		4							18
∅ Empower the youth	19		2				1			22
∅ Broadens the youth's understanding of the environment	4							5	12	21
∅ Meeting interesting and new people	6						2			8
∅ Making friends	8	10	4		9	7	4			42
∅ Create a clean and healthy school environment		1					8	2	5	16
∅ School is making a small difference. If everybody gets involved our world can be a much better place		5							2	7
∅ Makes me proud of my school when people pay		9		3						12
		1								1

compliments			3				2		4	9
∅ Teaches us about recycling and how to earn money				4			6		9	4 15
∅ It is "Cool" and fun										
∅ We do drama and dancing										
∅ Teaches the youth about the environment										
2. What don't you like about the Eco-Schools Programme?										
∅ The traffic jam when people come to drop off recycling things and the mess before the things are collected		2								2
∅ Resources and equipment are not delivered on time			1						1 2	1 2
∅ Not everyone is part of the club										
∅ Many of the activities are done after school / weekends										
3. Are you part of the Eco-Schools working group/club? Yes 141 / No 136?	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y N
	35 / 1	15/ 2	6	18/ 31	13/26	25/20	14	4 /17	11/25	
3.1 How are you involved?										
∅ Taking care of the garden and wetlands	28	5	5		1	8				47
∅ Cleaning the school grounds	5		2		3	6	6		4	26
∅ Feeding programme	3			1		15				19
∅ Promoting the club	2		3			4	5			14
∅ Part of the management team	2		3				2			7
∅ Training and teaching other learners	4		2				1			7
∅ Involved in the recycling programme		17	1					2		20

∅ Involved in the Art & Drama programme				12						12
∅ Being part of the group-working as a team						11	9		8	28
4. Do you know what is a school audit? Yes/No Yes = 37 No = 204	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y	Y N	
	17	17	6	49	36	45	1 13	N	7 / 29	
4.1 How was the audit conducted at your school?	19							6		25
∅ Conducted by the management team	10							15	4	19
∅ Completed a questionnaire	2		6						3	13
∅ Conducted on a monthly basis							1	6	2	9
∅ Conducted interviews with learners			6							6
4.2 What did you learn from the audit	1									1
∅ Use of time	2								2	2
∅ More focus should be given to the environment	1									
∅ Need more resources	1							2	2	4
∅ The importance of team work										
5 Are environmental issues included in your lessons? Yes/No? Yes = 200 No= 12 Give an example.	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y	Y N	
	35	17	6	49	29 7	Learners were not able to answer this question	11/1	N	20/	33 / 3
∅ Planting, mulching, global warming – Natural Sciences	10 7	17	1		22			1	19	70
∅ Life Sciences – eco-systems, plants, soil etc		10	1		1		7	3	13	17
∅ Life Orientation about pollution and HIV/Aids			1	7						8
∅ Environmental issues - wetlands				20	10			6		36
∅ About littering				12						12
∅ Water			2		10					12

∅ Special Days as per Enviro-Calendar			1							1
∅ Engineering graphic and design					1					1
∅ Economic ad Management Sciences							3			3
∅ Geography							3			3
∅ Travel and Tourism									5	5
∅ Business Studies									1	1
∅ History										
6 What is a portfolio?										
∅ A collection of work done / evidence	23	14	6	Don't know anything about portfolios	33	20	13	21	36	166
∅ It is a file		10								10
6.1 Did you help with compiling the Eco-Schools portfolio? Yes/No? Yes = 62 No= 71	Y N	Y N	Y N		Y N	Y N	Y N	Y	Y N	
6.2 How did you collect the evidence for the portfolio?	9	1 16	6		36	Learners were not able to answer this question	12/ 2	N	1 / 35	
∅ Taking photos, research and collection of information	24	1	4				9	/18	1	27
∅ By having meetings	3		2				4			15
∅ Learners work used for the portfolio from their portfolios									3	9
7. Did you achieve the green flag? Yes/No?	No	Yes	Yes	No	No	No	No	No	Yes	
∅ Received the Bronze Certificate	X									
∅ Received the Green Flag for 5 years and International Green Flag in 2008		X	1 <sup>st</sup> flag						1 <sup>st</sup> flag	
How do you feel about it?										
∅ Very proud and happy.		17	6						25	48



∅ All schools should be involved in the programme					about bullying	3		1	4
∅ It should be compulsory for all schools			1						1
∅ Schools should network with each other	11					3			14
∅ It should be advertised widely						2		1	3
∅ It should have its own youth programmes on local radio channels/ TV			6					5	11
∅ More camps must be organised	3		1			2			6
∅ All schools should do recycling	8		2						10
∅ Youth should be trained to train youth						2			2

APPENDIX: E 1

Nkosi Molala      Date: 27/02/09      Time: 8:30      Interview

Dept. of Education, District Tshwane South. GET Social Science Facilitator and EE Co-ordinator.

	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p><b><u>Question 1:</u></b>  <i>Waheeda: Are you aware of the Eco-Schools Programme? Yes/No? Explain.</i></p> <p><b>Nkosi:</b>            Yes, we are aware of <b>Eco Schools Programme.</b>            We have some schools that have been <b>participating for the last 3-5 years.</b> <b>Christa Van Schalkwyk</b>, the <b>co-ordinator</b> for this project is the one directly involved. She got me into the programme and informed me about it and told me that they have done well. They have their <b>Green Flag.</b> It is <b>3-5 years</b> now. It is going to be successful if they can keep up to the <b>Environmental greening campaign.</b></p>	<ul style="list-style-type: none"> <li>∅ Eco schools</li> <li>∅ Co-ordinators</li> <li>∅ Green Flag</li> <li>∅ Environmental greening campaign.</li> <li>∅ Participate 3-5 years</li> </ul>		<ul style="list-style-type: none"> <li>∅ Christa facilitates EE at the EE centre in Mamelodi. Responsible for implementing ESP in Mamelodi and Pretoria</li> </ul>
<p><b><u>Question 2:</u></b>  <i>Waheeda: The Department of Education established the National Environmental Project for General Education and Training (NEEP-GET) in 2000. The aim of the project was to strengthen environmental learning in the South African curriculum. The project was funded by Danida, the Department of Education and partner groups.            A consortium of South African Higher Education Institutions participating in this</i></p>			

	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p>project were The University of South Africa (UNISA), Rhodes University, Stellenbosh University, University of Kwa-Zulu Natal (UKZN) and Venda University.</p> <p>The report conducted in 2004 which was circulated to you cited many challenges in terms of the 7 outputs of the project. Please discuss the progress made to date with regards to these challenges and the recommendations given in the report.</p> <p><b><u>Nkosi:</u></b></p> <p>I was aware about NEEP. I got to know about it around 2000. I think the programme works for integration of Environmental Education across all learning areas. In integrating it across all learning areas it (NEEP program) was successful. Even in Natural Science and Technology there are Learning Outcomes and Assessment standards for EE.</p> <p>EE is mostly addressed in Natural Sciences and Social Science areas. EE is most suited to these learning areas. Let me take you back to a learning area of Mathematics. If they do a subject in Geography about the environment, they have to get the data, analyse the data and then graph the information in a bar graph. They will somehow have to work with numbers. This is where the integration of Mathematics comes in.</p>	<ul style="list-style-type: none"> <li>∅ NEEP</li> <li>∅ Integration of EE</li> <li>∅ Learning Areas</li> <li>∅ Successful</li> <li>∅ Assessment standards</li> <li>∅ Data</li> <li>∅ Analyse the data</li> <li>∅ Graph</li> <li>∅ integration</li> </ul>	<ul style="list-style-type: none"> <li>∅ NEEP successful in integrating EE across all LA</li> <li>∅ EE mostly addressed in NS &amp; SS</li> <li>∅ Year 2000</li> </ul>	<ul style="list-style-type: none"> <li>∅ Seems unsure of integration in all LA's</li> <li>∅ Does not see EE as Sustainability Ed. States that EE is only suitable for certain LA's</li> <li>∅ Example of integration – Geog &amp; Maths?.</li> <li>∅ "They" refers to the learners.</li> </ul>

	<b>Concepts</b>	<b>Theme / other</b>	<b>Notes</b>
<p>When they do <b>planning</b>, we make them aware to <b>incorporate</b> it. They must look at the natural resources. With the <b>topic</b> of <b>water</b> we want them to look at it in terms of <b>conservation</b>. So it has to do with <b>planning</b> and when they do the <b>planning</b> they must be aware of all these of all the interesting things (about <b>water</b>). This month we took them to a <b>wetland</b> from February 2 to 6. The whole week was <b>wetlands</b> week. We took only the teachers for a tour guide hoping that when they go back they can do that with their current learners. It's a <b>work in progress</b>. We are still waiting for the <b>brochures</b> and <b>information</b> material which they have to supply to teachers.</p> <p>We do take them out regularly when we have <b>environmental day or week</b>. And they also are impressed because they see how it <b>is integrating</b> so easily with Natural Science in a hands-on way. If we can expose all of them to Natural science then it will make them more aware of EE.</p>	<ul style="list-style-type: none"> <li>∅ <b>Planning</b></li> <li>∅ <b>Incorporate</b></li> <li>∅ <b>Topics</b></li> <li>∅ <b>Water</b></li> <li>∅ <b>Conservation</b></li> <li>∅ <b>Wetlands</b></li> <li>∅ <b>Special dates</b></li> <li>∅ <b>Information</b></li> <li>∅ <b>Work in Progress</b></li> <li>∅ <b>Integrate</b></li> </ul>	<p>∅ 2-6 Feb</p>	<ul style="list-style-type: none"> <li>∅ In this instance "they" refers to the teachers</li> <li>∅ Training and development of teachers – taking them on excursions/ tours workshops</li> <li>∅ Excursion sites to supply teacher's with brochures &amp; info.</li> <li>∅ Training linked to special dates on EE calendar.</li> <li>∅ Again focus is on NS</li> <li>∅ Displays limited understanding on the scope of EE &amp; integration of EE with other LA's</li> </ul>
<p><b>Question 3:</b></p> <p><i>Waheeda: One of the aims of this research is to find ways to incorporate the Eco-Schools Programme into the formal Education System so that all schools move towards whole school development through sustainability education.</i></p> <p><i>Do you think the Department of Education would work towards adopting such a policy? Yes/No? Discuss.</i></p>			

<b>Nkosi:</b>	<b>Concepts</b>	<b>Theme / other</b>	<b>Notes</b>
<p>Right now it is voluntary. It would help if EE becomes part of the curriculum provided that it is not seen as an add-on because right now that is the perception out there. There must be an advocacy campaign to convince them that it is not an add-on programme but it is part and parcel of the curriculum and show them the benefit of being part of an Eco School. If it presented from that angle they will buy into it but right now it is not seen as part of the curriculum and they don't see the link or the benefit of it.</p>	<ul style="list-style-type: none"> <li>∅ Advocacy campaign</li> <li>∅ perception</li> <li>∅ Curriculum</li> </ul>	<ul style="list-style-type: none"> <li>∅ ESP is Voluntary</li> <li>∅ Perception of DoE and teachers that ESP is an add-on</li> <li>∅ Link to curriculum.</li> </ul>	<ul style="list-style-type: none"> <li>∅ EE become part of curriculum? It is integrated in the NCS. Nkosi is referring to ESP.</li> <li>∅ The Doe must / needs to be Convinced.</li> <li>∅ DoE must be made aware of the benefits of ESP and how it links to the curriculum</li> </ul>
<p><b>OTHER:</b></p> <p><i>Waheeda: Would you like to share any other experiences?</i></p> <p><b>Nkosi:</b></p> <p>From my experience we are operating in silos (isolation). There is no co-ordination. Lot of things are included in the curriculum but when they bring their project they do not consult with the people involved in the curriculum. So the schools view this as separate from the curriculum. It must be co-ordinated properly and a consultation of all stakeholders is involved and we have to support them and we tell teachers how it is going to help them and improve their delivery in the classroom if they are involved in the programme.</p>	<ul style="list-style-type: none"> <li>∅ Silo mentality</li> <li>∅ Consultation</li> <li>∅ Co-ordination</li> <li>∅ Stakeholders</li> <li>∅ Classroom delivery</li> <li>∅ Grassroots level</li> <li>∅ Curriculum</li> </ul>	<ul style="list-style-type: none"> <li>∅ Training and development.</li> <li>∅ Implementation requires good support structures</li> <li>∅ Delivery in the Classroom</li> <li>∅ Involve teachers in the programme</li> </ul>	<ul style="list-style-type: none"> <li>∅ "They" refers to ESP facilitators. Facilitators do not consult district officials who are responsible for Curriculum. NGO's work directly with schools therefore schools / teachers view ESP as an addition to the curriculum. Hence their reluctance to get involved.</li> <li>∅ Proper co-ordination and consultation needed.</li> </ul>

<p>So the teachers who come in, they are not <b>involved</b> in the program. <b>We are the drivers of the program, we have to interact with the schools, we have seen it, and we have done it. We know the pitfalls of the program and how we can improve it. As I pointed out, there must be co-ordination and consultation with all stake-holders involved so they can benefit from it. We have to go to the grassroots level and work with them on a daily basis if we really want to get their support.</b></p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ Consultation</li> <li>∅ Involvement</li> <li>∅ Interact</li> <li>∅ Pitfalls</li> <li>∅ Co-ordination</li> <li>∅ Daily basis</li> <li>∅ Support</li> </ul>	<p><b>Theme / other</b></p> <ul style="list-style-type: none"> <li>∅ Collective responsibility</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ DoE: District office is the driver (implementer) of EE in the schools.</li> <li>∅ DoE works at grassroots level</li> <li>∅ Aware of challenges (pitfalls) of the programme</li> <li>∅ “They” refers to the teachers</li> <li>∅ DoE can help improve ESP</li> <li>∅ Must include all stakeholders</li> </ul>
---	---	---	--

Narrator: Ms Alison Jennings

Name of School: Brescia House

Date: 19/02/09

APPENDIX: F 1

Email: [ajennings@Brescia.co.za](mailto:ajennings@Brescia.co.za)

Tel: 011 706 7414

	<b>Concepts</b>	<b>Themes / other</b>	<b>Notes</b>
<p>Eco-schools was only introduced at Brescia House at the beginning of 2008. A club was formed, called Earthkeepers, and this small group of children and myself initiated and ran most of the projects. The group of children also changed from term to term. Only grade 4 to grade 6 girls could participate in the club. The rest of the school joined the initiatives started by this group. Brescia House School still has a long way to go before it can claim to be fully environmentally aware and make a noticeable difference in the greater environment.</p>	<ul style="list-style-type: none"> <li>∅ Club</li> <li>∅ Projects</li> <li>∅ grade 4 to grade 6</li> </ul>	<ul style="list-style-type: none"> <li>∅ Members from Intermediate Phase</li> <li>∅ Private school very well resourced</li> </ul>	<ul style="list-style-type: none"> <li>∅ Club is called "Earthkeepers"</li> <li>∅ The rest of the school joined the initiatives started by this group</li> </ul>
<p>We learnt a lot from the first year and this year the teachers have agreed to take on and run existing projects as well as manage new projects.</p>	<ul style="list-style-type: none"> <li>∅ teachers</li> <li>∅ manage</li> <li>∅ projects</li> </ul>	<ul style="list-style-type: none"> <li>∅ Team work and good management skills.</li> </ul>	<ul style="list-style-type: none"> <li>∅ still has a long way to go before it can claim to be fully environmentally aware and make a noticeable difference</li> </ul>
<p>Our projects: Blue Bag Recycling Project</p> <ul style="list-style-type: none"> <li>Raising and releasing two spotted eagle owls onto the school grounds</li> <li>Paper bins for all classes</li> <li>Celebrating Earth Hour 2008</li> <li>Electricity Consumption Awareness campaign</li> </ul>	<ul style="list-style-type: none"> <li>∅ school grounds</li> <li>∅ eagle owls</li> <li>∅ beautiful</li> <li>∅ well maintained</li> </ul>	<ul style="list-style-type: none"> <li>∅ Effective communication</li> </ul>	<ul style="list-style-type: none"> <li>∅ teachers are knowledgeable on environmental issues able to complete the curriculum component of Eco-Schools very easily.</li> </ul>
<p>Our children are very privileged to learn on school grounds that are beautiful and very well maintained. Our teachers are also very knowledgeable on environmental issues and we were able to complete the curriculum</p>			<ul style="list-style-type: none"> <li>∅</li> </ul>

<p>component of Eco-Schools very easily.</p> <p>Eco-schools ensures that change does take place as they require evidence on all projects run at the school. I have always carried the Environmental component at my previous schools and this programme has really challenged me to implement real change, not just knowledge sharing.</p> <p>Our girls come from wealthy homes where sustainable living isn't practiced and our challenge is to teach the children to teach their parents so the children have a planet for the future.</p> <p>Eco-schools should be adopted in small stages as it can be very overwhelming in addition to classroom responsibilities. It would be fantastic to see more schools join the programme successfully as we would then have a greater chance of protecting our environment. Twinning of schools could be an option but then it must be an equal sharing and not a give and take relationship. We all have something of value to contribute. WESSA offers fantastic support for schools starting out.</p>	<p><b><u>Concepts</u></b></p> <ul style="list-style-type: none"> <li>∅ teach children to teach their parents</li> <li>∅ planet for the future</li> <li>∅ Twinning of schools</li> </ul>	<p><b><u>Themes / other</u></b></p> <ul style="list-style-type: none"> <li>∅ Children come from wealthy homes where sustainable living is not practiced</li> <li>∅ Take into account context of learners standard of living? Is this really factor – debatable.</li> </ul>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ Eco-schools ensures that change does take place – portfolio of evidence</li> <li>∅ Implement real change, not just knowledge sharing</li> <li>∅ can be very overwhelming in addition to classroom responsibilities</li> <li>∅ WESSA offers fantastic support for schools starting out.</li> </ul>
--	---	--	---

Narrator: Ms Christa Van Schalkwyk

Name of Organisation: Mamelodi Environmental Centre

APPENDIX: F 2

Email:

Tel: 012 801 3197

Cell: 072 378 1669

Date: 03/03/09

Experiences with Eco Schools Project.	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p>As an environmental centre we have also joined the Eco Schools programme. We started at our centre with a waste and water audit and developed a policy regarding our water, waste and energy use. The policy is very useful to us as it provides us with measures to control and review every year. After the review we can make adjustments. It also helped a lot in terms of building up our resources for the centre. What do we have, what do we still need. It also helped with our community involvement. For instance we started a clean up campaign during National Clean up Week whereby we do a river basin study and after that a clean up. We also got involved in the community with a waste project.</p>	<ul style="list-style-type: none"> <li>∅ waste and</li> <li>∅ water audit</li> <li>∅ policy</li> <li>∅ energy</li> <li>∅ measures to</li> <li>∅ control</li> <li>∅ community</li> <li>∅ involvement</li> <li>∅ clean up</li> <li>∅ campaign</li> <li>∅ National Clean</li> <li>∅ up Week</li> <li>∅ river basin</li> <li>∅ study</li> </ul>	<ul style="list-style-type: none"> <li>∅ Poor planning</li> <li>∅ No team work</li> <li>∅ Driven by one teacher</li> </ul>	<ul style="list-style-type: none"> <li>∅ did not manage to keep the flag. The work they handed in this year did not qualify.</li> <li>∅ process was driven by on passionate teacher who was not supported enough by other teachers</li> </ul>
<p>We also involved three schools in Mamelodi to become Eco Schools already in 2006. Already during the first year the first school fell off. The next year we managed to get one school obtain their Green Flag. The other missed it just by a little bit. The school that obtained the Green Flag did not manage to keep the flag. The work they handed in this year did not qualify. The other school also tried again this year but failed. We don't know what the reason could be. We think it is lack of coordination within the school. Both times the process was driven by on passionate teacher who was not supported enough by other teachers. Another factor could be a lack of planning. Although we came at the beginning of the year with a framework to</p>	<ul style="list-style-type: none"> <li>∅ Green Flag</li> <li>∅ Planning</li> <li>∅ framework</li> </ul>		

<p>plan their work, it did not really happen. Teachers planned but did not stick to their plan and did not manage to get more teachers on board. Teachers seem to think that Eco schools is extra work and do not see it as part of their curriculum.</p> <p>Another reason fro the failure could be that we did not really support them enough from our side, but one would think that if you obtained a green flag, you would know what needs to be done.</p> <p>We find that the two schools in town which we are also involved with, hardly need any support. Teachers have managed to integrate the eco schools framework within their learning programme and by the beginning of the year, eco schools just basically roll out with the rest of the school programme.</p> <p>We also find that the way of reporting is a bit academic. It could be much more simplified if schools understand how to monitor and control their policies. Otherwise it is like you have to start from scratch every year, starting off with an audit at the beginning of the year. Where as in the new year it would be better if you just reviewed your policies and management strategies, than writing new things every year. It is a complete waste of time and very inefficient. I think another factor with these schools is the way the reporting works, far too extensive and complicated.</p> <p>With regards to Neep, I used to be the Neep coordinator for the district. It is sad the the whole programme basically ended as soon as their was no more funcint</p>	<p><b>Concepts</b></p> <p>∅ extra work</p> <p>∅ curriculum</p> <p>∅ support</p> <p>∅ green flag</p> <p>∅ reporting</p> <p>∅ Neep</p> <p>∅ Neep coordinator for the district</p>	<p><b>Themes / other</b></p> <p>∅ Simplify process of reporting and review policies yearly instead of drafting new ones each year</p>	<p><b>Notes</b></p> <p>∅ Teachers seem to think that Eco schools is extra work and do not see it as part of their curriculum.</p> <p>∅ we did not really support them enough from our side</p> <p>∅ Neep programme ended after its mandate had expired</p>
---	---	---	--

	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p><b><u>1.Involvement</u></b></p>			
<p>My involvement in the Eco Club was <b>Financial Administrator and Co-ordinator.</b></p>	<p>∅ <b>Financial Administrator</b></p> <p>∅ <b>Co-ordinator</b></p>	<p>∅ Focus on administrative role and management responsibilities</p>	<p>∅ <b>Eco Club member</b></p> <p>∅ <b>Meeting procedures</b></p>
<p><b><u>2.Role of play in committee</u></b></p>			
<p>I was responsible for the <b>collection of fees</b> from the <b>affiliated learners</b> and the administration thereof. I assisted in co-ordinating of all the activities as well as <b>fund raising</b> for the club.</p>	<p>∅ <b>Collection of fees</b></p> <p>∅ <b>affiliated learners</b></p> <p>∅ <b>fund raising</b></p>		<p>∅ <b>Membership responsibilities</b></p> <p>∅ <b>Focus on team work and skills of each team member</b></p>
<p><b><u>3. Team dynamics</u></b></p>			
<p>The committee met officially once a month to discuss the progress of the club as well as to plan for the various activities. Matters that arose during the <b>meetings</b> were discussed and <b>resolutions</b> were taken by <b>voting</b>. During these meetings committee members were assigned <b>specific duties</b> according to their <b>skills</b>. However the team members would keep in touch with each other as and when required.</p>	<p>∅ <b>meetings</b></p> <p>∅ <b>resolutions</b></p> <p>∅ <b>voting</b></p> <p>∅ <b>specific duties</b></p> <p>∅ <b>skills</b></p>		<p>∅ <b>Accurate records of financial and club activities</b></p>
<p><b><u>4. Challenges experienced at Admin</u></b></p>			
<p>The following challenges were experienced from an Administration perspective:</p>			
<ul style="list-style-type: none"> <li>- Since there was not an official operating system, a <b>manual system</b> was deployed. This created challenges in keeping <b>accurate records</b> of members and funds.</li> </ul>	<p>∅ <b>manual system</b></p> <p>∅ <b>accurate records</b></p>		

	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<ul style="list-style-type: none"> <li>- Due to a single banking account for the school, a separate record of the Eco Club financials had to be kept</li> <li>- Arranging of appropriate transport for local activities</li> <li>- Research of best flight schedules and prices for Malaysia trip</li> <li>- Ensuring that all flight documentation (visas, passports &amp; tickets) were completed timeously</li> <li>- Ensuring collection of funds pledged at fund raising events</li> </ul>			
<p><b><u>5. Activities &amp; Educational Benefits</u></b></p>			
<p>Regular trips to the Wetlands in The Reeds (Centurion)</p>			
<ul style="list-style-type: none"> <li>- Educating of learners about all matters relating to <b>Wetlands</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ <b>Wetlands</b></li> <li>∅ <b>Survival</b></li> <li>∅ <b>indigenous</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Active involvement of learners</li> </ul>	<ul style="list-style-type: none"> <li>∅ <b>Effective management of club activities</b></li> </ul>
<p>Trip to Malaysia</p>			
<ul style="list-style-type: none"> <li>- Visit to the rain forests to highlight natural habitat and to witness the <b>survival</b> of people within this <b>natural environment</b></li> <li>- Meeting of <b>indigenous people</b> (The Orang Asli) and understanding their way of life</li> <li>- Educational walking trails in the rain forests to <b>physically experience</b> the natural habitat</li> <li>- Experience of being totally cut off from modern technology (cell phones, television, radios etc).</li> <li>- Learning experience for learners to be <b>independent</b> and <b>responsible</b> for their daily chores</li> <li>- Learning about the Malaysian people and their <b>culture and history</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ <b>people</b></li> <li>∅ <b>physically experience</b></li> <li>∅ <b>natural environment</b></li> <li>∅ <b>independent</b></li> <li>∅ <b>responsible</b></li> <li>∅ <b>culture and history</b></li> </ul>		<ul style="list-style-type: none"> <li>∅ <b>Educational benefits of active and experiential learning</b></li> </ul>

<p>- Visited a Pewter factory where items are manufactured from pewter (The F1 Cup amongst many other products)</p>	<p><b><u>Concepts</u></b></p>	<p><b><u>Themes / other</u></b></p>	<p><b><u>Notes</u></b></p>
<p><b><u>6. Buy in from learners, parents and other educators</u></b></p>			
<p>Initially the response was not very forthcoming from all parties. The <b>consistent promotion</b> of the Eco Club slowly generated lots of interest and eventually the various parties <b>actively started participating</b>. Once the <b>learners</b> began to enjoy the activities, the <b>parents</b> showed more support by donating <b>funds</b> and assisting in the promotion of the Eco Club.</p>	<p>∅ <b>consistent promotion</b></p> <p>∅ <b>actively started participating</b></p> <p>∅ <b>learners</b></p> <p>∅ <b>parents</b></p> <p>∅ <b>funds</b></p>	<p>∅ Effective campaigning and communication to get buy in from all role players</p>	<p>∅ Eventually the success of our Eco Club resulted in the formation of similar clubs in other local schools.</p>
<p>Eventually the success of our Eco Club resulted in the formation of similar clubs in other local schools.</p>			<p>∅ strongly believe that should the department formalise this subject, a lot more awareness will be created from the learners into the community</p>
<p><b><u>7. Department of Education</u></b></p>			
<p>I strongly believe that should the department formalise this subject, a lot more awareness will be created from the learners into the community at large. The formalised education in this regard will <b>benefit all</b> and more <b>support</b> will be realised from parents, educators and other <b>important role players</b> within each <b>community</b>. As a result of this, we can <b>create respect and love for the natural environment</b>, which will ultimately benefit everyone.</p>	<p>∅ <b>benefit</b></p> <p>∅ <b>support</b></p> <p>∅ <b>important role players</b></p> <p>∅ <b>community</b></p>		<p>∅ create respect and love for the natural environment</p>
<p>Imagine what can be achieved formally, when so much was accomplished informally.</p>			

Narrator: Mrs A Schloss

Name of School: Al Ghazali College

Date: 06/02/09

Email:

Tel: 012 653 5090

Cell: 072 525 1989

	<b><u>Concepts</u></b>	<b><u>Themes / other</u></b>	<b><u>Notes</u></b>
<p><b><u>REPORT OF AN EX-ECO MEMBER OF AL GHAZALI COLLEGE ENVIRONMENTAL CLUB</u></b></p> <p><u>Reason for Joining the Eco-Club</u></p> <p>I realised that we <b>are totally dependent on our environment for our existence.</b> Being a Muslim, I am also aware that it is the will of the Almighty that we should understand Him through the study of His creation. This includes the earth and all things on it. It is through understanding, that the earth and the flora and fauna, the land, the water and the atmosphere, as well as all the planets in the universe, exist only through complete submission to the Creator, except for humans, who have been granted the option of choice.</p> <p>We, as human being have the <b>responsibility to learn</b> and to understand about our nature and functioning, so as to ensure that creation is not abused by way of <b>degradation, pollution, soil erosion</b>, etc. However, over the years, the environment has slowly deteriorated. Serious environmental problems, such as soil erosion, <b>air, water and soil pollution, loss of plant and animal species, inadequate waste management, littering, urbanisation and over population</b> have emerged. It must be borne in mind that <b>environmental problems are not caused by natural disasters, but rather by the mismanagement of the environment.</b></p>	<ul style="list-style-type: none"> <li>∅ <b>responsibility to learn</b></li> <li>∅ <b>degradation, pollution, soil erosion</b></li> <li>∅ <b>loss of plant and animal species</b></li> <li>∅ <b>inadequate waste management</b></li> <li>∅ <b>Littering</b></li> <li>∅ <b>Urbanisation</b></li> <li>∅ <b>over population</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Humans are dependent on Nature</li> </ul>	<ul style="list-style-type: none"> <li>∅ <b>are totally dependent on our environment for our existence</b></li> <li>∅ <b>Understand God by understanding and His creation and respecting it</b></li> <li>∅ <b>environmental problems are not caused by natural disasters, but rather by the mismanagement of the environment</b></li> </ul>

	<b>Concepts</b>	<b>Themes / other</b>	<b>Notes</b>
<p>Today, the study of <a href="#">environmental education is the anchor for understanding the earth on which we depend for our survival</a>. The study and our responsibility to it, in terms of <b>sustainable development</b> is one of the most serious concerns facing humanity in today's world.</p> <p><u>Launch of the Environmental Club</u></p> <p>In February 2005, Al Ghazali launched their Environmental Club with the following objectives:</p> <ul style="list-style-type: none"> <li>• To develop the learners' interest in the environment, e.g. in nature, people and impact of technological growth and development</li> <li>• To get the learners to know their local environment, e.g. home, school, town and surroundings as well as environmental issues and problems experienced in this environment</li> <li>• To make learners aware of the relationship between local, national and global environmental issues and problems</li> <li>• To sensitise learners to the environment, teach knowledge and skills and to clarify values</li> <li>• To emphasise every individual's responsibility towards the environment and to work collectively towards a sustainable future</li> </ul>	<p>∅ <b>sustainable development</b></p>	<p>∅ Eco Club objectives aligned to CCO's and Tbilisi Principles</p>	<p>∅ <a href="#">EE is the anchor for understanding the earth on which we depend for our survival</a></p>
<p><u>Activities</u></p> <p>As a teacher at Al Ghazali College, I joined the Environment Club and took up the post of <b>secretary</b>, as well as the <b>Foundation Phase representative</b>. In</p>	<p>∅ <b>secretary</b></p> <p>∅ <b>Foundation Phase representative</b></p>	<p>∅ Structured committee</p>	

<p>the Foundation Phase, we looked at <b>nutrition</b> as an important health issue. This entailed a <b>structured programme</b> in educating the <b>young learners</b> of the importance of <b>healthy eating habits and food</b>. One of the activities was a <b>health week</b>, in which <b>parents</b> participated in preparing healthy lunches and snacks for the learners. <b>Awareness posters</b> were made by the learners, <b>educational talks by parents and teachers were given</b>. The idea behind this programme, was to create awareness and <b>encourage learners to not only eat healthy but be aware of the benefits of this way of life</b>.</p>	<ul style="list-style-type: none"> <li>∅ <b>nutrition</b></li> <li><b>Concepts</b></li> <li>∅ <b>structured programme</b></li> <li>∅ <b>young learners</b></li> <li>∅ <b>health week</b></li> <li>∅ <b>Awareness posters</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Involve parents</li> <li>∅ Team work</li> <li>∅ Effective communication</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ <b>educational talks by parents and teachers</b></li> <li>∅ <b>encourage learners to eat healthy and be aware of the benefits of this way of life.</b></li> </ul>
<p>Furthermore, the Foundation Phase organised <b>field trips</b> that provided many <b>opportunities for learning</b>.</p>	<ul style="list-style-type: none"> <li>∅ <b>field trips</b></li> <li>∅ <b>opportunities for learning</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Relevant Role Players</li> </ul>	<ul style="list-style-type: none"> <li>∅ Nature Conservation</li> </ul>
<p>I also coordinated our <b>wetlands</b> programme. Al Ghazali College adopted the wetlands area in Rooihuiskraal, Centurion and became a <b>friends group</b>, which supported the <b>Nature Conservation Section of the City of Tshwane</b>. <b>Environmental education</b> was the key focus of the group, which visited the sanctuary on a three weekly basis. <b>A programme for the year was developed</b> in conjunction with Nature Conservation, and each time focused on different key aspects, e.g. soil erosion, <b>rehabilitation</b>, etc.</p>	<ul style="list-style-type: none"> <li>∅ <b>Wetlands</b></li> <li>∅ <b>friends group</b></li> <li>∅ <b>rehabilitation</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Planning and organising</li> </ul>	<ul style="list-style-type: none"> <li>∅ <b>City of Tshwane</b></li> <li>∅ <b>A programme for the year was developed</b></li> </ul>
<p>In 2007, the Environmental Club, in conjunction with <b>UNISA</b> and <b>Edutree (Malaysia)</b>, organised an educational trip to Malaysia. The aim of the trip was to <b>extend learning beyond the classroom and to foster a change in our habits and attitudes</b> that will place a high premium on environmental concerns and to promote sustainability. Visits to the University of Malaysia's field study centre, Batu Caves, the Kuala Selangor Nature Park formed part of the</p>		<ul style="list-style-type: none"> <li>∅ Networking</li> <li>∅ Active and action learning</li> <li>∅ Refer to itinerary</li> </ul>	<ul style="list-style-type: none"> <li>∅ <b>UNISA / Edutree (Malaysia)</b></li> <li>∅ <b>extend learning beyond the classroom and to foster a change in our habits and</b></li> </ul>

<p>itinerary. The highlight of the trip was a three day stay in the Endau Rompin National Park rain forest, which included day and night walks in the forest, educational talks, sightseeing and meeting the indigenous people of Malaysia, the Orang Asli, who live in the forest.</p>			<p>attitudes</p>
<p><u>Lessons Learnt and Conclusion</u></p>			<p><u>Notes</u></p>
<p>In conclusion, we came to the realisation that, <b>environmental education should be a very important facet of any learning institution, especially schools.</b> The Dept of Education does place emphasis on environmental education, but not as part of the curriculum. This does create the problem that, educators involved in the schools environmental programme, sits with the challenge of balancing this with their teaching responsibilities and resources. We are of the view that the Dept. of Education should, at a high level focus on the <b>Whole School Curriculum</b>, and include the emphasis of the relevance of sustainable development. This could mean, <b>having facilitators at government levels, as well as a person dedicated on management level at schools to support and guide the environmental programme.</b></p>	<p>∅ <b>Whole School Curriculum</b></p>	<p>∅ Teacher is unable to comment on the integration of EE in the NCS. This is a common oversight of educators.</p> <p>∅ Team work</p>	<p>∅ <b>environmental education should be a very important facet of any learning institution, especially schools</b></p> <p>∅ <b>having facilitators at government levels, as well as a person dedicated on management level at schools to support and guide the environmental programme.</b></p>
<p>I was honoured to contribute to the Environmental Club at Al Ghazali College and work with a very <b>dedicated team</b> led by the coordinator, Ms W. Carvello. It was an especially <b>proud moment</b> for us when the school was <b>awarded the Eco Green Flag from WESSA in 2007.</b></p>	<p>∅ <b>dedicated team</b></p> <p>∅ <b>proud moment</b></p> <p>∅ <b>awarded the Eco Green Flag from WESSA in 2007.</b></p>		
<p><i>“Every South African has the right to an environment that is not harmful to their health or well-being” Constitution of South Africa, section 24</i></p>			

Narrator: Mrs V Pillai  
 Email: viveka.pillai@nlsa.co.za

Name of School: Al Ghazali College  
 Tel: 012 654 5460

Date: 16/02/09  
 Cell: 082 499 2595

	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p>I joined the Al Ghazali Ecological Club on my appointment in January 2005. As far as the learners' in my Grade 5 form class were concerned it was the only club to join at school. As a class educator and member it was clear to see that the highest amount of interest was from learners in Grade 4 through to 6. Incidentally all the class educators' were members too!</p> <p>Learners were ever willing to meet, raise funds, support the club and were also full of ideas. Mums and Dads of club members and in the community that had heard about us also showed a keen interest because we were such an enthusiastic bunch. The upside was channeling all the enthusiastic response and the down was finding the time to fit all this in to an already hectic school and home schedule.</p> <p>Inevitably our lessons incorporated many activities that dealt with nature, the environment, fauna and flora. Even in seemingly difficult subjects e.g. EMS educators were finding innovative ways of incorporating eco ideas. My colleagues and I took up our task with gusto, and were constantly competing to be more creative and outrageous, it worked! And the learners' loved it!</p> <p>There were many fund raisers' and trips that got the juices flowing and ideas bouncing off the walls. Our Eco meetings in the Educator's staff room at school were always loud, gregarious and fun. I must also admit that food was</p>	<ul style="list-style-type: none"> <li>∅ class educator</li> <li>∅ Mums and Dads</li> <li>∅ keen interest</li> <li>∅ enthusiastic bunch</li> <li>∅ fund raisers'</li> <li>∅ ideas</li> </ul>	<ul style="list-style-type: none"> <li>∅ Each grade teacher in the Intermediate Phase is a member of the Eco Active Committee</li> <li>∅ Lots of enthusiasm</li> <li>∅ Time constraints both at home and school</li> <li>∅ Constructive competition amongst educators</li> </ul>	<ul style="list-style-type: none"> <li>∅ the only club to join at school</li> <li>∅ lessons incorporated many activities that dealt with nature, the environment, fauna and flora</li> <li>∅ colleagues were constantly competing to be more creative and outrageous, it worked! And the learners' loved it!</li> <li>∅ Eco meetings in the Educator's staff</li> </ul>

<p>always a part of it all! Although not the main attraction what ever we could rustle up from our lunch boxes would perk us up after a hard of teaching. We would very quickly settle down, unlike learners, and get to the matters at hand: <b>future plans, excursions, obstacles and inevitably complain about low funds and what we were going to do about it.</b></p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>future plans</b></li> <li>∅ <b>excursions</b></li> <li>∅ <b>obstacles</b></li> <li>∅ <b>low funds</b></li> </ul>	<p><b>Themes / other</b></p>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ Finding solutions</li> </ul>
<p>The funding of trips, <b>transport, refreshments</b>, etc. was always low and caused great concern and unnecessary <b>anxiety</b> amongst <b>parents and educators</b>. We could have and would have done a lot more had we had guaranteed cash on hand or a budget from the beginning of each year. I personally believe it would be advantageous if the Department of Education could get involved and help in this regard. Of course school fund raisers, etc would still be in place but they would guarantee that learners from all back grounds and circumstances could be included with out having to worry about where Mum and Dad were going to find the cash to send them on camp, etc. It would not be difficult to work as the Club will already have an <b>elected Treasurer</b>, and we can be <b>audited</b> once a year to prove that all the money was not squandered on biscuits for our meetings!</p>	<ul style="list-style-type: none"> <li>∅ <b>Transport</b></li> <li>∅ <b>Refreshments</b></li> <li>∅ <b>Anxiety</b></li> <li>∅ <b>Parents</b></li> <li>∅ <b>Educators</b></li> <li>∅ <b>elected</b></li> <li>∅ <b>Treasurer</b></li> <li>∅ <b>audited</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Structured Eco Committee</li> <li>∅ Got all role players involved</li> </ul>	<ul style="list-style-type: none"> <li>∅ Community members, parents and businesses in the area were always very cooperative and generous</li> </ul>
<p>We were blessed in many ways when it can to funding, or lack thereof! On the school sports day the Club was to sell all the refreshments, it was a scorching hot day and we sold out! <b>Community members, parents and businesses in the area</b> were always very cooperative and generous.</p>	<ul style="list-style-type: none"> <li>∅ <b>Community members</b></li> <li>∅ <b>Businesses</b></li> </ul>		
<p>During my time with the club I think the highlight was our trip to the <b>Malaysian Rainforest region</b>. I was fortunate enough to have the means to accompany</p>	<ul style="list-style-type: none"> <li>∅ <b>Malaysian Rainforest region</b></li> </ul>		

<p>my colleagues and the learners. It was a phenomenal, once in a life time experience that will always remain with me. We experienced all sorts of fabulous sights, sounds, aromas and of course tastes! Our first night was spent in five star accommodation in the city, the learners were thrilled and on a high, little did they know two nights later they would be camping in their sleeping bags on raised hard wood floors in the middle of the rainforest.</p> <p>The humidity was oppressive and nothing would dry, especially the smelliest of takkies! Our time there and the experiences on hikes and field activities with our guides were an eye opener. We saw, and this is just to name a few, albino snails, rare species of spiders, water snakes, elephant foot prints, indigenous people and flora were could only imagine in our dreams. We were also made aware of the plight of the Orang Asle people, who used to live in and off the forest. They have been greatly affected by modernization, deforestation and politics. Our learners related these people to our own San and Khoi Khoi tribes back home.</p> <p>For me going back to the city was an anti climax, although I probably will never get to ride up to the bridge of the Petronas Towers again in my life time! The food was also a gastronomical experience, the Mangostine and Queen Fruit were unusual and palate pleasing. The learners of course headed for the first fast food joint that they could find! We also, other than experiencing nature in all its glory, experienced the wonderful people, who were pleasant, helpful and polite to such a big group of people. It was more than a trip, or tour we experienced so much of the culture, not too much unlike our own. This kind of experience with learners' and colleagues extends</p>	<p><b><u>Concepts</u></b></p> <ul style="list-style-type: none"> <li>∅ indigenous people</li> <li>∅ flora</li> <li>∅ Modernization</li> <li>∅ Deforestation</li> <li>∅ politics</li> <li>∅ San</li> <li>∅ Khoi Khoi</li> <li>∅ Petronas Towers</li> <li>∅ Mangostine</li> <li>∅ Queen Fruit</li> <li>∅ fast food</li> <li>∅ culture</li> <li>∅ friendships were forged</li> <li>∅ teams</li> </ul>	<p><b><u>Themes / other</u></b></p> <ul style="list-style-type: none"> <li>∅ Association and active learning</li> <li>∅ Team work and communicating</li> </ul>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ Urban vs Rural living</li> <li>∅ Our learners related these people to our own San and Khoi Khoi tribes back home.</li> <li>∅ Connecting with people, nature and understanding of cultures</li> <li>∅ Lifelong learning and personal growth and development</li> </ul>
--	--	--	---

above and beyond just the Club, unlikely friendships were forged, teams banded together and personalities showed off their true colours.

I will always be grateful for all that I learned and taught at Al Ghazali College, but especially within the Ecological Club. I learned a lot about human nature, made life long friends and best of all educated my self and others on how to treat and sustain our beautiful earth. I am no longer a member and resigned at the end of 2007 from teaching, however I will always hold the memories close to my heart as they made my time at the school memorable and worthwhile.

Narrator: Mrs F Ebrahim

Name of School: Al Ghazali College

Date: 24/02/09

Email:

Tel: 012 400 4897

Cell: 083 777 8262

	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p>My experiences being involved in the Alghazali Eco club was a very short but exciting experience.</p>	<ul style="list-style-type: none"> <li>∅ Camp</li> <li>∅ cleaning up</li> <li>∅ after</li> <li>∅ themselves</li> <li>∅ littering</li> <li>∅ activities</li> <li>∅ game drive</li> <li>∅ bucks to</li> <li>∅ giraffes</li> <li>∅ frogs to bugs to</li> <li>∅ spiders</li> <li>∅ night activities</li> <li>∅ team work</li> <li>∅ challenges</li> </ul>	<ul style="list-style-type: none"> <li>∅ Active and experiential learning</li> <li>∅ Adapting</li> <li>∅ Conceding</li> <li>∅ significant change in their attitude</li> <li>∅ involvement was more enthused</li> </ul>	<ul style="list-style-type: none"> <li>∅ removed from their comfort zone</li> <li>∅ camp rules and the consequence of their actions</li> <li>∅ The rules made them even more resistant to having a good time.</li> <li>∅ eventually got involved in the night activities despite the threat of ticks, bugs and animal droppings</li> </ul>
<p>My earliest memories are of <b>Camp</b> Nelu. This camp targeted learners from grade 5-12 who were registered Eco club members. On arrival at the camp learners were not very keen on anything as they were removed from their comfort zone. Soon they made aware of the camp rules and the consequence of their actions. This included cleaning up after themselves after every meal, but more importantly learners were conscientised about littering and the impact it has on the environment. These rules made them even more resistant to having a good time.</p>			
<p>The camp activities included a game drive which emphasized the relationship of the animals towards each other and the environment. The trip included the sights from bucks to giraffes. The functions of the smallest creatures and their role in our environment, from frogs to bugs to spiders were explained to learners.</p>			
<p>The night activities posed a challenge to our learners who were used to their home comforts and who at first refused to “Stalk the Lantern” as they were required to crawl in the black of the night to catch a “lantern” in the distance. They soon succumbed and eventually got involved in the night activities despite the threat of ticks, bugs and animal droppings. After the first day there was a significant change in their attitude and their involvement was more</p>			

	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p>enthused. The <b>team work challenges</b>, that included a dip in the mud pool was the talk of the school for a few weeks. The weekend ended with a night fire and roasted marshmallows with a ghost story that culminated in a trip to a Ghost House. <b>At the end of the weekend learner's attitude had changed to the extent that nobody actually wanted to go home.</b></p>			<p>∅ <b>At the end of the weekend learner's attitude had changed to the extent that nobody actually wanted to go home</b></p>
<p>Being a member of the Eco club also afforded me the opportunity to visit Malaysia in 2007. The trip was certainly one I would never have ventured on my own. The focus of the trip was <b>environmental education</b>. The tours included a visit to an Environmental institution for a day and 1 night here learners asked to emulate the <b>behavior of bats</b>. The learners also hiked into the neighboring forest where the <b>anatomy of leaves</b> in relation to the environment was the lesson for the day.</p>	<p>∅ <b>environmental education</b></p> <p>∅ <b>behavior of bats</b></p> <p>∅ <b>anatomy of leaves</b></p> <p>∅ <b>native "Orang Asly".</b></p>	<p>∅ Appreciate nature and what one has</p> <p>∅ Be humbled</p> <p>∅ Engaging with indigenous people</p>	<p>∅ <b>Learners learnt very quickly to respect nature and more importantly appreciate their lives back home</b></p>
<p>The focus of the trip was a 5 day stay in the rain forest with a <b>native "Orang Asly"</b>. <b>Learners learnt very quickly to respect nature and more importantly appreciate their lives back home.</b> They were now responsible for their own washing and hygiene. The local cuisine was a challenge that learners tried very little to overcome. As educators it frustrated us and embarrassed us.</p>	<p>∅ <b>swimming in fresh water</b></p> <p>∅ <b>leeches</b></p> <p>∅ <b>rainforest</b></p>		
<p>The experience of <b>swimming in fresh water</b> was a first for many of us. The fact that we were swimming with many fish was an adventure many did not want to embark on.</p>			
<p>The 5 hour hike through the <b>rainforest</b> was a testimony to the endurance I never thought I had. It was an experience I definately have again, <b>leeches</b> included.</p>			
<p>The visit from the local rangers and the chief was a humbling experience. We were informed of the locals attempt to maintain their identity in this changing</p>			

	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p>world and their challenges. It made me appreciate my life.</p> <p>The visit to the local villages was an affirmation of the sufferings of the locals but <b>even more disturbing was that they were being marginalized by their government.</b> It appears that their current government had forgotten that they were the indigenous people of Malaysia.</p> <p>The village was also filled with very old people and very young children. <b>The young and strong locals go to the city to seek work/ employment.</b></p> <p>Accommodation was extremely limited as the <b>humidity</b> in the <b>rainforest</b> would encourage the appearance of <b>weevils</b> and <b>bugs</b> in the mattresses and blankets. We were therefore instructed to use only our sleeper bags. Just as we got used to the sleeping arrangements we had to go back to the city.</p> <p>The city life in Malaysia was very different to what we experience in SA. Learners got the opportunity to shop and experience city life for 3 days without the threat of being attacked. <b>Transport was reliable and cheap.</b> The visit to the Chinese market gave us all an opportunity to shop for our loved ones back at home.</p> <p>So while my membership at Alghazali Eco club was very short I had the wonderful experience in being involved in 2 of its most <b>exciting projects.</b></p>	<ul style="list-style-type: none"> <li>∅ <b>humidity</b></li> <li>∅ <b>rainforest</b></li> <li>∅ <b>weevils</b></li> <li>∅ <b>bugs</b></li> <li>∅ <b>exciting</b></li> <li><b>projects</b></li> </ul>		<ul style="list-style-type: none"> <li>∅ <b>even more disturbing was that they were being marginalized by their government</b></li> <li>∅ <b>The young and strong locals go to the city to seek work/ employment.</b></li> <li>∅ <b>Transport was reliable and cheap</b></li> </ul>

Narrator: Mrs S Bellinger

Name of Organisation: Sue Bellinger Consulting Date: 03/03/09

APPENDIX: F 4

Email:

Tel: 011 463 4902

Fax: 086 672 6574

Cell: 082 577 7000

My apologies for forgetting to send you my thoughts earlier:	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p>?e Initiatives such as Eco-Schools (ES) must (rightly) be approved by the DoE before being introduced to schools. Were this not to be the case, any company wishing to market any of its (sometimes of value to the company only) initiatives could talk schools into participating, even if the initiative added little/no educational/developmental value to the schools themselves. Such initiatives often use the lure of cash to incentivise schools to participate.</p>	<ul style="list-style-type: none"> <li>∅ DoE</li> <li>∅ Company</li> <li>∅ Market</li> <li>∅ for schools to see/experience</li> <li>∅ Departmental support</li> </ul>	<ul style="list-style-type: none"> <li>∅ DoE play an important role adding value to Eco-Schools</li> <li>∅ Teachers will more serious about implementing</li> </ul>	<ul style="list-style-type: none"> <li>∅ must (rightly) be approved by the DoE</li> <li>∅ If DoE is not involved companies can abuse schools for selfish gains</li> </ul>
<p>?á In addition, it is important for schools to see/experience Departmental support for the initiatives. The Dept can also play a role in bringing together initiatives which add value to each other.</p>	<ul style="list-style-type: none"> <li>∅ DoE sanctioning meetings</li> </ul>	<ul style="list-style-type: none"> <li>∅ Poor communication major challenge</li> </ul>	<ul style="list-style-type: none"> <li>∅ many schools' phones and/or fax machines are non-</li> </ul>
<p>?á The Department is important also in sanctioning meetings, which teachers might otherwise ignore – failing to recognize their relevance.</p>			<ul style="list-style-type: none"> <li>∅ functioning</li> </ul>
<p>? In Mpumalanga (specifically Secunda/eMbalenhle/Leslie/Bethal/Evander) especially, my experience has been that many schools' phones and/or fax machines are non-functioning much of the time, making communication almost impossible.</p> <p>Some schools do not even have telephone lines, and their teachers must use their cellphones for communication. Written communication must of necessity be routed through the Department to schools' pigeonholes. Due to the fact that many of the schools with which I deal are distant from the Evander circuit office, many of them do not clear their</p>			<ul style="list-style-type: none"> <li>∅ much of the time, making communication almost impossible</li> <li>∅ Schools don't clear pigeonholes regularly</li> </ul>





<p><i>Laura Conde (Eco-Schools Regional Coordinator: Eastern Cape)</i>  <i>Regional Manager</i>                  043 748 5798      083 475 1752</p> <p><b>My experience with Eco-Schools:</b> I feel that Eco-Schools has the potential to support the Department of Education strategy in achieving whole school development. A great deal of work has been put towards implementing NCS with different environmental focuses contributing towards improvement of quality education through active learning processes. However, we still need to explore synergies in working together towards achieving other aspects of WSD such as the role on SMT (school management teams) in placing environment and sustainability principles into the schools' ethos and practices.</p> <p><b>Special fact on E-S:</b> E-S brings like-minded people together!!</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ implementing NCS</li> <li>∅ environmental focuses</li> <li>∅ quality education</li> <li>∅ active learning</li> <li>∅ school management teams</li> <li>∅ sustainability principles</li> <li>∅ schools' ethos</li> <li>∅ practices</li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ DoE and ES to create an effective and efficient implementation partnership to improve quality of education</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ has the potential to support the Department of Education strategy in achieving whole school development</li> <li>∅ need to explore synergies in working together</li> </ul>
<p><i>Scott Walker – WESSA: Curriculum Specialist and ECO – Schools Manager</i>                  083 259 8327 / 011 462 5663</p> <p><b>Encounters with Eco- Schools</b></p> <p>I have found Eco- schools to be an enabling framework for engaging with schools around environmental issues. Added to this, the programme is flexible enough and broad enough in its design to allow educators and</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ enabling framework</li> <li>∅ environmental issues</li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Flexible to adapt to any context</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ design to allow educators and learners to engage with other facets such as social</li> </ul>

<p>learners to engage with other facets such as social issues. The programme allows us as environmental educators to assist schools in addressing issues most pertinent to the <b>context</b> of the individual school. The programme is particularly effective in <b>mobilising partners</b> with various specialities and <b>broadening the base of knowledge, skills and action available to schools</b>.</p> <p><b>Special Fact</b> Eco- schools has assisted in encouraging the schools to <b>improve all aspects of their management of the schools</b>. Educators who engage with Eco-Schools gain much by way of <b>administration and project management skills</b> as well as event organisation and the writing of fundraising letters.</p>	<ul style="list-style-type: none"> <li>∅ <b>flexible</b></li> <li><b>Concepts</b></li> <li>∅ <b>context</b></li> <li>∅ <b>mobilising partners</b></li> <li>∅ <b>management</b></li> <li>∅ <b>administration</b></li> <li>∅ <b>project management skills</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Improves administrative and management skills</li> </ul>	<p>issues</p> <p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ broadening the base of knowledge, skills and action available to schools.</li> <li>∅ improve all aspects of their management of the schools.</li> </ul>
<p><b>Jim Taylor</b>    <a href="mailto:jt@wessa.co.za">jt@wessa.co.za</a></p> <p>ES has <b>evolved</b> in a well reasoned and researched manner that makes it special and relevant in <b>supporting schools</b> in SA and elsewhere.</p> <p>I can't think of a better <b>social framework</b> than the one offered by Eco-Schools. <b>It is the most reliable and coherent process for bringing about meaningful change and transformation in SA schools and associated communities.</b></p> <p><b>"Working from existing action to better action and measuring outcomes in terms of local change makes this programme relevant in any socio-economic context, no matter how under-resourced and poverty stricken."</b></p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>evolved</b></li> <li>∅ <b>supporting schools</b></li> <li>∅ <b>social framework</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Supportive social framework that can be implemented in any socio-economic context</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ It is the most reliable and coherent process for bringing about meaningful change and transformation in SA schools and associated communities</li> </ul>

	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p><b>Kim Ward</b>    <a href="mailto:kim@wessa.co.za">kim@wessa.co.za</a></p> <p><u>Special thing about Eco-Schools</u>  A programme which <b>acknowledges</b> and gives <b>recognition</b> to the <b>efforts</b> of the very <b>special teachers and learners</b> in all kinds of different schools and circumstances in South Africa.</p> <p>I have found the work done and the people involved <b>inspiring</b>.</p> <p><b>A programme that fills one with hope for South Africa.</b></p> <p>What is special is the way that schools can start work with what they have and where they are, build on this with support (in the form of interest, information, encouragement from Eco-School supporters and co-ordinators) and really do something great in their schools. <b>Projects</b> lead to <b>better learning</b>, but also make <b>practical difference</b> – improving the <b>school grounds</b>, <b>providing food</b> from gardens, decreasing negative impact (e.g. <b>recycling</b> programmes).</p> <p><b>Programme is transformative!</b></p> <p>Also provides those willing to be involved in other ways (e.g. through providing funding and being supporters) an <b>opportunity</b> to do this through a <b>coherent</b> and well <b>structured</b> and credible <b>programme</b> rather than on an ad hoc basis. Also if funding stops, schools are not left in a lurch and can continue on their <b>own initiative</b>.</p>	<ul style="list-style-type: none"> <li>∅ <b>Acknowledges</b></li> <li>∅ <b>Recognition</b></li> <li>∅ <b>Efforts</b></li>   <li>∅ <b>Inspiring</b></li>   <li>∅ <b>Hope</b></li>   <li>∅ <b>Projects</b></li> <li>∅ <b>better learning</b></li> <li>∅ <b>practical difference</b></li> <li>∅ <b>school grounds</b></li> <li>∅ <b>providing food</b></li> <li>∅ <b>recycling</b></li>   <li>∅ <b>opportunity</b></li> <li>∅ <b>coherent</b></li> <li>∅ <b>structured</b></li> <li>∅ <b>programme</b></li> <li>∅ <b>own initiative</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Views schools as the centre of change, teachers and communities as the vehicles of change</li>   <li>∅ Empowers and gives ownership</li> </ul>	<ul style="list-style-type: none"> <li>∅ <b>special teachers and learners</b></li>   <li>∅ <b>A programme that fills one with hope for South Africa</b></li>   <li>∅ <b>Programme is transformative</b></li> </ul>

	<u>Concepts</u>	<u>Themes / other</u>	<u>Notes</u>
<p><b><u>Bridget Ringdahl</u> – National Coordinator</b></p> <p>Encounter / experiences with Eco- schools</p> <p>I have worked with the programme for 3 years in an overarching <b>management</b> position from a <b>national perspective</b>. For me it has been a very <b>inspirational, challenging, rewarding</b> and sometimes <b>frustrating experience</b> all of which have <b>added to my learning and understanding of education</b> processes and how they can facilitate better Env. Management and improved environmental ethic. Certainly while difficult to measure (as most people want to) the impact of the programme it is most rewarding to see and know that everyone of the schools who have <b>participated</b> , are participating (and those who will participate) have <b>benefited from their experience / interaction with the programme, whether that be, for 1 year (and never again) or whether for 4, 5, 6 or 7 years.</b> <b>The ability for schools to make changes in learning and action is notable no matter how big or small.</b> I always remember the teacher who phoned us about what to do when he found a snake in the classroom instead of killing it, and the teacher who said how much they had learned and grown through their involvement in the programme, not to mention how their school had developed and benefited as well as the environment.</p>	<ul style="list-style-type: none"> <li>∅ <b>Management</b></li> <li>∅ <b>national</b></li> <li>∅ <b>perspective</b></li> <li>∅ <b>inspirational</b></li> <li>∅ <b>challenging</b></li> <li>∅ <b>Rewarding</b></li> <li>∅ <b>participated</b></li> </ul>	<ul style="list-style-type: none"> <li>∅ Change is noted in context</li> </ul>	<ul style="list-style-type: none"> <li>∅ added to my learning and understanding of education</li> <li>∅ benefited from their experience / interaction with the programme, whether that be, for 1 year (and never again) or whether for 4, 5, 6 or 7 years.</li> <li>∅ The ability for schools to make changes in learning and action is notable no matter how big or small.</li> </ul>

<p><b><u>Dennis Mkhabela</u></b> Gauteng Region E.S. Coordinator</p> <p>Phone: 011-462-5663 Email: <a href="mailto:dmkhbela@wessanorth.com">dmkhbela@wessanorth.com</a></p> <p>I am a new person in the Region and also with the E.S. programme. I started working in the Eco-Schools programme in June 2008. My experience with E.S. is that the programme is very much embraced by schools in the region and it is fast growing. However, some of the schools are still battling with some aspects of the process e.g. lesson plans, linking calendar days to the curriculum planning frame. Although these challenges exist, some schools are flying with the programme.</p>	<p><b><u>Concepts</u></b></p> <ul style="list-style-type: none"> <li>∅ lesson plans</li> <li>∅ linking calendar days</li> <li>∅ curriculum</li> <li>∅ planning</li> </ul>	<p><b><u>Themes / other</u></b></p> <ul style="list-style-type: none"> <li>∅ Despite challenges the programme is doing well</li> </ul>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ programme is very much embraced by schools</li> </ul>
<p><b><u>Nokulunga Mshibe</u></b> – KZN R.C.</p> <p>The ES programme helps educators to implement and understand the S.A. education system (NCS) This is because it allows them to study the policy doc's for understanding. As for learners, they get a chance to know, respect and understand their locality i.e. the surrounding environment.</p> <p>From my experience most educators get empowered through the programme. The programme demands / allows the inclusion of all stakeholders which helps with the whole school development and community development because learners share what they have learnt with their families who are somehow involved.</p> <p>Some really find it difficult to work independently whereas for some that is not a problem. Support to schools is important, it could be planning or collecting/gathering information.</p>	<p><b><u>Concepts</u></b></p> <ul style="list-style-type: none"> <li>∅ educators</li> <li>∅ implement</li> <li>∅ understand</li> <li>∅ NCS</li> <li>∅ Learners</li> <li>∅ Respect</li> <li>∅ surroundings</li> <li>∅ empowered</li> <li>∅ community</li> <li>∅ families</li> <li>∅ work independently</li> <li>∅ Support</li> <li>∅ Planning</li> <li>∅ information</li> </ul>	<p><b><u>Themes / other</u></b></p> <ul style="list-style-type: none"> <li>∅ Learners share what they learn with families and families do get involved.</li> </ul>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ it allows them to study the policy doc's for understanding (NCS)</li> <li>∅ allows the inclusion of stakeholders which helps with the whole school development</li> </ul>

<p><b><u>Zuzette de Beer</u></b> Mpumalanga R.C.</p> <p>083 273 5392 <a href="mailto:zetdebeer@gmail.com">zetdebeer@gmail.com</a></p> <p>Eco-Schools is an incredible programme that draws other <b>environmental partners</b> to it to make a greater impact and have a far reaching effect. Many programmes think it is a great idea but <b>often struggle to incorporate it in the national curriculum as they see it as an added extra</b>. The eco-schools programme's success rests on a <b>dedicated individual</b> that often doesn't get the support from other teachers or principal. <b>Successful schools often have a very strong TEAM that runs with the programme.</b></p>	<p><b><u>Concepts</u></b></p> <ul style="list-style-type: none"> <li>∅ <b>environmental partners</b></li> <li>∅ <b>incorporate</b></li> <li>∅ <b>national curriculum</b></li> <li>∅ <b>dedicated individual</b></li> <li>∅ <b>TEAM</b></li> </ul>	<p><b><u>Themes / other</u></b></p> <ul style="list-style-type: none"> <li>∅ One dedicated teacher who does not get support from teachers and principal</li> </ul>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ often struggle to incorporate it in the national curriculum as they see it as an added extra</li> <li>∅ Successful schools often have a very strong TEAM that runs with the programme.</li> </ul>
<p><b><u>Leon Barkhuizen</u></b> Free State Region <a href="mailto:barkhl@dteea.fs.gov.za">barkhl@dteea.fs.gov.za</a></p> <p>Eco-Schools had a tremendous growth in the Free State since 2004 when the programme was first introduced to schools in the Province. During 2004 there were only 5 schools registered and during 2008 it increased to 91. <b>The Env-Educ division within the Free State Dept. of Tourism, Env. and Env. Affairs realigned all its programmes and activities to focus on Eco-Schools, as the Eco-Sch programme provided a framework in which all the activities / programmes were covered.</b> The Eco-Sch programme is <b>structured</b> and <b>simple</b> and it <b>guides schools</b> through the 7 steps toward better env. management and learning. It also <b>ensures sustainability</b> as schools (from 2008) need to follow a five year process in order to qualify for the Int. Award. <b>In the F.S. we view Eco-Schools as the best Env. Educ. programme.</b></p>	<p><b><u>Concepts</u></b></p> <ul style="list-style-type: none"> <li>∅ <b>Structured</b></li> <li>∅ <b>Simple</b></li> <li>∅ <b>guides schools</b></li> <li>∅ <b>ensures sustainability</b></li> </ul>	<p><b><u>Themes / other</u></b></p> <ul style="list-style-type: none"> <li>∅ FS has applied the White Paper on EE. They have included other Gov. Depts. and not only focused on DoE. Very good strategy.</li> </ul>	<p><b><u>Notes</u></b></p> <ul style="list-style-type: none"> <li>∅ The Env-Educ division within the Free State Dept. of Tourism, Env. and Env. Affairs realigned all its programmes and activities to focus on Eco-Schools, as the Eco-Sch programme provided a framework in which all the activities / programmes were covered.</li> </ul>

<p><b>Hette Gets</b>    <a href="mailto:hgets@wwf.org.za">hgets@wwf.org.za</a></p> <p>The Eco-Schools Programme is all <b>inclusive</b> and all <b>supportive</b>. It requires <b>commitment</b>, a <b>positive attitude</b>, energy and <b>an ethos of sharing and learning</b>.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>Inclusive</b></li> <li>∅ <b>Supportive</b></li> <li>∅ <b>Commitment</b></li> <li>∅ <b>positive attitude</b></li> </ul>	<p><b>Themes / other</b></p>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ requires an ethos of sharing and learning</li> </ul>
<p><b>Cathy Dzerefos</b>    Limpopo Region</p> <p>P.O. Box 276, Haenertsburg, 0730.    Phone: 015-276-5003</p> <p>Email: <a href="mailto:cathy@dzerefos.com">cathy@dzerefos.com</a></p> <p>Eco-Schools is an incredible programme as it <b>can be adapted for any school no matter whether they are rural/urban</b>, aware/unaware, of env. issues or having <b>resources</b> or not. In this time of <b>rampant consumerism, climate change and loss of biodiversity</b> E-S is one of the few initiatives that is really tackling the issues and <b>making a contribution to a better future</b>. I have witnessed first hand how the <b>guidelines for E-S encourage teachers to expand their knowledge and produce better lessons</b>. The <b>outdoor activities</b> and <b>action projects</b> take learning out of the classroom and provide learners with a <b>lifelong and lasting Eco-School experience</b>.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>rural/urban</b></li> <li>∅ <b>resources</b></li> <li>∅ <b>rampant consumerism</b></li> <li>∅ <b>climate change</b></li> <li>∅ <b>loss of biodiversity</b></li> <li>∅ <b>outdoor activities</b></li> <li>∅ <b>action projects</b></li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ Learning out of the classroom.</li> <li>∅ Active and experiential learning</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ can be adapted for any school no matter whether they are rural/urban</li> <li>∅ guidelines for E-S encourage teachers to expand their knowledge and produce better lessons</li> <li>∅ lifelong and lasting Eco-School experience contribution to a better future</li> </ul>
<p><b>Caroline Physick</b>    Eco-Schools National    <b>Fact</b></p> <p><b>Support</b> potential to <b>educators</b> around env. learning. <b>Although the programme seeks to enhance the env. issues within the NCS, the understanding thereof is limited by educators</b>. The <b>framework</b> and support initiatives within the programme therefore support the educators and <b>learners</b> in obtaining a greater depth and meaning around these issues. <b>Knowledge being the potential catalyst for change</b>.</p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ <b>Support</b></li> <li>∅ <b>Educators</b></li> <li>∅ <b>Framework</b></li> <li>∅ <b>learners</b></li> </ul>	<p><b>Themes / other</b></p>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ Although the prog. seeks to enhance the env. issues within the NCS, the understanding thereof is limited by educators</li> </ul>

<p><b>James Lind Holmes</b>    Marketing: WESSA    <a href="mailto:jameslh@nashuaisp.co.za">jameslh@nashuaisp.co.za</a></p> <p>1. Experience: Eco-Schools</p> <p><b>This is the single most important sector of endeavour of all enviro /eco / conservation gestures in the world and in S.A.</b></p> <p>Eco-schools has drastically low awareness amongst the public at large, and grossly under-publicised.</p> <p>2. Fact. <u>Potential</u></p> <p><b>Massive sustainable capacity-building is at hand. I see an army of student "peasant farmers" waist deep in market-garden crops grown in a low-carbon-footprint ethos – minimal waste, huge recycling – increased diet and health.</b></p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ low-carbon-footprint</li> <li>∅ ethos</li> <li>∅ minimal waste</li> <li>∅ recycling</li> <li>∅ diet</li> <li>∅ health</li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ low awareness amongst the public and grossly under-publicised</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ Massive sustainable capacity-building is at hand</li> </ul>
<p><b>Janice April</b>    <a href="mailto:janiceapril@iafrica.com">janiceapril@iafrica.com</a>    084-657-0581</p> <p><u>Whole School Participation:</u></p> <p>Schools see this as one of the biggest challenges when embarking on the E.S. programme for the first time. Yet in spite of this they continue with their effort. The second year seems to be less challenging as more and more <b>teachers, parent and learners</b> see the <b>benefits of E.E.</b> within and without the curriculum. <b>It is only when the programme shows benefits – Whole School involvement becomes evident.</b></p> <p><u>Resources:</u></p> <p><b>Schools (especially under-resourced) tend to become very creative and show lots of initiative.</b></p>	<p><b>Concepts</b></p> <ul style="list-style-type: none"> <li>∅ Teachers</li> <li>∅ Parent</li> <li>∅ Learners</li> <li>∅ benefits of E.E</li> <li>∅ under-resourced</li> <li>∅ creative</li> <li>∅ initiative</li> </ul>	<p><b>Themes / other</b></p> <ul style="list-style-type: none"> <li>∅ First couple of years schools battle but soon settle into the programme</li> </ul>	<p><b>Notes</b></p> <ul style="list-style-type: none"> <li>∅ It is only when the programme shows benefits – Whole School involvement becomes evident</li> <li>∅ Under resourced schools tend to become very creative and show lots of initiative.</li> </ul>

	<b><u>Concepts</u></b>	<b><u>Themes / other</u></b>	<b><u>Notes</u></b>
<p><u>Curriculum:</u>  Most schools find E.S. a “sophisticated” vehicle to strengthen the curriculum.  5 Principles.</p> <p><u>School Development Plans (Whole School Development)</u>  Schools in the Western Cape are slowly including the E.S. <b>Portfolios</b> and actions in the <b>School development Plans</b> and <b>Whole School Development</b> –  Good Example: Morgenson P.S. (Underperforming School)</p>	<ul style="list-style-type: none"> <li>∅ <b>Portfolios</b></li> <li>∅ <b>School development Plans</b></li> <li>∅ <b>Whole School Development</b></li> </ul>		<ul style="list-style-type: none"> <li>∅ Most schools find E.S. a vehicle to strengthen the curriculum</li> </ul>