Above and Under:
Introducing the Challenges of Education for Sustainable Development
A Case Study from Malta

Zsofia Klopfer

Supervisor: Thomas Malm

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Abstract

By the end of the 1960s there was a growing environmental concern all around the globe. As a part of an answer to this challenge the need was recognized for a reorientation of the education processes towards developing knowledge, attitudes and skills for resolving the issues. This was the birth of the concept of Environmental Education (EE). However, this notion is far from being static as it went through massive changes in the course of the past four decades until it has reached its current form as Education for Sustainable Development (ESD). With this thesis I aimed to analyze the process and the challenges of the transition from the perspective of the overarching global power structures. Regarding the methods, the thesis was designed in favor of a directed content analysis whereby the data collected in the course of a fieldwork in Malta was examined addressing how the theoretical challenges are represented, reflected or countered there. Finally, some of the explored counter-concepts – such as empowerment, eco-centric perspectives and place-based approaches – were opened for discussion and further research as those of possible complementary aspects to the current stage of EE or ESD.

Key words: Environmental Education, Education for Sustainable Development, top-down approach, Western science, anthropocentrism, sustainable development, human ecology, Malta.

Acknowledgements

Abbreviations

CEER	Center for Environmental Education and Research
DESD	Decade of Education for Sustainable Development
EA	Environmental Assessment
EE	Environmental Education
EEP	Environmental Education Programme
EFA	Education for All
ESD	Education for Sustainable Development
FEE	Federation for Environmental Education
IEEP	International Environmental Education Programme
IMF	International Monetary Fund
LEAF	Learning About Forests
MEPA	Malta Environment Planning Authority
NGO	Non-Governmental Organization
NMC	National Minimum Curriculum
NTM	Nature Trust Malta
OPP	Outdoor Provision Programme
PBE	Place-Based Education
TEK	Traditional Ecological Knowledge
UN	United Nations
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
YRE	Young Reporters for the Environment

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1. Introduction

When I started to think about the topic of the thesis, my first intention was to write about the Traditional Ecological Knowledge (TEK) in the concept of Education for Sustainable Development (ESD). These are actually the two propositions I developed the most interest in during the CPS Program. Before I arrived to Malta to start my internship and to conduct the fieldwork I assumed that these concepts would be apparent there. Since Malta is a fairly small island with a restrained amount of natural resources I thought that they definitely applied their accumulated traditional knowledge of sustainable resource use, and thereby this concept is deeply integrated to their education system as well. However, I was wrong. When I first arrived there and started to ask around about these concepts nobody seemed to know what I was actually talking about. And I did not see TEK in the practice either.

So it is obvious that I started to wonder why. Why is it that nobody seems to know anything about Traditional Ecological Knowledge? Is this rooted in the approach of the Education for Sustainable Development? Are there any overarching power structures in the background? Is this phenomenon related to the dominant Western worldview and the neocolonial structures?

Following these questions that rose in the course of my fieldwork I arrived to the current topic of my thesis. In the ensuing pages the overall power structures and other theoretical aspects that have shaped the concepts of Environmental Education (EE) and Education for Sustainable Development (ESD) and the transition between them will be explored. Furthermore, these theoretical aspects outlined will be articulated and analyzed in the context of a case study from Malta.

1.1. Background

Hereby, I would like set up the scene for the thesis by providing the basic definitions of Environmental Education and Education for Sustainable Development.

By the end of the 1960s there was a growing concern regarding the environment and its problems mostly produced by human activities. Hence, as an answer it was also recognized that "there is a vital need for an educational approach that effectively educates man regarding his relationship to the total environment" (Strapp 1969: 34).

The first definition of Environmental Education (EE) was elaborated in 1969 by William Strapp and his colleagues at the University of Michigan, United States. Strapp states:
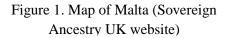
> Environmental Education is aimed at producing a citizenry that is knowledgeable concerning the *biophysical environment* and its associated problems, aware of how to help solve these problems and motivated to work toward their solutions. (Strapp 1969: 34; my emphasis)

The original concept introduced here went through mass transformations during the times – these transformations are going to be presented in the following section. However, by the end of the 1990s the need for a new educational approach has arrived to the concept of Education for Sustainable Development (ESD) that could be defined in the following way:

> (…) a learning process (or approach to teaching) based on the ideals and principles that underlie sustainability and is concerned with all levels and types of learning to provide quality education and foster *sustainable human development* – learning to know, learning to be, learning to live together, learning to do and learning to transform oneself and society. (UNESCO website; my emphasis)

It can be noticed that I have accentuated the two central concepts of the definitions in order to show the basic differences. The circumstances and the way itself that have lead to this mass transformation from the environment to the humans in the focus constitute the central analytical aspect of the section of theoretical frameworks following this introduction.

Figure 1. Map of Malta (Sovereign Ancestry UK website)

Furthermore, I would like to provide historical and demographical background information about Malta as well. Malta is a fairly small country constituting of three main islands – Malta, Gozo and Comino – in the middle of the Mediterranean Sea with the total population of about 420.000 people living on the total area of 316 km^2 (Malta Enterprise website). Regarding the prehistory of the country, the arrival of the first people was around 7200 B.P. presumably from the closest mainland, Italy. However, in historic times the language and culture show Arabic features as well. Actually, the Maltese is the only one from the Arabic family of languages that is written with Latin letters (Visit Malta website).

From the times of the early inhabitants Malta went through successive periods of invasion, being a colony or a part of different nations and empires such as the Phoenicians (1000-480 B.C.), the Carthaginians (480-218 B.C.), the Romans (218 B.C.-395 A.D.), the Byzantines (395-870), the Arabs (870-1090), the Normans (1090-1485), the Aragonese (1485-1530), the Knights of St. John (1530-1789), the French (1798-1800), and the British (1800-1964). Among these periods the two most important that had left the greatest impact on the culture of Malta are the Knights and the British. As we will see later, the system of administration, legislation and education still show the characteristics of the British rule that lasted until 1964. After that, Malta finally became an independent republic in 1974, featuring the democratic parliamentary system. Moreover, the country joined the European Union in 2004 that had actually fostered their development (Visit Malta website).

1.2. Purpose and Research Questions

The *purpose* of the thesis, with Malta as a case study, is to highlight the historical and current challenges, both theoretical and practical that Environmental Education and/or Education for Sustainable Development are facing. Based on the available literature and research material, I aim to analyze these challenges from a political ecology perspective, hence citing the concept of education to the Human Ecology discourse.

Following this, my intent is to answer the following research questions:
1. What are the theoretical challenges of the transition between Environmental Education and Education for Sustainable Development?
2. How is this transition related to the overarching global power structures?
3. How are these theoretical challenges represented and reflected in the Maltese Education for Sustainable Development system?

1.3. Outline of the Thesis

Regarding the structure of the thesis, after this introduction, the methodological approach and the specific research tools will be outlined. In the third section which is about the theoretical challenges, a special emphasis will be put on the top-down approach (of EE/ESD) as another way of colonization from the Western perspective that is anthropocentric. In the fourth part, while outlining the historical process of the development of the Maltese EE/ESD system, a practical analysis will be conducted of the theoretical challenges represented and reflected in

this case. In addition, further aspects that might be complementary or counter-concepts for the current stage of EE/ESD will be opened up for discussion and possible further research in section 5. Finally, I will present my conclusions regarding the original research questions outlined above.

2. Methodology

In this section I would like to introduce the particular methodology and the research tools that were applied in the thesis.

First of all, for gaining the primary data a fieldwork was conducted during the course of my internship period from the 24th of August 2015 until the 31st of January 2016. Regarding the geographic location, this empirical study was carried out in Malta with the features outlined in the introduction. As one of the concrete research tools, participant observation or more specifically being a "participant as an observer" was enacted in order to gain practical knowledge and insight (cf. O'Reilly 2008). In the course of this activity, besides working in Xrobb l-Ghagin Nature Park day-by-day and observing the educational activities, I managed to participate in other key events as well – such as the children's summit on climate change, tree plantings and other activities organized by the EkoSkola program. The observations made constitute my field notes as one of the main sources of primary data.

The other main source of the primary data is the seven semi-structured interviews conducted with key informants of the Maltese Environmental Education or Education for Sustainable Development system. Regarding their lengths, they took about an hour each and they were recorded respectively. These interviews focused mainly on the process and the challenges of establishing this system as it can be seen from the interview guideline attached in the appendix (Appendix 1).

Due to the fact that none of the informants indicated that they wished to remain anonymous when asked, here I would like to provide a list of them:

- Attard, Vincent, president of Nature Trust Malta, president of EkoSkola Malta.
- Caruana, Censu, assistant lecturer at the Center for Environmental Education and Research at University of Malta.
- Gauci, Audrey, EkoSkola officer, Young Reporters for the Environment national coordinator.
- Grixti, Bernard, EkoSkola officer.
- Mifsud, Mark, senior lecturer at the Center for Environmental Education and Research at University of Malta.
- Pace, Paul, director of the Center for Environmental Education and Research at University of Malta, EkoSkola national coordinator.
- Sammut Carbone, Esther, education officer at Xrobb l-Ghagin Nature Park.

If no other source is specified, all references to these persons are from my interviews with them.

Regarding the limitations of the fieldwork, I would like to mention the constraint time-frame and the access to informants. For example, conducting surveys or interviews with children in schools would have been problematic because of permissions and human rights legal issues. This however, did not seem to be necessary according to the focus of the thesis.

As regards to the analysis of the data, a directed content analysis was applied. Content analysis in general "focuses on the characteristics of language as communication with attention to the content or contextual meaning of the text" in order to establish and examine "an efficient number of categories that represent similar meanings" (Hsieh & Shannon 2005: 1278). In particular, the objective of the directed approach is to use already existing theoretical frameworks to identify the key concepts by which they can be validated or extended (Ibid.: 1281). In the context of the thesis, these categories were the top-down approach of EE/ESD, the Western scientific knowledge by which the principles are outlined and the anthropocentric bias of the transition between the two concepts. The operational definitions are outlined and articulated in the theoretical frameworks part of the thesis. By

reading the transcripts of the primary data, the aforementioned theoretical categories were identified and highlighted and new codes of counter-concepts were created.

The reason why this particular method of analysis was applied is that my focus was foremost on the content of the primary data – or in other words what the informants said – in the context of the theoretical frameworks. More specifically, my intention was to explore how the top-down approach of EE/ESD and its anthropocentric bias is represented and reflected in the Maltese system. Hence the analysis is consorted by the presentation of the data as exemplars for the predetermined categories which are simultaneously supporting and countering the theoretical frameworks.

Regarding the limitations of this particular analysis method, I would like to cite Hsieh and Shannon (2005: 1283) who state that "using theory has some inherent limitations in that researchers approach the data with an informed but, nonetheless, strong bias. Hence, researchers might be more likely to find evidence that is supportive rather than non-supportive of a theory". However, as stated above, in the course of this particular analysis counter-concepts to the outlined categories were also found.

Furthermore, the open system of international principles of Environmental Education and/or Education for Sustainable Development was approached from a critical realist perspective. The objective was to examine and explain the underlying characteristics and identify the mechanisms this system may cause for the reality of EE/ESD. Therefore, the critical lens was applied in a specific context of the Maltese system in order to interpret the right meanings of the context (cf. Sayer 2000).

In addition, it is also important to consider the question of transferability of the findings. As stated by Blommaert and Dong (2010: 19) every occasion is a "uniquely situated reality". It might happen, however, that the results of the study are transferable "to some extent to other situations that are similar enough to warrant it" (O'Reilly 2008: 84). Therefore, we have to be careful when we step out from the Maltese context to consider applying the practices found there for countering the top-down approach and the anthropocentric bias of ESD to another country or to the global settings.

3. The Theoretical Challenges of ESD

In this section I would like to introduce the nature of the transition between Environmental Education and Education for Sustainable Development through the international principles developed in five phases between 1972 and 2014. By proposing the theoretical frameworks of this thesis I would like to show through a brief literature review, that these overall principles were elaborated in the act of a top-down approach as another way of colonizing, from the Western perspective that is anthropocentric.

3.1. International Policies

The aforementioned way of mass transformation from the environment to the humans in the focus within the frames of Environmental Education and Education for Sustainable Development could be divided into five phases.

3.1.1. Formulation

By the beginning of the 1970s the growing environmental concerns had lead to an international recognition of the need for aligned actions. Because of this the UNESCO Conference on Human Environment was held in Stockholm in 1972, where the Recommendation 96 highlighted the importance of an effort to promote Environmental Education (Pace 1996: 2). Accordingly, the United Nations Environment Programme (UNEP) together with the United Nations Educational, Scientific and Cultural Organization (UNESCO) established the International Environmental Education Programme (IEEP) for the period of 1975-1983.

This program was basically designed to facilitate the planning process of Environmental Education on an international level, with the promotion of networking, exchanging information and research. Furthermore, the need for training of the key personnel and the formulation of new approaches and materials was also recognized (UNESCO-UNEP 1975a: 1).

Regarding the working definition of EE, the concepts elaborated by William Strapp were applied with the major objectives of a broad understanding of the biophysical environment and its problems and developing attitudes and motivation for solving them (Strapp 1969: 34-35).

Consequently, this part of the process could be seen as sort of a "brainstorming" phase where all the concerned countries were asked to start developing their approach in Environmental Education.

3.1.2. Elaboration

One of the three phases of the formulation process marked in the IEEP was the preparation for the International Belgrade Workshop on Environmental Education held in 1975. The aim behind it was to evaluate the developed trends within the frames of the international program in order to formulate recommendations and guiding principles to promote Environmental Education (Pace 1996: 4).

The elaborated Belgrade Charter proposed the main characteristics of EE that all the concerned approaches should follow – namely that it is a life-long, interdisciplinary process with all the levels from primary to tertiary learning and all the stages from local to international involved. It should consider the environment in its totality focusing on the current and future situations and examining development and growth from its perspective. Furthermore, the audience addressed should be the general public given that the Environmental Education process would take place in both the formal and the non-formal education sectors (UNESCO-UNEP 1975b: 16).

Based on the proposed evaluation process and the international information exchange, two years after the Belgrade Charter was acknowledged, there was a need for another Intergovernmental Conference on Environmental Education held in Tbilisi (1977) for further elaboration of the concept. Besides the basic characteristics of Environmental Education recommended in the Belgrade Charter (1975) this was the first time when the criteria of "understanding the complex relations between the socio-economic development and the improvement of the environment" was introduced (UNESCO-UNEP 1977: 25).

This change in the basic characteristics shows the first step of the aforementioned transformation from the environment to the humans in the focus of EE/ESD. For better understanding I present here a table, comparing the two main policies of the evaluation phase (Table 1).

Table 1. A comparison between the Belgrade Charter (1975) and the Tbilisi Declaration (1977)

Belgrade Charter (1975)	Tbilisi Declaration (1977)
Considering the environment in its totality	Considering the environment in its totality
Interdisciplinary, life-long process	Interdisciplinary, life-long process
Examining growth and development from an environmental perspective	**Examining socio-economical development and the improvement of the environment**
Local, national and international levels	Local, national and international levels
Formal and non-formal education sector	Formal, non-formal and informal education sector (with diverse learning environments)
-	**Learners participation in the planning process and in decision-making**
Objectives: awareness, knowledge, attitude, skills, **evaluation ability**, participation	Objectives: awareness, knowledge, attitude, skills, participation

3.1.3. Strategies for Implementation

Evaluating the efforts made for the actual applications in the past 13 years since the establishment of the International Environmental Education Program (IEEP) and coming to the conclusion that little had been done, the need for an overall implementation strategy was recognized. Therefore, exactly 10 years after the Tbilisi Declaration (1977) a conference was held in Moscow in 1987 in order to elaborate the International Strategy for Action in the Field of Environmental Education and Training for the 1990s.

The aims of the international strategy were concerned with

(i) the search for and implementation of effective models of environmental education, training and information; (ii) a general awareness of the causes and effects of environmental problems; (iii) a general acceptance of the need for an integrated approach to solving these problems, and (iv) the training, at various levels, of the personnel needed for the rational management of the environment in view of achieving sustainable development at community, national, regional and worldwide levels. (UNESCO-UNEP 1987: 6)

Moreover, concrete guidelines, objectives and actions to be taken were introduced in 8 different field of implementation. As Pace (1996: 11) states, following this congress real progress could have been observed in Environmental Education. This progress might have been dedicated also to the overall changes in the environmental concerns worldwide, with the introduction of the notion of "sustainable development" in the Brundtland Report (1987).

3.1.4. Reorienting Education

The United Nations Conference on Environment and Development was held in Rio de Janeiro in 1992 with the outcome of the Agenda 21 document where the concept of sustainable development was reinforced with human well-being in the center. In Chapter 36 – Promoting Education, Public Awareness and Training, it was recognized that "education is critical for promoting sustainable development and improving capacity of the people to address environment and development issues" (UN 1992: 36.3).

Since the concept of sustainable development has three components – environment, society and economy – and education is essentially related to all of them in order to achieve the proposed aims, the need for an overall and comprehensive change in the system was recognized (Pace 1996, McKeown et.al. 2002). This was the point where the concept of Education for Sustainable Development (defined in the Introduction) was introduced for not only focusing on environmental issues but on all the aspects of the human well-being.

In 2000 the Dakar Framework for Action in Education for All (EFA) was elaborated in accordance with the UN Millennium Development Goals (New York, 2000) that proposes the achievement of universal primary education by 2015. The framework also introduces the underlying goals of ensuring education for all ages and groups and gender equality within its system in order to achieve improved average literacy and education quality (UNESCO 2000: 8).

Apparently, the requirements for achieving the goals of EFA happen to be matching the objectives and proposed actions of Education for Sustainable Development – particularly in the social component for human and environmental well-being (McKeown et.al. 2002).

<u>3.1.5. ESD as the New Orientation</u>

According to McKeown and her colleagues (2002) the approach of ESD can be divided into four overlapping concepts:

1.   Improving basic education;

2.   Reorienting existing education – with more principles, skills, perspectives and values related to sustainability;

3.   Public understanding and awareness;

4.   Training.

As stated above, these concepts are matching the goals and objectives of Education for All; however, they are also deriving from the objectives and goals of Environmental Education. Accordingly, it can be recognized that Education for Sustainable Development has successfully caught the wave of the overall educational reform and it became the new orientation itself.

As such, the UN announced the Decade of Education for Sustainable Development (2005-2014) (DESD) with the overall goal "to integrate the values inherent in sustainable development into all aspects of learning to encourage changes in behavior that allow for a more sustainable and just society for all" (UNESCO 2006: 1).

As it can be seen, by the time the process has reached the 5th phase, sustainable development became the key concept of the new educational orientation with human well-being in the center. In the following section I aim to reveal the underlying theoretical concepts of this transformation. However, for a more detailed understanding the reader is referred to the Appendix for a summary of the overall changes in the concepts of EE/ESD through the international principles.

3.2. Theoretical Framework

First of all, here I would like to clarify that the notion of "Western societies" or "Western science" is used following Val Plumwood (2002) and most of the other authors referenced in the thesis. By these notions I actually mean the powerful, dominant institutions (such as the World Bank, the IMF, the UN or the UNESCO) and the corporate elite groups based mainly in Europe and the US; and the group of scientific experts who went through the standardized

process of university education. Hence my arguments are based on the assumptions that these groups are in the center of the global power relations – due to their ability of funding and their expertise – therefore composing the improvement of Environmental Education and Education for Sustainable Development.

3.2.1. The top-down approach as another way of colonization

"There is evidence that formal ESD in 'developed' countries is dominated by UNESCO guidelines for the development of the curriculum" (Kopnina 2012: 710). This statement could be clearly observed from the previous section; or in other words it is apparent that the international frameworks of Education for Sustainable Development were elaborated at a level of an expert elite. Kopnina and Meijers (2014: 192) argue in line with Mosse (2010, cited by Kopnina & Meijers 2014) that the mainstream concept of sustainable development is dominated by the "big players" such as The World Bank or the International Monetary Fund (IMF) as financers and powerful international organizations such as the UN or the UNESCO being in charge for the curriculum development of ESD.

Deriving from this argumentation ESD can be considered as a form of the "foreign aid" concept as it is favored by not only the powerful organizations but also by the corporate elites (Kopnina 2014: 80). Consequently, as Samoff and Stromquist (2001: 639-640) argue, the legitimate knowledge on development and management in education is highly centralized in Western societies. By their dominant role in regulating the nature of this improvement, the information is made vague by scientific approaches. This concept is elaborated further in the next section. Moreover, since the rules by which knowledge is deemed valid or important are set by a group of experts, this approach reinforces the current global power relations further.

This way, since the "enlightened ideology of development" is defined by the powerful Western countries, these investments could guarantee easy access to natural resources as well as the re-establishment of neo-colonial power structures (Kopnina 2014: 80). In addition, this neo-colonial strategy is used also to integrate developing societies into the global political economy by applying the outlined approach as a sort of foreign aid of knowledge (Samoff & Stromquist 2001: 642).

Knowledge, what matters for the sake of development in education processes is primarily created or refined and distributed in the favor of the Western elite. Therefore, although a few scholars outside Western elites could be involved in the generation and development of this process through dominant institutions, the so called traditional or indigenous knowledge might be rejected or dismissed. Despite that this aspect will only be articulated in section 5 Discussion, it can be seen here that the approach outlined also reinforces global power relations dominated by Western societies (Samoff & Stromquist 2001: 647-649).

Therefore, many critiques (e.g. Goldsmith 1996; Shiva 1993; Easterly 2006; Bodley 2008; Oliver-Smith 2010, cited by Kopnina 2014: 193) have argued that foreign aid programs aiming to promote development established from the Western perspective are problematic. According to Kopnina and Meijers (Ibid.), such programs "may have caused more harm than good in exacerbating global inequalities and have largely failed in addressing ecological crises".

Since the mainstream discourse on sustainable development and the closely related concept of ESD are dominated by powerful elites, the priorities outlined often follow their interests instead of aiming for a greater good. These objectives rather emphasize social and economic development overshadowing environmental premises (Kopnina 2012b: 612). Consequently, ESD pursues the propositions where nature is only seen as a tool of resources providing "ecosystem services" for the sake of human well-being (Ibid.: 609). According to Persson (2008: 45) ecosystem services mean the "indirect value species have due to their role in the ecosystems that they are a part of". Or in other words, these are those basic processes that humans' lives and well-being depends on (Ibid.: 46). However, according to the dominant point of view where nature is only seen as resources, students might not have a chance to learn to recognize its value in itself (Kopnina 2012b: 613).

In addition, there is one more argument against the top-down approach of outlining the principles of sustainable development and ESD – namely that this way students will be discouraged to challenge these perspectives (Kopnina & Meijers 2014: 197). Hence the current dominant view of nature as resources for economic development and consumerism will be perpetuated and the ways of preserving the environment for its own sake will be undermined (Ibid.: 192). Consequently, Jickling (2005, cited by Kopnina & Meijers 2014: 193) asks the question whether "ESD really has the capacity to challenge the status quo and

would it not contribute more to sustaining present global inequities, given its corporate and political sponsorship?"

3.2.2. From the Western perspective

It can be easily argued that since the UNESCO guidelines of ESD are elaborated by Western scientific experts, the knowledge that it is built on serves the interests of the powerful – those who are at the center of the dominant rationalist worldview, the corporate elite (Plumwood 2002).

Hereby, I aim to elaborate on the underlying attributes of the Western scientific knowledge, based on Plumwood's arguments (2002). As she argues the failure of rationalism or the "ecological crises of reason" is rooted in the "illusion of disembeddedness", i.e. humans of Western societies tend to see themselves as ecologically disembedded, or in other words as not a part of nature. In relation to this concept, Ingold (2000: 209) argues that the growing current concern is about the global environment that actually "signals the culmination of a process of separation". According to this perception, "the world" is seen from a global perspective – from above – far away from the lived experience that leads to a feeling of detachment (Ibid.: 210-211, 216).

As Plumwood (2002) claims, this worldview of disembeddedness is inherently irrational since the current social-economic system largely depends on the resources of nature. As such, Ingold (2000: 214) argues, this perspective can be seen as a colonial one from a Western point of view whereby the global environment is ours to be occupied and managed for the sake of production and human well-being.

However, deriving from this there is "the idea that human life takes place in a self-enclosed, completely humanized space that is somehow independent of an inessential sphere of nature which exists in a remote space 'somewhere else'", this way creating the overarching "dualism of human/nature" (Plumwood 2002: 51-52). This worldview somehow explains the "sado-dispassionate models" of Western scientific knowledge, as it is completely distanced and neutral emotionally and "ethico-politically disengaged" of the costs and consequences of exploiting nature – the practice is seen simply as a means to an end of social-economic development and well-being (Ibid.: 22, 41). As Kopnina writes (2012a: 703), the dominant

Western worldview can be featured by the "human exceptionalism paradigm" whereby although humans are a part of nature, they usually perceive themselves as above nature therefore excluded from its restraints. Hence Plumwood claims that "if an ecosocially disembedded rational economy hand-in-hand with a sado-dispassionate productivist science were to become the twin forces shaping human history, the future would look very grim indeed" (Plumwood 2002: 39).

The concept of what Plumwood calls the "commodification of nature" derives from the perception of humans above nature. According to this, our environment is reduced to a production model where the resources are treated in terms of contribution to development and production (Plumwood 2002: 40-41). Actually, all the aforementioned concepts are closely interrelated in the sense that the sado-dispassionate models of Western scientific knowledge derive from the illusion of disembeddedness and the human/nature dualism and together they lead to the commodification of nature where our environment is seen as a means to an end of our well-being – something to be exploited without boundaries (Ibid.).

Since the Western scientific knowledge characterized above is used for reinforcing the power of humans over nature, this way people might simply never know how to do something purely for the environment and not for their own sake. The way I see it, the reason for this is the deeply rooted anthropocentrism or human-centeredness.

3.2.3. That is anthropocentric

Once again, since the international frameworks of ESD were elaborated by Western scientific experts serving the dominant power dynamics, nature is seen nowadays as resources for social-economical development and human well being. Persson (2008: 9) calls this concept the "anthropocentric instrumentalism". He articulates it as "anthropocentric because it only considers the value of other species have for human beings, and instrumentalism because it does not conceive of other species as having value as ends, but only as a means to something else".

As it was shown in the section 3.1. International Policies, the transition from Environmental Education to Education for Sustainable Development began with the Rio Earth Summit in 1992 where the concept of sustainable development was introduced. The resulting

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document of the summit, the Agenda 21 contains recommendations for the new concept of Education for Sustainable Development to meet the also recently introduced "triple bottom line" of social, economic and environmental well-being (UN 1992). Some critiques call this the oxymoron of sustainable development, since the goal appointed is to achieve an appropriate balance between the three. However, as Jenkins and Jenkins (2005: 117) state, "the appropriate (balance) may not always mean an even balance, as it will depend on the context of the issues being considered".

According to the outlined arguments, it can be stated that the concept of ESD is a departure from the focus of environmental maintenance and a shift towards social and economic (sustainable) development (Jenkins & Jenkins 2005: 115-116). At the same time, this means a disavowal from the original objectives of EE with environmental problems and the process toward their solutions in the focus for reaching social fairness as well (Kopnina & Meijers 2014: 193). However, in line with the Western scientific knowledge, ESD assumes the environment as a mass of natural resources for the sake of economic development and for sustainable living (Kopnina 2012a: 703); vis-á-vis the earlier forms of EE that perceived nature as a holistic system that has intrinsic value (Ibid.). The key concern here is that the pluralistic approach of Education for Sustainable Development subordinates the eco-centric perspective to the anthropocentric interests of the Western political and corporate elites (Kopnina 2014: 78).

In her arguments, Plumwood (2002) urges the countering of this anthropocentric orientation of the Western dominant worldview. She introduces the objectives of it through the structure of centrism divided into four claims and she proposes a concept of "ecological education" as a base of the desired social change. Opposing the "radical exclusion" or the view of nature as a "hyper-separate lower order" it would be appropriate to point out humans as a part of their environment. In order to counter "backgrounding and denial" of nature's agency it is also important to raise awareness of the human dependency of its resources. Counteracting the aggressive "incorporation and assimilation" of nature to the human space it is crucial to dispose the view of human superiority (Ibid.: 112). Finally, one of the most important things is to oppose the "instrumental view" of nature with "some degree of human humility and sensitivity to nature's own creativity and agency" (Ibid.: 107, 111-113).

In line with Plumwood's claims, Kopnina (2012a, 2012b, 2014) argues for a reorientation of ESD towards the eco-centric, or what Naess (1973: 95) calls the "deep ecology" perspective. As Naess (1973: 95) claims the "deep ecology" would involve a departure from anthropocentric environmental concerns such as pollution or resource depletion, to deeper perspectives that concern conservation for nature's own sake. This shift would call also for the re-examination of the deeply anthropocentric dominant Western worldview in which those of humans are seen as disembedded from or superior to nature and therefore unable to sort out all of its problems (Kopnina 2012a: 704). Moreover, Scott (2005) proposes that instead of the "triple bottom line" framed by the concept of sustainable development, the "real bottom line is the ecological integrity of the biosphere" (Scott 2005, cited by Kopnina 2012a: 706). In order to counter the anthropocentric bias of Education for Sustainable Development, Helen Kopnina (2014: 78) urges the "return to the principles of environmental education outlined in the Tbilisi Declaration and the Belgrade Charter with their aim of educating people to be actively involved in working toward the resolution of environmental problems (…) to ensure a truly sustainable future for the whole ecosphere, including humans".

To summarize the theoretical challenges of the transition between Environmental Education and Education for Sustainable Development, I would argue in line with most of the critiques that the notion of sustainable development tends to undervalue the social and environmental expenditures of development; and together with hiding the attempts for reinforcing the current global power relations in the background made by the dominant Western elite (following Kopnina 2014: 77).

4. Reflecting the Challenges of ESD: The Case Study

I will here introduce the basic characteristics of the progress of the Maltese Education for Sustainable Development system. While presenting the data obtained through the fieldwork on the nature and the factors that had shaped this evolution, a directed content analysis will be elaborated applying the outlined theoretical frameworks.

4.1. The Maltese Education System

4.1.1. Characteristics and issues

The Maltese education system is largely influenced by the British system due to the colonial past. According to this, the primary education in Malta takes place from age 5 to age 11, followed by the secondary education from age 11 to age 16 until which it is mandatory to attend school. After that the ambitious and determined students can go to post-secondary school for 2 years which prepares them for the University years from age 18. Moreover, each level of education in Malta has state, church and private schools. However, the church and the private school sector cater for the issue of increasing the essentially competitive culture of the Maltese schooling and distributes the resources for the best achievers instead of those who would need them the most (Mifsud 2012: 53-54).

One of the issues that might have had an effect on the implementation of Environmental Education in Malta is the overall reliance on the United Kingdom for their educational models and other resources. This fact raises the question of transferability of educational practices. Evidence have shown that if some particular practices provide promising results in one country, it does not mean that those could be successfully transferred to another country due to differences in culture, history, traditions and other circumstances (Mifsud 2012: 55).

Another issue deriving from the traditional, conservative and centralized British educational system is its monodisciplinary structure. As it is described in details in the International Policies part, both EE and ESD have interdisciplinarity as one of their main characteristics therefore some incompatibility problems might occur in the course of the implementation (Pace 2000: 6). However the fragmentary nature of the primary education still provides opportunities for incorporating environmental education practices in the system as cross-curricular topics (Pace 1997: 6).

Furthermore, the third issue of the Maltese education system when it comes to the implementation of EE is its examination-oriented nature. This can be considered as one of the major obstacles as well since it puts a great pressure on the children, their parents and also on the teachers. The rigid curriculum and the impacted timetable do not leave space for activities that are not in favor of preparing for the exams (Pace 2000: 9). Moreover, since teachers are assessed according to the students' passing rate, they "tend to judge the relevance of teaching resources and curriculum guidelines on the basis of their contribution to examination success" (Pace 1997: 6).

Consequently, as Pace (2000: 2) states, Environmental Education initiatives based on their original principles were not quite compatible with the main characteristics of the Maltese educational system.

4.1.2. Educational reform initiatives

After being a British colony for more than 150 years Malta finally became an independent republic in 1974. As Vincent Attard stated in the interview, the economic and industrial development had started off fast and it had led to a large extent of environmental degradation. Therefore those concerned for the state of nature in the Maltese islands realized that they had to do something about it. This, he said, was the time when a lot of environmental awareness and protection movements started to mushroom, providing a supporting infrastructure for EE initiatives. For example Nature Trust Malta was the main NGO attempting to raise public awareness even though they were mostly focusing on the informal education sector (Pace 1997: 2).

Moreover, Attard explained, at that time nature was seen as something very separate from humans. Due to their colonial past "Maltese seemed to have a problem realizing they own the island itself and therefore, its environment" (Mifsud 2012: 54). Hence there was the predominant feeling of helplessness among the citizens when they had to face with issues of their surroundings (Pace 2000: 7).

Following this, by the 1990s the need emerged to develop strategies in the formal educational sector as well in order to induce pro-environmental behavior (Pace 1997: 4). This necessity had led to an inquiry of introducing Environmental Education principles in the

system. As Pace (2000: 3) states the successful implementation had required a paradigm shift in the teaching and learning approach.

4.1.3. The beginnings of Environmental Education in Malta

According to Pace (1997: 11), the emergence of Environmental Education initiatives in Malta can be divided into three phases:

1. The *awareness phase* (1960s-1970s) of the growing environmental concern and the sporadic initiatives and needs for implementing EE in the system, that was described in the previous section.

2. The *fragmentary phase* (1980s-early 1990s) that has outgrown from the NGO initiatives of raising public awareness. It was the time of various movements to introduce the EE principles in the curriculum.

3. The *coordinated phase* (from mid 1990s) of the successful initiatives of Environmental Education or Education for Sustainable Development, such as EkoSkola.

As we have seen, the Environmental Education initiatives emerged from the NGOs' endeavors of boosting public awareness towards the Maltese environment. Furthermore, in the early 1990s there were three main, but unsuccessful attempts of introducing EE in the primary school curriculum (Pace 1997, Mifsud 2012). The UNESCO funded Environmental Education Programme (EEP) together with the establishment of a Science Center of the Education Division aimed at producing teacher's manuals on implementing EE as cross-curricular theme (Ibid.). However, these proposals did not consider the constraints of the educational system and they were hindered by the Education Division due to lack of interest in curriculum change (Pace 1997: 7). The third attempt was an award scheme called Dinja Wahda (One World) offered by another NGO (BirdLife Malta), consisting of fourteen activities aiming to promote "pro-environmental behavior" (Pace 1997: 8). Although this project can be considered as relatively successful it was never planned as a long-term process.

There were further attempts on introducing multidisciplinary themes for raising environmental awareness in a broad sense, such as the subject of Environmental Studies (1992) on the secondary level and the Systems of Knowledge (1989) as the entry requirement for the University on the post-secondary level (Pace 1997, Mifsud 2012). There were a

number of issues with reaching the goals though. The lack of educational resources, the lack of time in the timetable and the lack of teacher training have all hindered these initiatives together with the non-examinable nature of these subjects. However, when under the pressure of the exam-oriented system these themes had become examinable, they got to be only another tool for earning points and certificates (Ibid.).

In the mean-time, following these initiatives there was a growing need to implement and co-ordinate a change in the formal educational paradigm. On the legislative level of the supporting infrastructure of EE, the National Minimum Curriculum (NMC) was introduced between 1988 and 1991. As Pace (1997: 3) states, "the NMC outlines the need for a holistic, community oriented education that promotes self-directed learners who are able to critically analyze knowledge and apply it to a broad context". He also states that these "attributes have become synonymous with Environmental Education" (Ibid.). Therefore the attempts of the NMC can be considered as a simultaneous bottom-up or middle way approach for implementing the same objectives and characteristics of Environmental Education; however this notion is never mentioned and the proposed innovations had failed also because of the inflexibility of the educational system (Ibid.).

In my opinion, the proposal of the National Minimum Curriculum can be considered as the beginning of the third phase of the EE evolution in Malta, although it definitely required further and more institutionalized initiatives for it to strengthen. These movements can be divided into three main stages introduced in the following sections.

4.1.4. Center for Environmental Education and Research (CEER)

As shown above, one of the reasons why the former initiatives of Environmental Education have failed in Malta is the lack of pre- and in-service teacher training. The first person of EE in Malta, Paul Pace, explained in the interview that he had recognized the impeding factors of implementing the new educational scheme and together with the change in authority in the mean-time it became feasible to foster the matter.

However, he also said, it required a lot of "lip service" because everybody found the concept of EE and teacher training important, but when it came to investments, there were always other priorities. His ideas, he explained, were always geared on empowering people to

become change agents and eventually transfer the skills and attitudes to their students, and as such within the University of Malta he was the one pushing for the concept of creating a center for fostering EE.

The Center for Environmental Education and Research (CEER) was founded in 2004 within the Faculty of Education at the University of Malta and with the cooperation of the Ministry of Education, the Ministry of Rural Affairs and Environment and the Malta Environment Planning Authority (MEPA) (CEER website). Their aim is to promote Environmental Education and research in order to "catalyze change towards a sustainable society" (Ibid.). In co-operation with communities, governmental and non-governmental organizations and local and regional groups they work for the main objective of citizen empowerment (Ibid.).

Furthermore CEER caters for a Master's program in Education for Sustainable Development that provides pre- and in-service training for teachers and people from other fields as well, this way including the non-formal sector and enriching the program (P. Pace and M. Mifsud in interviews). As Censu Caruana stated in an interview, their aim is to show the students how to integrate ESD principles in the everyday teaching, this way making education more relevant to the real issues that we face as societies.

4.1.5. Nature Trust Malta (NTM)

In the first phase of EE evolution of Malta the main role was played by environmental NGOs in raising public awareness. Among this the outstanding one was Nature Trust Malta, a non-profit, non-governmental organization founded originally in 1962 (NTM website). Their main objectives were – and are until today – site management and habitat restoration, wildlife rescue, eco-tourism and education that became the focus in the 1990s (V. Attard in interview).

In the late 1990s Nature Trust Malta had linked up the forces with Paul Pace who was already making efforts to implement EE (or by this time ESD) in Malta and decided to join the Federation for Environmental Education (FEE; introduced later on) in order to start Education for Sustainable Development (V. Attard in interview). The decision can be considered as a bottom-up approach, but as it will be described later, FEE applies a top-down approach in implementing principles of ESD.

However, the idea of re-introducing the concept of education *in* nature by creating a place where children can go to do fieldwork was purely a grass root movement (V. Attard in interview). The idea was to have Xrobb l-Ghagin Nature Park as a site for countering the overall disembeddedness of the current age groups by educational visits where children can discover humans' connection to nature (Ibid.). So when the first part of the project was done between 2007 and 2010, the need to cater students there emerged. The park had opened its gates in April 2011 and Esther Sammut Carbone immediately took on the opportunity to start educational visits on a voluntary basis.

As Esther Sammut Carbone said when interviewed, "these 3-hours long educational visits offer the opportunity to take the students not only on a physical journey on the site but on a mental journey where from the idea of nature education what they came with we can take them through a deeper educational experience which challenges the students to take action at the end. In all the activities, while they start from something purely natural – e.g. trees, turtles or water – through the activity they are guided to think about human behavior towards these ecosystems which we rely on". However this journey can be considered as an anthropocentric bias in the concept of Education for Sustainable development, at the same time the activities are countering it by being in nature and showing the students the humans' embeddeness. Furthermore, Carbone explained, by now the whole concept slowly developed into moving on from site experience visits to thematic events available for second time visitors building on their first experiences.

Xrobb l-Ghagin Nature Park is a part of NTM's Outdoor Provision Programme (OPP). Besides the educational purpose, the aim was also to provide a demonstration and research site on sustainable environmental solutions – such as renewable energy, water and wastewater management, biodiversity and energy efficiency.

So to sum up this part I would say that I agree with Kopnina (2012: 710) who states that "it is especially important to understand the role of these organizations and their educational programming in the local context".

<u>4.1.6. EkoSkola Malta</u>

After Nature Trust Malta had linked up forces with Paul Pace, who had attended conferences organized by FEE on Education for Sustainable Development, in 2002 they had launched a pilot project of EkoSkola attended by 6 schools from all the sectors of formal education in Malta (P. Pace in interview, EkoSkola Resource Pack).

As it is stated in the Resource Pack, which was handed out to the schools that wanted to join the program, the EkoSkola Program "aims at mobilizing the whole school to empower students to adopt an active role in environmental decision-making and action in their school and their local community". Furthermore, the program is aiming at infusing a sustainable lifestyle to the everyday functioning of the school in order to help the environmental ethic to become an integral part of all participants (EkoSkola Resource Pack). The process itself includes seven steps as guidelines to establish the whole school approach, but the concrete design and realization is up to the individual schools (P. Pace in interview, EkoSkola Resource Pack). The seven steps are the following:

1. Establishing the EkoSkola Committee
2. The Environmental Review
3. The Action Plan
4. Monitoring and Evaluation
5. Linking with the curriculum
6. Involving others (the local community and other stakeholders)
7. The Eco-Code

Finally, at the end of the process schools can apply for either a bronze or a silver certificate or directly for the Green Flag which is an internationally recognized, valuable label showing that the particular school had fulfilled the requirements established by the FEE (EkoSkola Resource Pack).

Although the implementation of the EkoSkola Program in Malta went quite well because, as Paul Pace stated when interviewed, the program provided "tangible examples of what ESD was all about (…) and that actually shifted the interest", there were some challenges as well. For example as Bernard Grixti, one of the EkoSkola teachers said "there was a vacuum regarding children with disabilities participating – or actually not participating – in the

program". However, when he took up this aspect of EkoSkola by trying to include the resource centers[1] and create the same opportunities for the disabled students as well, the process had accelerated quickly. As a result, Grixti said, the first resource center that joined the program had reached the Green Flag status in one year, and now there are 3 more that have achieved the award. Although it is considered to be a great achievement, there is another challenge regarding children with disabilities – namely their life outside the school. One of the main objectives of the EkoSkola Program is the empowerment or in other words "giving opportunities to everybody to participate and have their voice heard" but when these children go outside their school they find that these endeavors do not reflect real life (B. Grixti in interview). As Grixti explained "there is a breeze of change, but we are still living in a *disabled society* – both in the sense of infrastructure and in the mindset of people". Furthermore, Audrey Gauci said, the six EkoSkola teachers who are working hard on the implementation of the program meet other challenges day by day such as change in leadership in the schools, lack of financing and bureaucracy.

There is another closely related program run also by the FEE in Malta – namely the Young Reporters for the Environment (YRE). The program "aims to empower young people to take a stand on environmental issues they feel strongly about and to give them a platform to articulate these frustrations through the media of writing, photography or video" (FEE website). As Audrey Gauci, the national coordinator of the YRE program says, it is always about ESD but the main aim is to get the students on board so they are doing something for the environment through journalism. The topics usually depend on the age of the journalist group, but is should be a local environmental issue that they investigate on (A. Gauci in interview, also on FEE Website). The main challenge of the program, according to Gauci, is to actually find time for it within the rigid timetable or as an extra-curricular activity.

In addition, there is the Learning About Forests (LEAF) Program related to EkoSkola, run also by the FEE in Malta. LEAF "aims to make people reconnect with our woodland heritage and to imbue children with a sense of ownership of their environment which, in many places, has become lost over time" (FEE website). The main objectives of the program are to reconnect, educate and inspire people to protect the environment and the forests as a part of it for their own sake (Ibid.).

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[1] In Malta parents can decide whether they send their disabled children to regular school or to a resource center designed specifically for them (B. Grixti in interview).

It is apparent that the institutionalized initiatives in the third phase of the coordinated implementation of the EE/ESD principles were more successful. In addition they are coupled with a growing support from the government side which is "now realizing that environmental education is an effective and long-term solution to ensure environmental sustainability" (Mifsud 2012: 61).

4.2. The top-down approach in Malta

As we have seen above, Pace (1997: 11) argued that there are three major phases of the Environmental Education development in Malta. In addition, during the analysis I have discovered three major levels as well.

4.2.1. The International Principles

Although the first initiative for implementing EE in Malta is rooted in the personal interest of Paul Pace, he fostered the UNESCO funded program at the end of the 1980s. As he stated in the interview, the prototype curricula for the primary schools produced in the course of this program had reflected the principles outlined at the Tbilisi Conference (1977) – for example interdisciplinarity, student participation and development of skills, values and attitudes that go beyond knowing about the environment.

Here we can observe the global tendency that educational institutions were merely opting for "the easiest way out" – they simply re-labeled the traditional teaching *about* the environment practices as Environmental Education, instead of rethinking the overall educational approaches (Pace 2010: 4). This disposition had led to the aforementioned implementation issues in Malta as well, since the international principles did not accord with the inflexible, centralized educational paradigm (Ibid.: 4). However, these problems "characteristically reveal a predominance of a top-down approach to implementation in which the solutions are sought from outside the targeted community" (Ibid.: 6).

Furthermore, after the release of the Brundtland Report (1988) and the Rio Earth Summit (1992) the focus of EE had widened to take into account other sustainable development issues as well. So the concept itself had shifted from Environmental Education to Education for Sustainable development in Malta. Although Paul Pace argues that the principles of ESD are similar to the ones outlined at the Tbilisi Conference and that the process itself had remained

more or less the same (Pace 2010: 2), I only partially agree with this; since I base the main theoretical arguments of this thesis on the transition between the concepts of EE and ESD as it is being anthropocentric. However I agree with him criticizing the dominant view of "the evolution of Environmental Education as a linear process" seeing the new concept as better than the old one, therefore replacing it. As he argues, this outlook is reductionist and insensitive in the sense that it is not taking into account the needs, cultures and socio-economic backgrounds of education (Ibid.: 3). Furthermore, in my opinion this view shows the oppressive nature of outlining EE or ESD principles on the international level as a top-down approach.

Although there are initiatives countering this oppressive nature of international principles, I still argue that the Maltese institutions were quite willing to take them as the best practice – as it is already described above and will be shown later as well. I assume that the overall reason for this in Malta is their colonial past. The hierarchically structured educational system is a result of the more than 150 years that Malta spent as British colony (Pace 2010: 2). Therefore, the Maltese consider most of the foreign concepts as more beneficial and they do not question the superior positions (Mifsud 2012: 54). In addition, as Censu Caruana argued in the interview, from an advocacy point of view it is more feasible to go for already existing commitments instead of convincing the government to implement something completely new.

4.2.2. The Governmental Level

Traditionally the governments are considered to be in the focus of the top-down approach, however in the context of the thesis and the case of Malta, the government is in the middle way of the process. The main issue here hindering the implementation of Education for Sustainable Development is the compartmentalized nature of the government (C. Caruana in interview). According to Censu Caruana, there are many different ministries that do not talk to each other and they do not know what the others are doing hence going against a holistic approach of development that would foster the matter.

However, by the 1990s there was a growing environmental concern that had led to the need to implement educational strategies to induce environmentally friendly behavior (Pace 1997, 2000). Although the Maltese government had formed the Environmental Protection Act (1990) and the Maltese Structure Plan (1990) with 4 actual policies related to the field of

informal Environmental Education (Pace 1997, Mifsud 2012), there was rather a lack of a consistent national policy of the new educational approach that had resulted in the prolonging of these initiatives (Mifsud 2012: 59).

The exact factor that had fostered ESD in Malta again was, Paul Pace said, the change in the person of the educational authority. At that time he had a meeting with the new minister where they both agreed upon the need for motivating children to take action for the environment as well as on the need for a teacher training center at the University that would also promote Environmental Education.

To sum up, I would argue in line with Bezzina and Pace (2004: 21) that the educational authority has only the role of "catalyst of change" in the sense of enabling and providing support for the initiatives in the process of developing EE or ESD.

4.2.3. The Grass-root Level

As it was already articulated, the initiatives of raising public awareness towards the environment are rooted in the Maltese NGOs' activities that could be considered as a grass-root level (Pace 1997, V. Attard in interview).

Furthermore, based on Pace's research conducted in 2000 about the attitudes towards Environmental Education in the Maltese formal education system, I would argue that there was an emerging need for new educational approaches for the successful implementation of EE principles (Pace 2000). Among this, it is worth to mention for example the learner centered teaching method that would follow the participative nature of EE. As Pace argues, although the teachers were in favor of this method, they perceived it quite differently. On the other hand, they mostly agreed on that the "schools should provide learners with experiences and opportunities to develop problem solving skills and the ability to think critically" (Ibid.: 10).

In addition, the Caring for the Earth document (1991) had addressed the general public as they should be in the core of the actions to be taken in order to achieve an overall sustainable lifestyle (Pace 2010: 6). However, I consider this to be a contradiction since this suggestion had also come from the international level as a top-down approach. Nevertheless, Paul Pace

(2010) says that the need for change should come from the educational community of actively involved people; and that the grass-root level should be the main target of all EE or ESD initiatives (Ibid.: 6).

At this level the challenges are, according to C. Caruana, to show people the power they have over changing their own lifestyle and not depending on the government to take action instead of them. He says that in Malta people tend to not believe in this power maybe because of the colonial past and therefore the educational challenge is to reclaim it by developing leadership skills.

Here I would like to take the chance to introduce the Federation for Environmental Education (FEE) that I consider to be present at each stages of the Maltese Environmental Education system. The organization is "recognized by the UNESCO as the world leader within the fields of EE and ESD" (FEE website). The foundation process started in the 1980s whereby "a group of dedicated environmental experts were busy formulating ideas and concepts which they believed could help steer the world towards a more environmentally sustainable future" (Ibid.). Today their mission is to collaborate with their worldwide partners in order to empower people through education processes, based on the values of involving all the stakeholders through positive educational activities in the democratic decision-making (Ibid.).

FEE is in charge for running the widespread programs of Eco-Schools, Young Reporters for the Environment (YRE) and Learning About Forests (LEAF). Nature Trust Malta had joined the organization first as associate member in 2002 in order to be able to run the pilot project of EkoSkola. Later, considering the success of the first program, they had incorporated the other two of YRE and LEAF as well. An example of conflict was mentioned by Audrey Gauci, the national coordinator of the YRE program. She stated that sometimes she did not agree with the international criteria outlined by FEE – such as the age limits (11 and 21) of this particular activity. However, she also stated that there were meetings held yearly where most of the changes proposed were implemented.

So to sum up, I would argue that although the programs and the criteria outlined by FEE can be considered as a highly top-down approach, the implementation processes tend to incorporate the grass-root initiatives as well. Further practices countering the top-down approach explored in Malta will be introduced in the following sub-section.

<u>4.2.4. And the counter-practice</u>

It could be seen that the development of Environmental Education and Education for Sustainable Development in Malta had started at all levels approximately at the same time, therefore it cannot be classified as a purely top-down approach. The implementation of the international principles was in accord with the objectives proposed for an educational reform on the governmental and the grass-root levels.

However, as Paul Pace stated in the interview regarding the EkoSkola Program, the educational minister first wanted something similar but organized in Malta by the Maltese experts. Later he could be convinced that although joining the FEE and running their programs can be considered as following a top-down approach, the membership is voluntarily and the international quality criteria would grant a degree of recognition for the matter.

Moreover as Paul Pace and Audrey Gauci emphasized, the schools are not forced to participate in the EkoSkola program, it is completely voluntary and although they usually follow the seven steps outlined, the process itself is formed by them. This can be considered as an example of incorporating the grass-root initiatives.

The Maltese practice puts a great emphasis on empowerment, one of the main characteristics of ESD itself. As Bernard Grixti explained "with EkoSkola student participation is not just on paper, it is there in practice" and even the students living with disabilities that are usually marginalized by the ESD discourse are now exposed to the world – they are not forgotten or isolated anymore but they can actually showcase their achievements. Furthermore, the program had reached new ends by getting into an Eco-Parliament where the children are actively participating in the decision-making processes and their voices are heard on the political level regarding issues concerning their future (V. Attard in interview). Vincent Attard claims in the interview "this made us realize that we are not the ones who have to make the change but we have to educate people to bring about this change themselves". He believes that if ESD is done the right way it can show people how their contribution counts in shaping a sustainable future.

The EkoSkola Program is also aiming for reaching out to the local communities and implement empowerment there as well. Censu Caruana believes that if the change happens at

the community level and the grass-root level with the involvement of citizens and with the backing of policy makers it is more beneficial for all the stakeholders.

So to sum up, I would say that the main objectives of ESD which are empowerment and the development of critical thinking seem to be effective tools to counter the oppressing top-down approach by equally strong grass-root initiatives. Paul Pace even said that if the government and the other corporate promoters really knew what they were investing in, there is quite little chance that they would have actually sponsored it; because eventually these empowered critical thinkers will start to question the unsustainable society and economy.

4.3. The anthropocentric bias in Malta

As seen previously, after the Brundtland Report (1988) and the Rio Earth Summit (1992) the Maltese Environmental Education development had put a greater emphasis on other sustainable development issues such as the social and economic ones (Pace 2010: 2). Therefore, the focus of the educational reform had broadened on all stages. For example, as Esther Sammut Carbone said that Nature Trust Malta had also implemented the notion of sustainable development in most of their already existing practices. In the Center for Environmental Education and Research this happened with the entry of Censu Caruana whose main focus of activities and research is poverty eradication. He states that "poverty and environmental problems are interlinked. Most of them have the same root cause, which are the certain models of development that are leading to increased poverty and increased destruction of the environment".

In addition, all of the informants' first ideas about EE were nature education; however in the process they realized the broader perspectives. Mark Mifsud claims that "people eventually start to comprehend that we are actually a part of nature, our life support system depends on the environment therefore we are also affected by its problems – so humans are very much central here". Furthermore, he thinks that Environmental Education or ESD is not only about the relationship between humans and nature, but also among humans – "there are a lot of social issues that are still important to attain sustainability, for example poverty".

In the Xrobb l-Ghagin Nature Park the most powerful activity is, according to E. Sammut Carbone, the Silent Exercise, where by actually stopping for five minutes to pay attention to

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themselves and each other, children can realize that their visit is not only about nature education but about the well-being of humans and the planet. As she explains, ESD at Xrobb l-Ghagin always targeted the development of attitudes and values of being respectful and altruistic for everything and everybody on the planet and hence reaching underlying changes in human behavior for the sake of sustainable development. In addition, Vincent Attard claims that "obviously one could not put away the aspects of economy and society in the whole scenario of sustainability".

These examples introduced above show that there is an anthropocentric bias in the development of EE or ESD in Malta as well. By outlining these instances I merely wish to show the Maltese face of the aforementioned global tendency. Moreover, particular practices can also be found for countering the human-centered bias.

4.3.1. And the counter-practice

The most powerful example here is the vision of Nature Trust Malta, the leading environmental NGO in Malta, on ESD. They declare that "ecological sustainability is held as the widest sphere that supports the smaller sphere of society and its economy"; moreover "it is about altruism defeating egoism within these widening spheres" (NTM website). Here I would like to introduce a persuasive quote from the organization:

> When nature is no longer visualized as something separate from us, but rather we are a part of it and, in turn, it is essential for human survival, we are more open to change our habits towards ones which care for ecology and the biosphere as a whole. (NTM website)

Vincent Attard states that working with the concept of ESD showed that there are ways to get people realize that environmental problems are affecting their lives and as such it is their duty to make a change.

In addition there are two more examples of countering the anthropocentric bias in Malta. One of them is the Xrobb l-Ghagin Nature Park itself where the educational activities are held in nature hence ensuring a way of reconnecting for the young students with their environment. The other example is that in the YRE activities there is actually an environmental bias in the topics that children choose to investigate on (A. Gauci in interview).

Finally, I would like to close this part of the thesis with the positive mind of what Censu Caruana says, that "there is another way of living where we can privilege our connection to nature and our quality of life".

5. Discussion

In this section I would like to discuss three main approaches that could be complementary or counter-concepts to the outlined theoretical and practical challenges of Environmental Education or Education for Sustainable Development. However, I would like to note that it is not my intention to provide solutions. These are concepts worth considering for further development, based on the research and the analysis. These could be topics also for future inquiry.

5.1. Empowerment

As it can be seen from the Maltese case study, empowerment is one of the strongest attribute of EE/ESD. Although it is not stated in the international principles, participation and critical thinking are among the main objectives since the very beginning (e.g. Belgrade Charter 1975, Tbilisi Declaration 1977).

However, there are three major challenges that could hinder the aspect of empowerment in EE/ESD. First, the conservative nature of most of the educational systems tends to conform students to proposed norms thereby creating an uncritical audience, or "passive recipients of knowledge" (Bezzina & Pace 2004: 3). Second, although there is an inspiration for a shift in the principles of education, the reforms proposed through a top-down approach could be contradictory. As Leal Filho and Pace (2002, cited by Bezzina & Pace 2004: 8) argue, there are three main characteristics of the response for the introduced changes: (i) when the change comes from outside of the community, or as a sort of forced top-down approach, people tend to "renounce the change and keep the status quo"; (ii) when the change would need a profound reorientation of the system, people tend to "adopt practices that are only a travesty of the new lifestyle"; (iii) but when the change comes from inside the community, people tend to "embrace the new lifestyle and face up the new challenges". Third, when it comes to the topic of environmental problems, people often feel helpless and frustrated since the mass

media favors to lower the importance of individual contribution; therefore the citizens rather turn to the authority for resolutions (Bezzina & Pace 2004: 14).

In contrast, EE/ESD and the eco-schools program provide a whole school approach that tends to involve all the stakeholders in the decision-making processes of the environmental policy that "empowers individuals with the responsibility and the means to bring about change (Bezzina & Pace 2004: 14, 21). Furthermore, this approach does not only involve those of responsible for the school development, but also the local communities (EkoSkola Resource Pack).

The critical environmental assessment (EA) education model targets local communities leaning to empowering the citizens to take over the responsibility of resource management (Diduck 1999: 87). This model is in line with the principles of EE/ESD as it applies the methods of transformative learning and participatory democracy, however its most important attribute seem to be critical thinking. Along with a dialogical approach in education that poses the students in charge for the learning processes, people involved are challenged to "empower themselves for social change" (Ibid.: 87, 89). The critical educational approach develops consciousness and appropriate skills and competences that are akin to social action. This procedure aims to increase personal autonomy and public empowerment that mitigate the common frustration and powerlessness towards environmental problems (Ibid.: 88, 92). Furthermore, as Bezzina and Pace (2004: 11) point out, the publication of the aforementioned Caring for the Earth document (1991) is addressed to the general public instead of the governmental level therefore fostering "the active participation of the grass-roots in environmental decision-making".

To sum up, for countering the purely top-down approach in EE/ESD that means that the principles are outlined in a central level above and made to implement in each school of each country, the answer does not seem to be a purely bottom-up approach. It could lead to a high level of fragmentation in the program because the decisions and the policies would be unique for each school. In line with Bezzina and Pace (2004), I would argue for a mix of both strategies whereby the overall principles are outlined on the international level – as it is now; they are facilitated by the government as the "catalyst of change", but the exact contents are elaborated by the empowered local stakeholders standing up for the needs of their unique settings (Bezzina & Pace 2004: 21).

5.2. Place-based approaches

The colonizing nature of the top-down approach of EE/ESD can be considered as an attribute of the current globalization tendencies which are potentially destructive for the environment and for local communities by homogenizing cultures and exploiting natural resources through corporate capitalism (Gruenewald & Smith 2008: xiii). As it could be seen from the Maltese case study, this could lead to a sense of "placelessness" whereby people experience a sort of alienation from local communities and their environment (Ibid.: xvi). Besides the involving nature of the whole-school approach proposed by the eco-schools program, there is another way for countering these tendencies – namely place-based education.

The place-based educational (PBE) approach tends to relate the process to the well-being of the local communities through enculturation; providing a "sense of agency" whereby people feel empowered and equipped with the appropriate knowledge and skills to participate in democratic decision-making for resolving the social and environmental problems (Gruenewald & Smith 2008: xvi, McInerney et.al. 2011: 4). Similarly to the whole-school approach, place-based education connects schools with local communities emphasizing the importance for the students "to learn about and care for the ecological and social well-being of the communities" (McInerney et.al. 2011:5).

Moreover, the attributes of the place-based educational approach show similarities to the objectives of EE/ESD. By building concern for the local culture and the environment, PBE enhances critical thinking through which students are confronted to and start challenging the dominant Western culture, the conservative education system and the devastating impact of global capitalism (McInerney et.al. 2011: 5, 11). By fostering community engagement and open communication students can gain the appropriate skills and values for participating in democratic decision-making processes (Ibid.: 4, 11). And finally, by experiential forms of learning students can directly connect to the lives and cultures of their local communities, hence "developing a sense of … ownership, identity and belongingness" (Ibid.: 5, 11). Consequently, these objectives could lead to strong relatedness to local traditions and practices about caring for one's environment. However, this proposes the same challenge explored regarding EE/ESD – namely that it is none of the corporate elite's interest to sponsor these initiatives because then the current institutional arrangements, which are highly beneficial for them, would be questioned.

Traditional Ecological Knowledge (TEK)[2] is a possible part of the local traditions that describes the place-based knowledge and beliefs that local communities could hold of their environment (Menzies & Butler 2006: 6). This knowledge is accumulated, developed and handed over through generations with adapting to occurring changes about the principles of "the ecosystem as a whole" and the appropriate resource use that sustains the community's lives (Ibid.: 5-6). Therefore, teaching and learning in the community – as it is proposed by the place-based educational approach – would be beneficial for passing on the historical knowledge accumulated and stored on the environment, its management practices and the local traditions (Nazarea 1999: 11).

One of the greatest challenges here is the oppressing nature of colonialism on traditional knowledges. As Seth (2009: 377) argues the "civilizing mission" of Western science as a part of the colonial context "denied the status of knowing subjects [of the natives] in terms of scientific knowledge". Hence the standardized curriculum and the outlined principles of EE/ESD by Western scientific experts are in conflict with "local or indigenous forms of knowledge" (Ibid.: 378). On the other hand, it would be beneficial to consider the incorporation of TEK into EE/ESD anyway, since local or indigenous people could provide alternatives to the exploitative nature of the dominant modes of resource management (Menzies & Butler 2006: 2). Furthermore, these traditional cultural practices provide opportunities for students to reconnect with their natural environment (Gruenewald & Smith 2008: xx).

In addition, the attributes of traditional ecological knowledge also match the objectives of EE/ESD and the place-based education model. As Menzies and Butler (2006) outline, TEK is dynamic in the sense that is emphasizes long-term practices and so does EE/ESD by targeting long-term behavior change. TEK is locally developed and provides specific information on the ecosystem and natural resource use; moreover it is holistic and embedded in a particular environmental and cultural context showing the interconnectedness among its elements (Menzies & Butler 2006: 9-10). Therefore, as Nazarea (1999: 17) argues, local people have developed a special and intimate relationship with their surroundings they rely on, that – if incorporated – could foster the sense of responsibility among students.

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[2] I use the term Traditional Ecological Knowledge (TEK) following Menzies and Butler (2006). This type of knowledge can be found under other names as well in the discourse – such as Indigenous Knowledge, Situated Knowledge or Local Ecological Knowledge – with slightly different attributes, but meaning mainly the same thing.

Accordingly, I would argue that the place-based educational model and the traditional ecological knowledge could be complementary concepts to EE/ESD. Although, at the same time I would argue for not abandoning the Western scientific concepts in education, because they provide perspectives of understanding the global processes. Integrating the two types of knowledge could lead to a highly diverse and deep comprehension of our environment and a sense of reconnecting to and responsibility for nature (Seth 2009: 381). As such this type of education would cater for opportunities for countering the top-down approach and the anthropocentric bias of the current nature of ESD.

5.3. Eco-centric perspectives

As it is outlined in the theoretical frameworks, Kopnina (2012a, 2012b, 2014) argues for a reorientation of ESD towards eco-centric perspectives. She does that by suggesting a return to the principles of Environmental Education as they were outlined in the Belgrade Charter (1975) and the Tbilisi Declaration (1977) viewing the environment as a whole, with humans as a part of it (Kopnina 2014: 78, Strapp 1969). This could be considered as an eco-centric perspective whereby the resolutions of the environmental problems would serve nature's own sake (Naess 1973: 95). On the other hand, this eco-centric approach suggests that humans should subordinate themselves to a "greater whole" that is the "ecological integrity of the biosphere" itself (Bonnett 2002: 17; Scott 2005 cited by Kopnina 2012: 706). Consequently, in my point of view, the eco-centric perspective could provide a counter-concept or challenge to the anthropocentric bias of the current practices of ESD where the environment or nature is seen as a means for maximizing the human-self interests; although it might also produce another bias (Bonnett 2002: 13, 17). Nevertheless, I would argue in line with Bonnett (2002: 14) that "our relationship with nature … is an important aspect of our identity".

The environmental connectedness perspective, outlined by Beery and Wolf-Watz (2014: 198), is "the idea of nature's potential for individual transformation towards higher levels of environmental concern and pro-environmental behavior". This idea basically suggests that the experiences gained through a first-person encounter with nature – or in other words, spending time in nature – will produce emotional relatedness whereby people tend to act in favor of the environment (Ibid.: 199). Although this perspective matches the principles of learning *in* the environment, and its holistic characteristic where humans are seen as an internal part of nature is in line with the objectives of EE/ESD, the idea is quite contested. In my opinion, there is a

gap in the sense that the human behavior is not devised only by the presence or lack of environmental encounter, but there is another link that is exactly Environmental Education or Education *for* Sustainable Development (Ibid.: 202). Moreover, this perspective suggests the aforementioned eco-centric bias in which case humans are subordinated to nature through its determining aspect of behavior. However, in line with the original ideas of the environmental connectedness perspective and my previous arguments for place-based approaches, Beery and Wolf-Watz (2014) suggest a way forward where the concept of "nature" would be replaced by the concept of "place". Hence the first-person experiences would be gained through a situated, specific context creating an emotional attachment or bonding to one's local community that could foster a stronger environmental ethic (Beery & Wolf-Watz 2014: 199, 203, McInerney et.al. 2011: 7).

To sum up, I would argue in line with Bonnett (2002: 17) that we should research on and discuss possible approaches that are neither anthropocentric nor eco-centric. Although it currently seems to be impossible, we should aim for striking an equal balance among the three pillars – environmental, economic and social – of sustainable development, through striking also an equal balance among the methods of education *in*, *about* and *for* the environment. The reason why I cited the aforementioned three concepts of empowerment, place-based approaches and eco-centric perspectives, is because in my opinion these would worth to be further researched and discussed and later incorporated into the principles of EE/ESD for developing the appropriate knowledge, skills, attitudes and connectedness towards one's place in order to solve its problems.

6. Conclusion

The first question explored in the thesis has been: What are the theoretical challenges of the transition between Environmental Education and Education for Sustainable Development?

In conclusion, I would argue that the main theoretical challenges are the overarching global power structures dominated by Western societies that have a determining role in the transition between Environmental Education and Education for Sustainable Development. They have shaped these concepts in a way that by the time the development of the international principles had reached the 5th phase of ESD as the new orientation of educational reforms, the notion of sustainable development became the key concept with the human well-being the focus.

The second question explored in the thesis has been: How is this transition related to the overarching global power structures?

In conclusion, I would argue that this transition is closely related to the overarching global power structures in the sense that the notion of sustainable development was outlined by Western scientific experts, whereby nature is seen as an instrument or means to the human-centered interests. Accordingly, it was implemented as a sort of "foreign aid of knowledge", replacing the more eco-centric objectives of Environmental Education, following a top-down approach that had finally created an anthropocentric bias in the system. Consequently, the balance among the three outlined pillars – economic, environmental and social – seems to be impossible to achieve in the current frame of mind.

The third question explored in the thesis has been: How are these theoretical challenges represented and reflected in the Maltese Education for Sustainable Development system?

In conclusion, I would argue that these theoretical challenges are clearly represented in the process of development of the Maltese Education for Sustainable Development system. Since the impact of their colonial past can still be seen on the education system, Malta tended to be open for implementing the international objectives and programs of EE/ESD outlined on a higher level that led to recognizable anthropocentric bias following the principles of sustainable development. However, the study had explored practices countering the

overarching top-down approach by incorporating initiatives from all levels – including the grass-roots as well. The participation in the EkoSkola program is completely voluntary and moreover it provides opportunities for empowerment for all the participants. Furthermore, the anthropocentric bias is reflected in a way that the ESD initiatives provide space for counter-practices such as education *in* nature that could re-create environmental connectedness and develop skills and attitudes for solving the urging issues of sustainability.

In addition, the aforementioned counter-concepts of empowerment and eco-centric perspectives, together with place-based approaches are opened for discussion and further research, as they could be complementary to the current stage of Environmental Education and Education for Sustainable Development.

Hopefully, by discussing the historical and current challenges of the transition between EE and ESD from a political ecology perspective, my thesis has contributed to the ongoing ESDebate as well as to the overall Human Ecology discourse.

Bibliography

Beery, Thomas H., and Daniel Wolf-Watz (2014). Nature to Place: Rethinking the Environmental Connectedness Perspective. *Journal of Environmental Psychology* 40, 198-205.

Bezzina, Christopher and Paul Pace (2004). *Promoting School Development Through Environmental Education*. Msida: University of Malta.

Blommaert, Jan and Dong Jie (2010). *Ethnographic Fieldwork: A Beginner's Guide.* Exeter: Short Run Press.

Bonnett, Michael (2002). Education for Sustainability as a Frame of Mind. *Environmental Education Research* 8.1, 9-20.

Center for Environmental Education and Research website. http://www.um.edu.mt/ceer Accessed 2016-05-17

Diduck, A. (1999). Critical Education in Resource and Environmental Management: Learning and Empowerment for a Sustainable Future. *Journal of Environmental Management* 57.2, 85-97.

EkoSkola Malta website. http://www.ekoskola.org.mt/ Accessed 2016-05-17

EkoSkola Resource Pack. Material adopted from *Eco Schools Handbook*. Tidy Britain Group, 2001.

Federation for Environmental Education website. http://www.fee.global/ Accessed 2016-05-17

Gruenewald, David A., and Gregory A. Smith (2014). Introduction: Making Room for the Local. In David A. Gruenewald, and Gregory A. Smith (eds.) *Place-based Education in the Global Age: Local Diversity*. London: Routledge, pp: xiii-xxiii.

Hsieh, Hsiu-Fang, and Sarah E. Shannon (2005). Three Approaches to Qualitative Content Analysis. *Qualitative Health Research* 15, 1277-1288.

Jenkins, Kathryn A. and Bertram A. Jenkins (2005). Education for Sustainable Development and the Question of Balance: Lessons from the Pacific. *Current Issues in Comparative Education* 7, 114-129.

Kopnina, Helen (2012a). Education for Sustainable Development (ESD): The Turn Away from 'Environment' in Environmental Education? *Environmental Education Research* 18, 699-717.

Kopnina, Helen (2012b). Evaluating Education for Sustainable Development (ESD): Using Eco-centric and Anthropocentric Attitudes Toward the Sustainable Development (EAATSD) scale. *Environment, Development and sustainability* 15, 607-623.

Kopnina, Helen (2014). Revisiting Education for Sustainable Development (ESD): Examining Anthropocentric Bias Through the Transition of Environmental Education to ESD. *Sustainable development* 22, 73-83.

Kopnina, Helen and Frans Meijers (2012). Education for Sustainable Development (ESD) Exploring Theoretical and Practical Challenges. *International Journal of Sustainability in Higher Education* 15, 188-207.

Malta Enterprise website. http://www.maltaenterprise.com/en/foreign-investors/about-malta/facts-figures Accessed 2016-05-17

McInerney, Peter, John Smyth, and Barry Down (2011). 'Coming to a Place Near You?' The Politics and Possibilities of a Critical Pedagogy of Place-based Education. *Asia-Pacific Journal of Teacher Education* 39, 3-16.

McKeown, Rosalyn, C.A. Hopkins, C, R. Rizi and M. Chrystalbridge (2002). *Education for Sustainable Development Toolkit.* Knoxville: Energy, Environment and Resources Center, University of Tennessee.

Menzies, Charles R. and Caroline Butler (2006). Introduction: Understanding Ecological Knowledge. In Menzies, Charles R. (ed.) (2006). *Traditional Ecological Knowledge and Natural Resource Management.* Lincoln: University of Nebraska Press, pp: 1-17.

Mifsud, Mark (2012). Environmental Education Development in Malta: A Contextual Study of the Events that Have Shaped the Development of Environmental Education in Malta. *Journal of Teacher Education for Sustainability* 14, 52-66.

Nature Trust Malta website. http://www.naturetrustmalta.org/ Accessed 2016-05-17

Nazarea, Virginia D. (ed.) (1999). *Ethnoecology: Situated Knowledge/Located Lives*. Tucson: University of Arizona Press.

O'Reilly, Karen (2008). *Key Concepts in Ethnography.* London: Sage.

Pace, Paul (1996). From Belgrade to Bradford – 20 Years of Environmental Education. In Leal Filho, W.D.S., Z. Murphy and K. O'Loan (eds.) *A Sourcebook for Environmental Education: A Practical Review Based on the Belgrade Charter.* Lancashire: Parthenon Publishing Group.

Pace, Paul (1997). Environmental Education in Malta: Trends and Challenges. *Environmental Education Research* 3, 69-82.

Pace, Paul (2000). Attitudes Towards Environmental Education in the Maltese Formal Education System. *Communicating Sustainability. Environmental Education, Communication and Sustainability Series* 8.

 Pace, Pace (2010). Education for Sustainable Development: Current Fad or Renewed Commitment to Action? *Journal of Baltic Science Education.* 9, 315-323.

Persson, Erik (2008). *What is Wrong with Extinction?* Lund: Lund University.

Plumwood, Val (2002). *Environmental Culture: The Ecological Crisis of Reason*. Abingdon: Psychology Press.

Samoff, Joel, and Nelly P. Stromquist (2001). Managing Knowledge and Storing Wisdom? New Forms of Foreign Aid? *Development and Change* 32, 631-656.

Sayer, Andrew (2000). *Realism and social science*. London: Sage.

Seth, Suman (2009). Putting Knowledge in its Place: Science, Colonialism, and the Postcolonial. *Postcolonial Studies* 12, 373-388.

Strapp, William (1969). *The Concept of Environmental Education*. Washington: The Journal of Environmental Education.

UN (1972). *Stockholm Declaration*. Report of the United Nations Conference on the Human Environment. Stockholm, Sweden.

UN (1992). *Agenda 21*. United Nations Conference on Environment and Development. Rio de Janeiro.

UN (2000). *Millennium Development Goals*. New York.

UN (2002). *Johannesburg Declaration on Sustainable Development*. Johannesburg.

UNESCO (2000). *Education for All*. The Dakar Framework for Action. Dakar.

UNESCO (2006). *Framework for the UN Decade of Education for Sustainable Development (2005-2014)*. International Implementation Scheme.

UNESCO website. http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-development/education-for-sustainable-development/ Accessed 2016-05-17

UNESCO (2014). *Shaping the Future We Want*. UN Decade of Education for Sustainable Development (2005-2014) Final Report.

UNESCO-UNEP (1975a). *Activities of the UNESCO-UNEP International Environmental Education Programme (1975-1983).*

UNESCO-UNEP (1975b). *Belgrade Charter*. The International Workshop on Environmental Education Final Report. Belgrade.

UNESCO-UNEP (1977). *Tbilisi Declaration*. Intergovernmental Conference on Environmental Education. Tbilisi.

UNESCO-UNEP (1987). *International Strategy for Action in the Field of Environmental Education and Training for the 1990s*. Moscow.

Visit Malta website. http://www.visitmalta.com/ Accessed 2016-05-17

Appendixes

Appendix 1

Interview guideline

- Please introduce yourself and your job!

  – What was your original degree?

- How did you get interested in ESD?

  – What were your first ideas about ESD?

- What were your starting points with your organization?

  – How did the process start?

  – What were the original ideas at your organization about ESD?

  – What were the target groups, the aims, the plans and the practices?

  – What international policies did you lean on?

- How did the process of implementing ESD go?

  – What were the challenges of the process?

  – What personal challenges did you meet along the process?

- How have your ideas changed about ESD along the process?

- What are the current challenges and practices of ESD?

- What are the future plans for development?

- Do you see it as your job or as a profession?

Appendix 2

	ENVIRONMENTAL EDUCATION				EDUCATION FOR SUSTAINABLE DEVELOPMENT		
	International Environmental Education Programme (IEEP) (1975-1983)	**Belgrade Charter on Environmental Education (1975)**	**Tbilisi Declaration on Environmental Education (1977)**	**Tbilisi Plus Ten (Moscow, 1987)**	**Agenda 21 (Rio Earth Summit, 1992)**	**Education for All (Dakar, 2000)**	**UN Decade of Education for Sustainable Development (DESD) (2005-2014)**
Goals		- population concerned of the environment and its problems; - develop knowledge, skills, attitudes, motivations and commitments; - work towards solutions collectively and individually, - preventing new issues.	- awareness and concern about economic, social, political and ecological interdependence; - opportunities to acquire knowledge, values, attitudes, commitment and skills to protect and improve the environment; - to create new patterns of behavior towards the environment.	- implementation of effective models of EE, training and information; - general awareness of the causes and effects of environmental problems; - general acceptance of the need for an integrated approach to solve these problems; - training of the personnel needed for the rational management of the environment.	- reorienting education towards sustainable development; - increasing public awareness; - promoting training.	- expanding and improving early childhood care; - access to compulsory primary education for all groups; - appropriate learning and life skills programs for all; - 50% improvement in general literacy by 2015; - eliminating gender disparities in education; - improving all aspects of the quality of education.	To integrate the values inherent in sustainable development into all aspects of learning to encourage changes in behavior that allow for a more sustainable and just society for all.

	ENVIRONMENTAL EDUCATION				EDUCATION FOR SUSTAINABLE DEVELOPMENT		
	International Environmental Education Programme (IEEP) (1975-1983)	Belgrade Charter on Environmental Education (1975)	Tbilisi Declaration on Environmental Education (1977)	Tbilisi Plus Ten (Moscow, 1987)	Agenda 21 (Rio Earth Summit, 1992)	Education for All (Dakar, 2000)	UN Decade of Education for Sustainable Development (DESD) (2005-2014)
Objectives	(a) coordination and planning of EE; (b) international networking; (c) research; (d) formulating approaches and materials in EE; (e) training; (f) advisory services.	(a) Awareness; (b) Knowledge; (c) Attitude; (d) Skills; (e) Evaluation ability; (f) Participation.	(a) Awareness; (b) Knowledge; (c) Attitude; (d) Skills; (e) Participation.	(a) Access to information; (b) Research and experimentation (c) Educational programs and teaching materials; (d) Training of personnel; (e) Technical and vocational education (f) Educating and informing the public; (g) General university education; (h) Specialist training; (i) International and regional cooperation.	(a) Universal access to basic education; (b) Attitudes, values and actions compatible with sustainable development; (c) Vocational training programs.		(a) Enhancing the central role of education towards sustainable development; (b) Networking and exchange of information; (c) Promoting the transition to sustainable development through education; (d) Increasing the quality of teaching and learning; (e) Strengthening capacity in ESD.

	ENVIRONMENTAL EDUCATION				EDUCATION FOR SUSTAINABLE DEVELOPMENT		
	International Environmental Education Programme (IEEP) (1975-1983)	**Belgrade Charter on Environmental Education (1975)**	**Tbilisi Declaration on Environmental Education (1977)**	**Tbilisi Plus Ten (Moscow, 1987)**	**Agenda 21 (Rio Earth Summit, 1992)**	**Education for All (Dakar, 2000)**	**UN Decade of Education for Sustainable Development (DESD) (2005-2014)**
Actions/ Strategies	3 phases: 1. preparing for the Belgrade Workshop (1975); 2. Belgrade Workshop 3. implementation of recommendations	- EE at international level; - EE at regional or sub-regional levels; - EE at national and local levels; - research; - development of EE programs; - training of EE personnel; - development of EE material; - funding of EE programs; - evaluation of EE programs.	- integration of EE into national education policies; - promotion of interdisciplinary cooperation; - promotion of interdisciplinarity in problem solving methodology; - multimedia programs for all; - research on education; - incorporating EE in training of educators; - provision of technical and financial support; - international, national and regional cooperation.	- networks at all levels; - research and experimentation on all aspects of EE; - developing curricula and exchanging information; - pre-service and in-service training of educators; - developing educational programs and materials; - use of communication and media; - developing awareness of academic authorities.	- involving all stages of education; - involving media and communication technologies; - implementing sustainable development at all points of decision-making.	- mobilize national and international political commitment; - promote EFA policies linked to development strategies; - engaging the civil society; - developing educational governance; - implementing strategies for gender equality in education; - improving education environments; - teacher training; - involving media and communications; - monitoring.	- advocacy and vision-building; - consultation and ownership; - partnership and networks; - capacity building and training; - research and innovation; - information and communication technologies; - monitoring and evaluation.