

CHALLENGES AND BARRIERS FOR IMPLEMENTING EDUCATION FOR SUSTAINABLE DEVELOPMENT (ESD) IN SECONDARY SCHOOLS IN SRI LANKA

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Abstract: This study was aimed to identify challenges and barriers to implement ESD in Secondary Schools in Sri Lanka. The samples were 36 Geography teachers from 36 1AB & 1C schools out of 54 schools. Samples were selected from the Kandy district and stratified random sampling method was used. Objectives were to identify challenges and barriers related to ESD in school curriculum, to investigate the challenges and barriers related to teachers in teaching ESD, to suggest ways and means to face the challenges and barriers. Data was collected by the survey method and the quantitative and qualitative data collected. Analysis was done descriptively. Challenges and barriers identified were; not including ESD as a core topic in the school curriculum, exam oriented mentality of students, lack of awareness of Sustainable Development (SD) and ESD concepts among teachers, lack of ESD programmes in the school time table, lack of funds, time and resource persons to carry out ESD programmes. The study recommended that curriculum enhancement and implementation of programmes to create awareness of SD and ESD with the concepts originated from the range of themes selected from the syllabi from Grade 6 to 13, a specialized SD and ESD teacher training, converting teachers to be change agents with a broad vision towards 17 SD Goals 2030 and identifying strengths and opportunities to implement ESD in the school programmes.

Keywords: Sustainable Development, Education for Sustainable Development, Secondary School, curriculum

Introduction

The Country Report of Sri Lanka Rio 20 (2012) explained that, “The Government of Sri Lanka has strongly reaffirmed its commitment to the Rio principles and the implementation of Agenda 21 and the current involvements of the education sector for Sustainable Development (SD) in Sri Lanka.” As well it has mentioned that several strategies are used to implement Peace and SD Programmes in schools. Use of morning assemblies to talk on issues pertaining to SD, make use of Teachers’ Guides and other developed modules to guide teachers, conducting co-curricular activities linked to Education Programs in SD in schools, monitoring and ascertaining the progress are the major strategies used. But, there is a need for a well-planned approach to implement SD concepts in the education system of Sri Lanka. When considering Sri Lanka’s current economic, social and environmental issues which affect many people and the environment of the country. Therefore, to address such issues ESD is a good tool but still there is a need to identify the challenges and barriers to implement ESD in the schools in Sri Lanka.

Chandith, (2006) has pointed out at the UNESCO conference, representing Sri Lanka, the importance of Education for Sustainable Development (ESD) by introducing it to Sri Lankan students. ‘ESD is very important to Sri Lanka since it focuses on many issues that are interlinked. They help to make the students wholesome and more aware of respect for human dignity and the rights and respect for the environment. The concept of SD is defined as ‘our common future’ in the landmark report of the World Commission on Environment and Development (1987) commonly known as the Brundtland Report, 1987. “SD is developments that meet the needs of the present without compromising the ability of future generations to meet their own needs.”

ESD is a mechanism to educate people and make awareness towards SD. It is conveying the message for keeping up humanity, empathy, compassion in hearts while sharing and caring for physical resources of the

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earth, protecting nature and all biological aspects and human beings while admiring the wonderful diversity on this living planet.

Walls (2009) defines ESD in two ways: 1) ESD as a means to transfer the 'appropriate' sets of knowledge, attitudes, values and behavior; and 2) ESD as a means to develop people's capacities and opportunities to engage with sustainability issues so that they themselves can determine alternative ways of living.

Westin, Martin. (2007) has explained barriers for implementing ESD in his article based on a study done in Sweden, 'Implementing ESD-Means, Drivers and barriers'

1. Traditions and structures.

The school sector has strong traditions rigid structures which are difficult to change. The scientific disciplines that have been evolving in the last couple of centuries are dominant and have made strong marks within the school system. Education is still organized in subjects. Often the teachers and other actors identify themselves with a subject and this sometimes causes rivalry and creates obstacles for implementing cross curricular perspectives such as ESD. The traditions and structures also create barriers on the national level, since the civil servants protect their areas of interest.

2. Fragmented public administration

Specialized and well organized Swedish administrative structure and the policy areas often compete for resources. This creates barriers between them and rivalry is common. Since SD is still viewed as part of the environmental policy the actors within the school sector are reluctant to accept the concept of ESD.

3. Weak pressure groups

The educational policy is formulated in interaction with different interests. There are strong pressure groups that look after different parts of the school sector. ESD has still not come into the scientific world and does not have strong support from the industry. This means there are no strong pressure groups that look after the interest of ESD.

4. Difficulties to assess ESD

There is a constant pressure on the school sector to show results. ESD is not easy to assess and measure. Therefore, parts of the educational system that are easier to measure are often prioritized.

A similar barrier was reported in Namibia, in a study by Anyolo (2015) where teachers reveal that teaching and learning do not exist in schools. As a result, most teachers are forced to use only textbooks to teach ESD, these sometimes being the only teaching material available. Lack of teaching and learning materials is one of the challenges faced by the teachers in implementing ESD. However, the use of textbooks is likely to impact certain teaching strategies and activities on the teacher which are then used when teaching ESD. Participatory approaches are the best tools for the teaching of ESD. Barriers such as lack of time, overloaded timetables, lack of resources, as well as the lack of teachers' training, are some of the major barriers faced by teachers in implementing ESD. The findings are compatible with Lee (2000) who argues that teachers' resistance to new innovations can be a barrier to the implementation of new education policies in all education systems.

Summers, Childs and Corney (2005) include the teacher's personality, the prevailing school climate regarding the use of teaching methods, and lack of support from the school principals. According to study of Granados (2011, mentioned challenges were the National Curriculum not mentioning ESD even though teachers conceive sustainability and ESD as the main purpose of Education, the teaching staff manifesting that there is an unavailability of models of teaching and the old fashioned language used to introduce SD in the text books. SD

is an abstract concept, and there is a lack of clarity about what it is and how it should be taught, the key concepts of sustainability are addressed in different ways in the curriculum, in the teaching materials and by the teachers, teachers manifest the lack of proper teaching materials that guide them to teach geography from an ESD point of view. They admit they haven't done any training on ESD and in-service teacher training courses do not show how to teach in a practical way.

The tables 1-3 below presents further clarifies challenges and barriers to implement ESD according to study done by Gross (2009)

Table 1: Challenges and barriers for implementing ESD in developing countries

Latin America (Developing countries)	Asia-Pacific Region (Developing countries)
Brazil-Political leaders have no interest in motivating people to participate in ESD	India-Lack of coordination and concerted efforts to come out with comprehensive approaches, teachers lack the sensibility of imparting ESD
Peru-Lack of promoting analytical thinking for Students	Pakistan Lack of government support, lack of teacher's knowledge and skills to integrate the concept of ESD into school curriculum
Costa-Rica-Political leaders have no need to motivate people	Thailand-Political unrest 'Asia'
Mexico-The lack of continuity in governments; political leaders do not always encourage empowerment, Lack of competent teachers	Fiji-The concept and need is only kept at headquarters and not passed down through schools to reach the children and their communities i.e. parents and family members.

Gross, (2009)

Table 2: Challenges and barriers for implementing ESD in Southern and Eastern Middle Europe

Southern and Eastern Middle Europe	
Southern and Eastern Middle Europe EE is still confused with environmental studies, not adequate teacher training Greece Teachers have no motivation to implement E.E., Scattered efforts to provide ESD, multiplication, lack of synergy at local, national and international level, Sustainability is not a priority for political leaders	Spain There are no sustainable practices, which could be communicated easily Hungary Several political leaders do not want to motivate

Gross, (2009)

Table 3: Challenges and barriers for implementing ESD in developed countries

Further European countries	
Switzer-land ESD is not understood as a real need yet, There isn't sufficient support to ESD activities, Curricula do not consider as relevant as they should. Denmark- Lack of motivation among teachers, Lack of resources for educational innovation	Germany Lack of funds for demonstrations project, Lack of awareness about the real need for sustainability, Lack of resources for educational innovation.

Gross, (2009)

Objectives of the study

- To identify challenges and barriers related to ESD in school curriculum,
- To investigate the challenges and barriers related to teachers in teaching ESD,
- To suggest ways and means to face the challenges and barriers.

Methodology

Teacher sample was selected according to available number of 1 AB and 1C schools of Kandy district and one Geography teacher from each school was selected purposively as a participant for the study. Altogether 36 teachers were included in the sample, selected out of 54 1AB and 1C schools. Table 4, represents the number of teachers in the respective Sub Education Zones in the Kandy District. School sample selected by stratified sampling method. Results analyzed by quantitatively and qualitatively. The following table presents the schools and teacher samples.

Table 4: Schools and Teacher sample

Zone	No of 1AB Schools	1AB Schools sample	No of 1C schools	1C schools sample	Total school sample	Teacher sample
Gampola	04	01	11	04	05	05
Kandy	20	05	16	04	09	09
Denuwara	07	02	13	03	05	05
Wattegama	04	01	15	04	05	05
Katugastota	05	01	23	06	07	07
Teldeniya	03	01	15	04	05	05
Total	43	11	93	25	36	36

Analysis and Discussion

The responses obtained from Geography Teachers were analyzed. The main threats and challenges identified by the teachers were, insufficiency of SD subject matter, concepts and issues in the school syllabi and not considering SD as a core concept, the Advanced Level students having an exam oriented mentality and not giving prominence to attitude changing programmes such as ESD, not having teachers trained for ESD and lack of knowledge of concepts of SD, the formal timetable allocating time, to teach subjects and not for other programmes, not providing direct training for teachers in ESD in such programmes.

The following table highlights the analysis of teacher responses received for questionnaires.

Table 5: Findings Challenges and barriers for implementing SD in secondary schools Sri Lanka

Findings Challenges and barriers for implementing SD in secondary school's Sri Lanka	Frequen cy	%	Summary notes from responses received to questionnaires
Curriculum related challenges and barriers	36	100%	“ESD is not a core topic, lack of evaluation of ESD, using lack of ESD concepts in the text books”
Students related challenges and barriers	32	88.88%	“Poor attendance of students, tuition, lack of motivation of students to learn ESD concepts, exam oriented attitudes, competition to win the exams”
Teachers related challenges and barriers	30	83.5%	“No proper teacher training for ESD, lack of teacher awareness of ESD concepts”
Inadequacy of Resources related challenges and barriers	28	77.77%	“No resource persons regarding ESD, lack of buildings, lack of funds”
Community related challenges and barriers	15	25%	“Threats of animals for school cultivation.”
Time related barriers	15	25%	“Time is an obstacle owing to the responsibility of covering the syllabus, less time allocation for ESD”.

According to the table major barriers regarding implementation of ESD was related to curriculum.it was 100%. “Insufficiency of ESD related subject content in the syllabus”, “having to teach only the syllabus and exam oriented education system, ESD is not a core topic, lack of evaluation of ESD, using lack of ESD concepts in the text books”

Second significant barrier was students related challenges and barriers and Poor attendance of students, tuition, lack of motivation of students to learn ESD concepts, exam oriented attitudes, competition to win the exams was 88.88%.

Thirdly, teachers’ lack of teacher training and teacher awareness were 83.5%. And were no proper teacher training for ESD, lack of teacher awareness of ESD concepts, No proper guidance and motivation to teachers towards ESD.

The fourth challenge and barrier was inadequacy of resources and it was 77.77%. The responses related to these challenges were No resource persons regarding ESD, lack of buildings, lack of funds”. Finally, community related and time related barriers indicated 25% respectively. They are using school premises and grounds in the afternoons by drug users, threats of animals for school cultivation, Time is an obstacle owing to the responsibility of covering the syllabi, and less time allocation for ESD were as responses from teachers.

Further, the following tables presented the details of teacher responses related to syllabi, students, and teachers,

Table 6: Teacher Responses related to school syllabi

Teacher Responses related to school syllabi	
“Not including Education for SD in the syllabus”	“Inability to conduct external projects with formal syllabus”
“Insufficiency of subject content in the syllabus,	“There Isn’t enough evaluations regarding ESD concepts in the school syllabus”
“having to teach only the syllabus and exam oriented education system”	“ESD is not named as a core theme in the new syllabus”.

“Knowledge based syllabus not paying attention to skills and attitudes for ESD”	“Inability in finding time for other things as completing the syllabus is a big challenge”
“These facts are not included in the syllabus sufficiently”	“There is no identified ESD concepts included in the syllabuses directly”
“Not enough ESD topics in the school curriculum, having to cover syllabus for national exams”	lack of ESD programmes in the school time table

The following table highlighted the details of teacher responses related to students

Table 7: Teacher Responses related to students

Teacher Responses related to students	
“Students getting ready for targeted exams”	“Lack of attitude development and Students attending tuition classes on school days”
“Poor attendance of Advanced Level students due to concentrating on passing the Examination”	“Students are targeting at only passing the exams.
“Result oriented students’ expectations and their inability to concentrate on other concepts”	“Advanced Level students spending time on academic work due to the high level of competition at exams”
Students’ attitude to love environment, country, should be built first”	

The following table highlights the details of teacher responses

Table 8: Teacher Responses related to teachers

Responses related to teachers	
“No proper guidance and motivation to teachers towards ESD”	“Not receiving sufficient awareness at seminars conducted for ESD”
“Lack of teachers with awareness”	“No teacher training towards ESD”
“Teachers are being busy to completing syllabuses”	“Lack of awareness of ESD concepts”

Anyolo (2015) & Granados (2011) have done similar findings of his study related to SD implementation in Namibia. According to Anyolo, ‘Teachers participating in this study are facing a number of barriers in implementing ESD. These barriers include lack of learners’ motivation, time constraints, unavailability of teaching and learning materials, lack of teachers’ training and limited ESD content in some syllabi.’ According to Granados (2011) The National Curriculum does not mention ESD, Teachers conceive sustainability and ESD as the main purpose of Education, The teaching staff has manifested that there is an unavailability of models of teaching,

Conclusion of the study is Sri Lankan school curriculum does not incorporate SD as a core topic. The exam oriented mentality of Secondary School students is an obstacle to implement a theme like SD which basically aims at attitude change. Awareness of SD concepts among teachers is very low, difficulties in including ESD programmes in the formal school timetable, obstacles in carrying out ESD programmes due to lack of funds, Lack of physical space in schools to carry out ESD programmes, lack of resource persons to carry out workshops and ESD programmes and obstacles which arise within the school community.

As implications, curriculum innovation and implementing programmes to create awareness about SD and ESD concepts needs to be originated from the range of themes selected from the syllabus of the subject of Geography from Grade 6 up to Grade 13 and knowledge, attitudes, values and perspectives related to ESD should be developed according to age levels of students of Geography. Converting teachers to be change agents with a broad vision towards 17 Sustainable Development Goals 2030 and identifying strengths and opportunities to implement ESD in the school programmes with the help of the school management. Creating awareness among students towards Sustainable development and 17 Sustainable Development Goals 2030, supplying proper opportunities to participate in ESD related activities in the school ground as well as outside the schools. A special place requires to be given to test students skills, attitudes and knowledge about SD and ESD concepts through assessments, term end tests, and national level examinations.

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