

Education



PERCEPTION ON ENVIRONMENTAL EDUCATION AND SUSTAINABLE DEVELOPMENT GOALS AMONG B.Ed STUDENT TEACHERS

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ABSTRACT The study assessed the perception on Environmental Education and Sustainable Development Goals among B.Ed student Teachers. 49 First year B.Ed Student teachers and 19 Second year B.Ed Student teachers were employed as sample for the study. Many student teachers (47%) thought that lack of class time was a major barrier to teaching EE. Some others (36%) thought that inadequate knowledge and training on EE, as well as lack of readily usable materials were also problems. In addition, lack of funding and the safety problem was perceived (17%) to be a barrier to the provision of field experience. More respondents in the Science stream (56%) were aware of the SDGs than those in the Arts stream (35%). With regard to knowledge, only 25% of the respondents had good knowledge of SDGs. However, for attitude, 64.7% of the respondents showed positive attitude. The findings of this study are revealed a positive attitude towards the environmental education and SDGs in educational settings.

KEYWORDS : Perception, Environmental Education, Sustainable Development Goals, Student teachers.

INTRODUCTION

Environmental Education (EE) is a process that creates awareness and understanding of the relationship between human and their environments. The Environment includes Natural, Man-made, Cultural and Technology. Increasing Public awareness about environmental issues and exploring possible solutions for the identified issues, making the individuals to take part actively in the protection of environment and rational use of Natural Resources are the objectives of Environmental Education, introduced Environmental Education as a compulsory subject in the school. As per the suggestions of Meredith et al (2000) first of all the must be trained on EE The trained teacher educators would transfer the knowledge and concepts of EE effectively to the teacher trainees. The EE training should include both pedagogical knowledge and subject matter knowledge. This is the need of hour to provide a sound Environment Education training programme for teacher trainees who will subsequently influence Changes in attitude and behavior of the school students.

Sustainable Development (SD) is the major global concern for the past three decades. According to World Commission on Environment and Development (Brundtland Commission) Sustainable Development is "meeting the needs of the present without compromising the ability of future generations to develop. Recently the concept of SD became a significant part in policy discussions. SD and EE are highly interlinked and inseparable. By achieving the objectives of EE it is highly possible to ensure the SD. Environmental Education for Sustainable Development (EESD) is a concept which aims to empower people of all ages to take the responsibility for creating a suitable future. To ensure the SD United Nations Development Plan (UNDP) has developed Sustainable Development Goals (SDGs). The SDGs are otherwise called as Global Goals for SD. SDGs are a collection of 17 global goals are also known as the 2030 Agenda for SD. The SDGs were developed to succeed the Millennium Development Goals (MDGs). The MDGs ended in 2015. The SDGs came into effect in January 2016. The SDGs would be the guiding principles for the UNDP policy and also provide funding until 2030. The UNDP provide support and help to implement the SDGs in 170 countries and territories.

The Partnership of Governments, Private sectors, Civil Society and the citizens are very much essential to achieve the SDGs and to leave a better planet for our future generations. Being a Teacher Educator the investigator was very keen to assess the perception on Environmental Education and Sustainable Development Goals among B.Ed student Teachers as the concepts are global concerns at present.

OBJECTIVES

- To investigate the perception on Environmental Education and Sustainable Development goals among the B.Ed student teachers.
- To investigate the perceptions of teaching practices in Environmental Education among the B.Ed student teachers.

Sample

49 First year B.Ed Student teachers and 19 Second year B.Ed Student teachers of academic year 2017-2018, Department of Education, Gandhigram Rural Institute, Dindigul District of Tamilnadu are selected as the sample for the study by purposive sampling technique.

Hypothesis

1. There is a significant difference between the mean scores of the I Year B.Ed student teachers and II Year B.Ed student teachers perception on Environmental Education.

2. There is a significant difference between the mean scores of the Science Stream and Arts Stream student teachers with reference to perception on Environmental Education.

Tools and techniques

Questionnaire consists of items on basic ideas of SDG and also items related environmental Literacy used by Sia, 1992, Lane et al., 1994; Littledyke,1997. The items related environmental Literacy were slightly modified to make it appropriate to the B.ED student teachers.

Statistical Analysis

Mean, Standard Deviation, percentage, t- test were computed for analyzing the data and drawing the conclusions.

Student Teacher's Perception on EE

Variations in teaching of EE were reflected in student teacher's emphasis on teaching environmental education, their use of a variety of teaching methods, and their regular practices of extra-curricular activities on environmental education. Majority of the student teachers (63%) involved in EE employed conventional text book methods, a few of them (26%) occasionally used other methods, such as informal discussion and group projects as well as resources, such as newspaper cuttings, EE learning packages, and environment-related web pages. In addition, some student teachers (11%) promoted EE through extracurricular activities. Most student teachers (76%) showed positive attitudes toward the environment and all of them agreed that the essence of EE should be education for the environment, with emphasis on development of suitable attitudes among the students. Many student teachers (47%) thought that lack of class time was a major barrier to teaching EE. Some others (36%) thought that inadequate knowledge and training on EE, as well as lack of readily usable materials were also problems. In addition, lack of funding and the safety problem was perceived (17%) to be a barrier to the provision of field experience. The findings from this study, however, are subject to a limitation. There was no classroom observation or participant observation to substantiate the self reported actual practices of the study of student teacher's perception on EE. Despite this limitation, the study provided an initial understanding of student teacher's perceptions on Environmental Education with some important implications for curriculum and pedagogical strategies for environmental science education in the future.

Table - 1. Analysis of Scores of Student Teacher's Perception on **Environmental Education**

B.Ed Year of Study	Ν	Mean	Standard Deviation	't' Value
I Year	49	21.35	4.03	7.123**
II Year	19	32.85	2.89	

** Significant at 0.01 level

The above table 1 reveals that the calculated t value 7.123 is significant at 0.01 levels. So there is a significant difference between the mean scores of I Year B.Ed Student teachers (21.35) and II Year B.Ed Student teachers (32.85) perception on Environmental Education. It is concluded that the II Year B.Ed student teachers perception on Environmental Education mean score (32.85) is better than the mean scores of I Year B.Ed student teachers (21.35).

Hence the formulated hypothesis there is a significant difference between the mean scores of the I Year B.Ed student teachers and II Year B.Ed student teachers perception on Environmental Education is accepted.

Table-2. Analysis of Scores on Perception of Environmental **Education - Arts Vs Science**

UG Stream of Study	Ν	Mean	Standard Deviation	't' Value
Arts	17	20.45	3.17	3.727**
Science	32	24.75	2.57	

** Significant at 0.01 level

The above table 2 reveals that the calculated value 3.727 is significant at 0.01 level. So there is a significant difference between the mean scores of Science stream in UG (24.75) and Arts stream in UG (20.45) among the student teachers perception on environmental education.

Hence the formulated hypothesis there is a significant difference between the mean scores of the Science Stream and Arts Stream student teachers with reference to perception on Environmental Education is accepted.

Student Teacher's Awareness on SDG

When asked about the first time they heard of the SDGs, 17(25%) of the 68 respondents said they heard of it in or before the year 2012. In the same vein, when asked about the year the SDGs were adopted by the United Nations(UN), 32 respondents (47%) stated that it was adopted in or before 2014, with only 36 (53%) stating 2015 as the adoption year.

More respondents in the Science stream (56%) were aware of the SDGs than those in the Arts stream (35%). With regard to knowledge, only 25% of the respondents had good knowledge of SDGs. However, for attitude, 64.7 % of the respondents showed positive attitude.

Implications

Educational systems have a lot to offer and are expected to define learning objectives and contents compliant with the SDGs, introduce pedagogies and curricula that empower learners to know about and implement SDGs. The 2030 Agenda in itself gave a premium place to education as education is a stand-alone goal (SDG 4) and many education related targets and indicators are present in the remaining 16 goals. Education is thus a means for attaining all the other SDGs as the SDGs are inter-linked and the fulfillment of one goal is likely to enhance the fulfillment of other goals. It is vital that each educational institution integrates the principles of sustainable development into their mission statements, with emphasis on today's development not adversely affecting future development.

CONCLUSION

It should be remembered that the main aim of environmental education is to develop environmentally responsible individuals who are informed and skilled enough to act for the environment. The comprehensive environmental education pre-service and in-service programs for teachers should be designed (Ko and Lee, 2003).

The findings of this study are revealing and provide invaluable data on

these and consequently stimulate efforts aimed at improving the level of awareness, knowledge and positive attitude towards the environmental education and SDGs in educational settings. The SDGs are for all nations and peoples and for all segments of society therefore pertinent individual and population-level methods of enlightening people about the SDGs becomes imperative and must be put in place in all settings, starting from the education sector.

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