



CLIMATE CHANGE LITERACY AMONG PROSPECTIVE TEACHERS OF VARIOUS D.Ed. INSTITUTIONS IN KANNUR DISTRICT

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ABSTRACT

Man, as a part and parcel of the environment, has to acknowledge the mantle and importance of environment in order to protect it and to get protection from it, for this, he needs environmental awareness. Environmental conservation is the axis for the economic well-being and the peaceful existence of humanity on the surface of the earth. Teachers are moulders of offsprings. If they have enchanted adequate environmental awareness, there is no need to fear the existence of future because they can implant these values among youth. This study was focussed to assess the level of climate change literacy among prospective teachers of various D.Ed. institutions in Kannur District. A questionnaire was developed and administered to the stratified sample of 240 prospective teachers. Result found that the majority of the prospective teachers possess average climate change literacy.

KEYWORDS: Climate Change Literacy, Prospective Teachers.

INTRODUCTION:

Environmental conservation is the axis for the economic well-being and the peaceful existence of humanity on the earth. But the fast progress of science and technology which resulted in the establishment of enormous industries and the quest of humanity for enlightened living are contributing remarkably for the abasement of the environment. As a result of the rampant growth of human population, we are impending several planetary limits or boundaries which threaten the environment. The future path is in the fist of today's decision makers. Teachers especially those who handle small children are the exact persons for making magical effect on the minds of children by implanting environmental values. Climate literacy is an understanding of the climate's effect on human beings and society and their impact on climate. The indispensable postulate of climate science presents information that is adjudge important for individuals and communities to know and apprehend about earth's climate, impact of climate change and proceed towards adaptation or alleviation.

ATTRIBUTES OF A CLIMATE LITERATE PERSON

- Apprehend the crucial postulates of all aspects of the Earth System commanding climate design.
- Knows how to collect information about climate and weather, and how to differentiatere reliable from non- reliable scientific sources on the subject.
- Interface the idea about climate and climate change in a significant way.
- Construct scientifically informed and accountable decisions regarding climate.
- Stronger awareness about climate change can voluntarily upgrade attitudes and conduct of societies as a whole.

HOW CLIMATE EDUCATION

Climate education can be given through formal (schools) and informal (media, museums, libraries) manner. To engage people of all ages and can achieve quick responses. Informal education is the powerful weapon. For the future development of society Formal education engages young generation, which is important. Climate science and energy are complex topics, with swiftly advancing science and technology, are possible for argument. There are many ways to proceed towards climate and energy depending on the degree level, course topics and instructional method. Yet no matter the pedagogic setting, using a literacy based approach can provide a second base to build learner's understanding of these topics.

Developing environmental literacy is believed to be the primary objective of environmental education. A person who possesses the values, attitudes and skills that enable knowledge to be converted in to action is described as the environmentally literate person.

Due to inertia in educational system education has always lagged behind the development of society. With an expansion of personal computers, educational system had to deal with ICT literacy and its incorporation has been successful. With climate change it is a different situation. Needs of future generations can be predicted following scientific studies concerning climate change. There is a growing gap between what is known about climate change by the scientific community and what is understood by the public. There is an urgent need to enhance climate literacy which is currently critically low as proved by several surveys. We assume that efforts towards climate literacy should be intensified. Teachers are moulders of future generation. If they have possessed adequate environmental awareness, there is no need to fear the existence of future because they can instil these values among young children. Current upper primary curricula are well structured and contain a lot of information about earth system components. Unfortunately, pupils are not able to connect the awareness to their life style. They have good bricks but don't know how to build. Pupil needs guidelines.

Climate change literacy is very essential for a citizen to make his environment clean and to conserve it for the future. The most effective way of increasing environmental awareness is to educate the children in their young age itself. As moulders of future generation it is the responsibility of teachers to take steps to develop environmental awareness among these small children. It is particularly worrisome that many of the students had inadequate or no information about the projected or actual impacts of climate change. Student's awareness about some of the key measures proposed at the global level is also inadequate.

The major aim of environmental and sustainability education at university level is to help prospective teachers to not only develop a broad conceptual framework but also to gain specialised knowledge and technical skills which could in turn, be applied in natural resource management and environmental protection (Belal and Springnel, 1998). Teacher education institutions are also expected to contribute towards climate change literacy. In line with such an expectation, some efforts have been made in recent years to assess the extent of climate change literacy among students at teacher education institution. Papadimitriou (2004) argues that prospective teachers should acquire a better and deeper understanding of the subject themselves to be able to teach properly about climate change and not to pass their own misconceptions to pupils. The aim of the present study was assessing the level of climate change literacy among prospective teachers.

OBJECTIVES OF THE STUDY

- To assess the level of climate change literacy among prospective teachers.
- To compare climate change literacy among prospective teachers with respect to gender.
- To compare climate change literacy among prospective teachers with respect to locale.

HYPOTHESES

1. There is no significant difference in the climate change literacy among prospective teachers with regard to gender.

2. There is no significant difference in the climate change literacy among prospective teachers with regard to locale.

METHOD & SAMPLE

Survey method was used for this study to find out the level of climate change literacy among prospective teachers. A sample of 240 prospective teachers was chosen from 6 D.Ed. institutions in Kannur District. The sample was selected by using stratified random sampling technique.

Tool

Climate Change Literacy Questionnaire is prepared by the investigator on the basis of review of current knowledge related to climate change has been used as a major tool for gathering data for the study. The questionnaire is composed of 40 statements each having 3 options: Agree, Disagree and No Response. An attempt has also been made to include national, continental and global dimensions of climate change literacy.

RESULT AND DISCUSSION

The data collected have been analysed statistically with reference to the objectives of the study. The mean and standard deviations of the scores of climate change literacy for teachers were 26.03 and 3.38 respectively. The teachers with scores of more than 31 are treated high climate change literacy and those in between 15 and 31 are treated as average literate and the scores below 15 are treated as low climate change literacy. The details are shown below in Table-1.

Table 1: Analysis of Climate Change Literacy among Prospective Teachers for the Selected Sample

Level	N	Percentage
High	62	24.12
Average	140	60.88
Low	38	15
Total	240	100

Table-1 shows that out of 240 students 62 possess high climate change literacy, 140 possess average climate change literacy and 38 possess low climate change literacy.

Table 2: Comparison of climate change literacy among Prospective Teachers based on gender

Gender	N	Mean	SD	t-value
Males	90	25.25	3.25	3.83*
Females	150	26.63	3.5	

*Significant at 0.01 level.

From Table-2, the calculated t-value 3.83 is significant at 0.01 level. Hence the hypothesis-1 is rejected. Thus male and female prospective teachers differ significantly in terms of their climate change literacy.

Table 3: Comparison of Climate Change Literacy among Prospective Teachers based on Locale

Locale	N	Mean	SD	t-value
Rural	163	25.82	3.81	1.53
Urban	77	26.37	2.89	

Table-3 depicts that the obtained t-value is less than the table value at 0.05 level. Hence it is not significant; consequently, the hypothesis-2 is accepted. Thus there is no significant difference in the climate change literacy of prospective teachers with respect to locale.

CONCLUSION

The survival of humanity on earth depends on the existence of clear and healthy environment. The environment around us is deteriorating which is a real threat to all of us. So awareness is essential for action and education can play a vital role in the direction. It is education that can make man aware, conscious of and knowledgeable about environment and environmental problems. So the schools should conduct seminars, film exhibition, afforestation, campus cleaning, nature camps, field visit, surveys, community oriented programme etc. to promote environmental awareness among new generation.

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