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An Overview Study on Awareness of Global Warming Among the Graduate Teacher Trainees

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Abstract

Nowadays global warming is considered as a burning problem and it is being a challenge to the entire world and its scientific society. Global warming is a worldwide environmental problem by which there is an abnormal increase to the level of temperature, particularly in a natural environment. Global warming is not only affecting the nature, but it affects the life and homes of millions of people. The changes of global warming is visible from the highest mountains to deep in the oceans and it extinguished different parts of the earth and it's also creates rich bio-diversity. To identify the level of awareness global warming and to enhance the same among future secondary school teachers, the Authors decided to conduct the present research study of awareness on global warming among graduate Teacher trainees of college of education. Further, the study may also help the student teachers of secondary schools to create awareness on global warming among students studying in secondary schools in future.

Keywords: global warming, climatic Change, green house effect, environmental refugees, and 3Rs

1. Introduction

1.1. Global Warming

Nowadays global warming is considered as a burning problem and it is being a challenge to the entire world and its scientific society. Global warming is a worldwide environmental problem by which there is an abnormal increase to the level of temperature, particularly in a natural environment. Global Warming is the observed and projected increase in the average temperature of earth's atmosphere and oceans due to green house gas emissions like CFC, CH₄, N₂O, CO, Hydro carbons on account of human activities. The effects of Green house gas due to increase in Green House Gas warms the planet, decrease in Green House Gas cools the planet. Unfortunately there is a steep increase of the temperature in the last three decades. Global warming is not only affecting the nature, but it affects the life and homes of millions of people. The changes of global warming are visible from the highest mountains to deep in the oceans and it extinguished different parts of the earth and it's also creates rich bio-diversity. Because of this face weather, climate thermal condition gets totally change. Human induced changes in global climate caused by release of green house gases into the atmosphere, largely from the burning of fossil fuels, have been correlated with global warming (encyclopedia McGraw hill science and technology (2001). Further there is a potential increase in average global atmospheric temperatures resulting from the green house effect". Encyclopedia Britannica (2003)

1.2 Causes of Global warming:

The global average temperature near earth's surface has risen by 0.74 +- 0.18 C during the last 100 years. The Intergovernmental panel on climate change (IPCC) (1988) in its climatic models has projected that global surface temperatures are likely to increase by 1.1 to 6.4C between 1990-2100. Although most studies focus on period up to 2100, warming and sea level rises are expected to continue for more than a millennium even if green house gas level are stabilized. This reflects the large heat capacity of the oceans. Drastic increase in atmospheric temperature speeding up the melting of ice caps, glaciers & ice mountains which in turn will lead to increase in sea level which will eventually result in coastal areas going beneath water. Sea warming leads to wind warming Wind Warming will make cyclones, hurricanes and typhoons more violent and frequent. The Consequences in a nutshell drastic increase in atmospheric temperature is speeding up the melting of ice caps, glaciers & ice mountains which in turn. Will lead to increase in sea level, Result in coastal areas going beneath water, Land and water becoming saline. Cyclones, Tornadoes, Typhoons & Earth Quakes becoming more frequent and intense. Cultivable lands becoming barren, resulting in drought. Steep reduction in agricultural yield due to Soil Warming & sea produce due to Sea Warming. Pandemic diseases wiping out huge chunk of population. Steep Price Rise of all commodities including consumables. Civil Wars between residents and migrating environmental refugees. The teachers working in secondary schools are unaware of global warming and at the same time, even if they are aware of global warming, they are not involving in the measures that prevent the global warming in the earth at some extent. In order to indentify the level of awareness on global warming and to enhance the some among future secondary school teachers, the Authors decided to conduct the present research study of awareness on global warming among graduate Teacher trainees of college of Education located in and around Karaikudi Town which is located in Sivagangai district, Tanil Nadu state, South India. Further, this study may also help the teachers and secondary schools to create awareness on global warming among students studying in secondary, schools in future.

2. Significance of the study

Lack of awareness on effect of the global warming is an essential problem. This problem should be solved by the future teachers at some extent by increasing the level of awareness, in this way the study is considered as needful one. Little knowledge on an environmental problems and global warming will affect the student-teachers and society to suffer a lot. Particularly by increasing the knowledge about global warming may help the society and students to know how to survive. The knowledge based related on global warming is needed for the survival of the present society and hence the study is a need one. Attitudes and values of concern for the environment and motivation to participate in its production are essential aspects. Every student-teacher must change the attitudes, values and motivate them to be aware of global warming. In this aspect the study is considered as a needful one. The study may reveal the cause, effectiveness and awareness on global warming of the student-teachers as well as future generation. This study is concluded an important ongoing change in the atmosphere must be known by the future teachers and students. By knowing about global warming, they can have a better survival in near future. In this way the study has its own importance.

3. Objectives of the study

- To identify the level of awareness on global warming among student-teachers who are undergoing training at various colleges of education.
- To identify the level of awareness among student-teachers in each and every aspect of global warming.
- To identify the significant difference if any between the different groups of biographical variables such as location of the college, sex and subjects in global warming.
- To suggest some practical solution to reduce or to avoid the dangerous effect of global warming

4. Sampling technique

The Authors used purposive sampling and samples are collected only from the graduate Teacher trainees who are undergoing training in various colleges of education located in and around *Karaikudi* area which is located in Sivagangai district, Tanil Nadu state, South India.

5. Data collection

The Authors visited each and every college of education which is located in and around *Karaikudi* area. The total respondent of the graduate Teacher training colleges is 300. Out of 300 the Authors selected only 290 samples from the respondent of graduate Teacher trainees studying in and around the *Karaikudi* area.

6. Data analysis

After collecting the data from the respondents, the Authors gave scores for the correct responses and then the Authors calculated the percentage scores. The percentage scores were used to identify the level of awareness on global warming. The Authors also used the test of significance to find out the significant difference of awareness on global warming in related to various groups of biographical variables, such as the location of the college, sex and subjects in global warming awareness among graduate Teacher trainees. *Distribution of overall, Male and Female graduate Teacher Trainees and their percentage scores in awareness on global warming.*

<i>S.No</i>	<i>Category Sex</i>	<i>Maximum Scores</i>	<i>Obtained Scores</i>	<i>Percentage</i>
1.	Male	5200	3422	65.80
2.	Female	6400	4264	66.62
3.	Overall	11,600	7686	66.25

The above table reveals the percentage scores of graduate Teacher Trainees and their awareness on Global Warming.

FINDINGS:

Female graduate Teacher Trainees awareness on global warming is slightly higher than the Male graduate Teacher Trainees. However the percentage scores of Male (65.80) and Female (66.62) are more or less equal.

Distribution of rural and urban graduate Teacher college percentage scores in awareness on global warming.

<i>S.No</i>	<i>Location College</i>	<i>Maximum scores</i>	<i>Obtained scores</i>	<i>Percentage</i>
1.	Rural	5480	3563	65.01
2.	Urban	6120	4123	67.36

The above table reveals the percentage scores of Rural and Urban graduate Teacher trainees and their awareness on global warming.

FINDINGS:

Urban graduate Teacher trainees are slightly higher than that of rural graduate Teacher trainees in awareness on global warming.

Distribution of Government and Private College graduate Teacher trainees and their percentage scores in awareness on global warming.

S.No	Type of college	Maximum scores	Obtained scores	Percentage
1.	Government College	3640	2520	69.23
2.	Private College	7960	5166	64.89

The above table revealed that the percentage scores of Government and private college of education graduate Teacher trainees and their awareness on global warming.

FINDINGS:

Graduate Teacher trainees of Government College of education have awareness on global warming which is more than the Private college graduate Teacher trainees.

7. Educational implication

The Authors suggested that the following recommendations for NCTE, NCERT, and educational bodies to enhance the global warming awareness among graduate Teacher trainees.

- (i) Theoretical aspects of environmental awareness strategies on global warming can be introduced as a unit of core subjects in the graduate Teacher Training curriculum.
- (ii) The practical inputs regarding environmental awareness strategy should be taken up through subject specific programmes such as lesson plan writing, observation classes and practice teaching.

8. Preventive measures on global warming:

“Prevention is better than cure”. To prevent the Global Warming the following steps should be taken care.

- o Emphasis on decentralized industries
- o Encouragement for free forming or afforestations
- o Preservation and management of forest
- o Water management
- o Dusting the nature by using appropriate technology
- o By using **3Rs** approach as Reduce, Reuse and Recycle, the problem may be minimized.
- o Resource utilization as per carrying capacity
- o Developing awareness on environment education may reduce all the problem related to earth and its atmosphere
- o Developing a life style on harmony with nature.

9. Suggestion for further research

It is suggested that the above study may be undertaken with all the Government Colleges of Education graduate Teacher trainees. The same present study can be conducted to high school students and Diploma teacher trainees.

Conclusion

The Authors felt that the students belong to arts group graduate trainees have low awareness on global warming than the students of graduate trainees. This is because, the knowledge of awareness on global

warming is low among student's society –knowledge about environmental awareness and the dangerous effect on global warming are considered as essential aspects for the student-teachers who are undergoing training in the college of education. If they have the awareness in the above areas they can enhance the awareness on global warming for future generation. Particularly students may learn and follow preventive meanings to prevent the problem of global warming.

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