### TEACHING ABOUT CLIMATE CHANGE- THE NEED OF THE HOUR

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## **Prologue**

There is a definite flow of events in life. Everything things has its own time. Events that are mistimed are unexpected and not welcomed to human lives. Recent years, human beings have experienced such mistimed events in very high frequency which are proving dangerous to the whole of human race. Climate change is one such harsh reality. Nature, has contributed to the cause of climate change by regular adaptations.

Climate change was a prediction but a number of natural calamities like wildfires, Tsunami, floods all directly point to climate change. Historical collapses of heritages sites like Harappa, Ancient Egypt and Maya civilization are all associated with climate change. Since, the last century, the world has been witnessing climate change and its effect on human life. Many researches on climate change reveal that the temperature is rising due to a phenomenon called the greenhouse effect. The ozone depletion is due to the warming up of the earth surface. This also affects our agriculture, water supply and many other problems.

Nature changes the climate unintentionally, humans have added to the problems through over-usage of resources, inefficient resources handling.

Climate change is one of the most complicated problems in India and therefore the researcher wants to find out the opinion of the secondary school teachers with regard to teaching climate change in the learning teaching process and suggest ways to integrate it irrespective of any subjects they teach.

## **Need and Importance of the study:**

The present study will help to find out the whether the secondary school teachers discuss

about climate changes in the learning teaching process. The study will also suggest ways to integrate climate change in any subject they teach.

## **Statement of problem:**

# **Teaching About Climate Changes among the Secondary School Students Aim of the study**

To find out and suggest ways about climate change among the secondary school students

## **Research Questions:**

- 1. Do the secondary school teachers talk about climate change in the learning teaching process?
- 2. Do the secondary school teacher's integrate climate change in the content they teach?
- 3. Is the teaching about the awareness of climate change planned or incidental?
- 4. Are the secondary school teachers aware of the different programmes to create disseminate climate change?

## **Objectives:**

- > To find out the whether the secondary school teachers discuss climate change in their learning teaching process.
- ➤ To analyze the opinion of secondary school teachers with regard to teaching climate change.
- > To suggest ways in which the secondary school teachers can teach about climate change to the students.

# **Research Methodology:**

Descriptive Survey Method used for this research because the study intends to elicit the responses of secondary school teachers with regard to teaching climate change.

## **Sampling:**

In the present research, the researcher included 40 secondary school teachers through incidental sampling.

## **Tool and Techniques for Data Collection:**

A rating scale was prepared by the researcher to find out the opinion of secondary school teachers regarding teaching climate change. The percentage was analysed

**Data Collection:** Data was collected from 40 secondary school teachers

# ANALYSIS OF THE RESPONSE OF THE OPINION OF SECONDARY SCHOOL TEACHERS ABOUT TEACHING CLIMATE CHANGE

## **Findings & Discussion**

From the above it is found that

Sr. No.	STATEMENTS	YES%	NO%
1.	It's not related to the subject(s) I teach.	86%	14%
2.	Teaching climatic change is my first choice.	35%	65%
3.	Teaching about climatic changes should be made compulsory in schools.	75%	25%
4.	I pre plan and talk to students about climate change in the learning teaching process.	30%	70%
5.	Students are too young to know about climate change.	55%	45%
6.	I have sufficient knowledge about it.	43%	57%
7.	I don't have the materials needed to teach the subject.	70%	30%
8.	I don't believe in climate change.	20%	80%
9.	My school does not sanction funds to spread the awareness of climate change.	57%	43%
10.	Climate change is at least a moderate threat to the country.	25%	75%

1) 86% of the secondary school teachers said that they do not teach about climate change as it is not related to the subjects they teach. This is probably because they might be of the opinion that teaching of climate change is the work of teachers of science and technology. They are not able to comprehend that the no matter whichever subjects they teach, there is always a scope for integrating climatic change, the awareness among the students. For example, even a language teacher, through poetry can talk

about the disaster and the way people are causing climate change through misuse of resources available to them.

- 2) It is really shocking to know that only 35% of the secondary school teachers are of the opinion that teaching climatic change is their first choice. The remaining 65% of the secondary school teachers probably may be of the opinion that content coverage is more important rather than integrating it whenever possible with the climate change. Teachers may also not feel the importance of discussing climate change as they feel the subject, they are teaching is not catering to climate change.
- 3) However, 75% of secondary school teachers are rightly of the opinion that teaching about climate changes should be made compulsory in schools. This shows that many teachers understand the importance of students knowing about climate change but they probably want it as a separate subject. They may not be aware that this should that this can be integrated in the existing subjects they teach.
- 4) Only 30% of the secondary school teachers are of the opinion that they pre plan and talk to students about climate change in the learning teaching process. This only shows that most teachers do not take the teaching climate change necessary or important in the syllabus. Teachers must take the topic of climate change seriously as it will drastically affect us in the near future. So, while planning the lesson, teacher must intentionally plan how she can talk about climate change and make students aware of their role in saving the environment.
- 5) Nearly 55% of the secondary school teachers feel that the students are too young to know about climate change. This is really strange and their opinion should be changed and they should know that students should be made aware of the ill effects of climate change where we all will be affected by it someday.
- 6) 57% of the secondary school teachers confessed that they only have superficial knowledge of climate change and they just know that the climate change would affect us all someday. The severity of climate change is not yet registered into the mind of the secondary school teachers. Hence, teachers must take efforts to do researches, read and ponder upon the severity of the problem and make efforts to integrate it in the

subjects they teach.

- 7) 70% of the secondary school teachers felt that they don't have the materials needed to teach the subject. The teachers must use their creativity and make students teach through Best out of Waste. Games, poetry, essay on the importance of effective use of available resources will help students enhance their creative, imagination and foster constructivist attitude.
- 8) Most of the teachers believe in climatic change however 57% of secondary school teachers are of the opinion that schools do not use funds for any separate programmes to spread the awareness of climate change. Schools must therefore set aside some grant for the sanction of having some enrichment programme to create awareness of climate change.
- 9) 75% of the secondary school teachers that climate change is not a moderate but major threat to the country and hence teachers must leave no stone unturned in creating awareness and making students aware of the major issue of climate change

### **Conclusion:**

Teachers are aware that teaching climate change is the need of the hour. They felt that students must be taught right from the beginning, in fact from home and there is a dire need to increase and spread awareness as they go to higher class. Here are some of the ways where the teacher can include, integrate the teaching of climate change in her learning teaching process irrespective of the subject they teach.

- 1. **Conducting laboratory activities** is the most effective way to show students how global warming works on an accessible scale. E.g. Simulations on green house effects, using plastic covers to trap the heat of the sun. Using charcoal, the student can see how black carbon from air pollution can speed the melting of the ice. While doing such activity, the student is aware and concerned of the problem.
- 2. **Show a movie** related to climate change. Students of all ages love to see movies and showing such movies that depicts the problems of climate change will raise their brows and their minds start thinking different ways of minimising the problem.

- 3. Encourage students **reviewing novels** that talk about climate change. This will help them to make connections with what is happening today. They connect the text with self, the problem and with the current situations. They also try to find out ways to solve the problem e.g. solutions for physical and economic water scarcity to combat the issue.
- 4. **Assigning a research project**, multimedia presentation on topics like the use of plastics, and other environmental issues will go a long way in helping students to start critically thinking about the problem and find some solution knowing the severity of the problem.
- 5. Making students **share their personal experience** of how the weather has changed in their lifetime. While talking about the uncertainties of climate changes will help them to realise their role in this major problem.
- 6. **Participation in a community project** like Beach Clean-up, Campus Cleaning will help the students realise the importance of keeping their surroundings clean and proper elimination of waste. Recycling of used paper can also be encouraged. The students love doing the work together, learn values like love, cooperation, sympathy and empathy and learning can be fun. The goal of doing our bit to save the environment will also be achieved.

Education, thus play an important role in combating climate change and is the key to understand how human-made climate crisis is affecting the planet. UNESCO (2016) suggests, education can advance our knowledge and skills to prevent and to adapt to climate change-related emergencies.

Teachers therefore must themselves know the severity of this grave problem and must pre plan varied activities in their learning teaching process so that the students are purposively or incidentally taught about climate change.

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