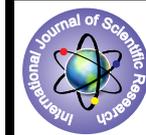


## Environmental Education: A Model Approach



### Education

**KEYWORDS : Environment Education Models Research**

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#### ABSTRACT

*In its broader sense, environment constitutes the whole universe consisting of all the objects, forces and the conditions that affects the individual through such stimuli as he is able to receive. In general, environment constitutes its two phases: External Environment and Internal Environment. External Environment indicates everything outside the organism that affects it. On its counterpart internal environment constitutes everything within organism, both actually and figuratively that affect it including physical conditions and processes, emotions, and mental processes. This paper highlights the findings of the research studies of models of teaching after experimentation and also models teaching environmental education.*

In its broader sense, environment constitutes the whole universe consisting of all the objects, forces and the conditions that affects the individual through such stimuli as he is able to receive. In general, environment constitutes its two phases: External Environment and Internal Environment. External Environment indicates everything outside the organism that affects it. On its counterpart internal environment constitutes everything within organism, both actually and figuratively that affect it including physical conditions and processes, emotions, and mental processes. It may be further broken down into physical, social and cultural elements, although the boundaries between these vary according to the theoretical predilections of the observer.<sup>2</sup>

Environmental education is the study of immediate surroundings. On the most important large areas of study in the modern curriculum organization including experiences that promotes the development of understanding of both the physical and the social environment.<sup>3</sup> The significant goal of environmental education is to develop a world population that is aware of, and commercial about the environment and its associated problems, and which has the knowledge (awareness), understanding, skills, attitudes, motivations and commitment to work individually and collectively toward solutions of current problems and the prevention of new ones.<sup>4</sup> As far as the imparting the environmental education at the different level of schooling, the teacher not only has the command of one method/ strategy/ device/ technique etc. but he/she must has the knowledge of various method/ strategies of teaching. In the field of teaching social sciences and particularly environmental education in Indian classroom teaching-learning process; discussion method, text-book method, project method and lecture method etc, are being fully utilized, but to know and understand the environmental education conceptually as well as practical aspect for the sake of smooth running of the human beings/ learners at all the stages of learning, the most significant method of teaching in general is observation that makes the learner very close to the environment. Traditionally. Even, today the teacher could not escape themselves to include the Herbertian steps in the methodology of teaching to impart any type of content in the teaching-learning process; but it could not be neglected that due to the advancement of science and technology, on the counterpart, the enthusiastic teacher are utilizing various modern methods/ strategies/models for teaching the content in the classroom to modify the behavior of the learner in the right direction. The new instructional technology based on different models of teaching have been developed by various psychologist educationalist, philosophers and thinkers particularly in the western countries. A model of teaching is a plan or pattern that can be used to shape curriculum (long term courses of studies) to design instructional material, and to guide instruction in the classroom and other settings.<sup>5</sup>

Bruce Joyce and Marsha Well organized models into four families namely information processing, behavioral, personal and social models of teaching.

The most important models for teaching environmental education are concept Attainment Model of teaching of Bruner, Ad-

vance organizer Model of Ausubel, Inductive Thinking Model of Hilda Taba, Inquiry Training Model of Richard Suchman, Biological Scientific Inquiry Model of Joseph J.S. Schwab, Awareness Training Model of Fritz Perls and William Schutz. Synaptic Model of William Godon, Group Investigation of Herbert Thelen John Dewey, Jurisprudential Model of Donald oliver and James P. Shaver, Social Simulation Model of Sarene Boocock and Harold Guestzknow, Contingency Management Model of B.F. Skinner and Mastery Learning of John B. Cawall and Benjamin Bloom.

Environmental Education is aimed at producing a citizenry that is knowledgeable concerning the biophysical environment and its associated problem, awareness of how to help to solve those problems and motivated to work toward their solution.

The findings of the research studies of different models of teaching indicate their effectiveness in terms of the various aspect of teaching at the different level of schooling.

Before utilizing the model of teaching in real practice teaching, it would be better to know the theoretical, understanding and reaction towards the model by the teachers as well as the student-teachers in teacher education institutions, therefore, in understanding the different model of teaching, Passi, Singh and Sunsunwall (19857, 19868) compared the concept Attainment Model and Inquiry Training Model and found both the models were equality effective.

Research studies in environmental education have generally dealt with the attitudes and values rather than with cognitive knowledge.<sup>9</sup> There was a favorable attitudes Towards the concepts of environmental education in teaching of science (Gangreeds. 198710 and Sushma 198711). The level of participation in the teaching-learning process indicates the competency of the teacher in teaching of various subjects at the different level of schooling. In teaching some of the concepts of environmental education in science and in social science, there was a high participation level of the students in teaching learning process through concept attainment model at the XI class level ( Pandey 198112, Siddiqui, 199113).

Teaching through Concept Attainment Model was superior than the Orational, Traditional and Lecture Method of teaching. In this Model the students could attain better concepts than the other instructional strategies of teaching (Chitrin 198314, Gangre 198715, Sushma 198716, and Budhisagar 198617). Reception and selection strategies of concept attainment Model were equally effective in terms of attaining the concepts of environmental education in teaching of science (Antimadas 198618, Bihori 198619) Senapati 198620 and Panni 198821).

It was also quite clear from some of the research studies that the concept Attainment Model had the significant effect in terms of achieving some of the concepts of environmental education in teaching chemistry at IX Class level, and experimental group responded favourably towards the competency of the Concept Attainment Model than the other strategies of teaching (Pandey 198122, Antimadas 1986 23, Bihari 1986 24, and Sharma 198625).

Before imparting the instructional material in the classroom, the teacher has to organize the learning material/information in systematic way so that he or she could perform better in providing that particular information to the students. In this respect, Advance organizer Model Plays significant role in the classroom teaching learning process. It was found that advance organizer Model is more superior than the Lecture Method of teaching the concept of environmental education in teaching of the subjects of science and social science (Budhi Sagar 198626. Panda 198627. Rajoria 198728. And senapati 198629).

In selection and organization of any information programming is very important in teaching or any subject in classroom. Some of the research studies indicates that programming learning material played a significant role in applying the different teaching Models of Advance organizer, Biological Science Inquiry Training Model. Inquiry Training Model, Lecture Method and Traditional Method in terms of achievement in teaching the concepts of environmental education in teaching of science (Budhi Sagar 198630, Panda 198631, Rajoria 198732 and Senapati 1986333).

Not only the concepts of environmental education in the field of science but also some of the concepts of environmental education in the field of social science. Advance organizer Model and Inquiry training Model were equally effective over the traditional method of teaching at the level of VIII Class students.

Chitrive (1983)<sup>34</sup> experimented both the concept attainment Model and Advance organizer Model at higher stage of learning. He found both the Model equally effective over the traditional method but concept Attainment Model showed the high participation level than the other one.

Not only in the field of environmental education, the Concept Attainment Model and Advance organizer Model play the significant role in teaching of teacher education; ultimately lead the teacher to organize the information properly in teaching the environmental education in the curriculum of various school at the different level of schooling. In this regard, both the models were found equally effective in terms of attaining the concepts (Siddiqui 1991)<sup>35</sup>.

If we observe the variation of urban and Rural Indian Classroom organizational situation, we find that Advance organizer Model is more suitable strategy of teaching in terms of understanding the concepts of environmental education in teaching of science as well as in teaching of social science to the students belonging to the urban and rural areas at the different level of schooling (Rajoria 1987)<sup>36</sup>.

The overall conclusion from the analysis of educational research findings indicates that individuals who exhibit responsible behavior on a broad range of environmental problem have the knowledge of relevant environmental concepts, problems, issues, the quality of environment, the different action strategies that may be used for resolving on issue; belief that their action can make a difference, commitment to take action and experience in action based activities.<sup>37</sup> For the competent teacher as well as for the generation of our country, the knowledge of environmental concepts is a necessary, but not by itself sufficient condition for the development of responsible environmental behavior; knowledge of environmental issues, issue skill analysis, and attitudes and values related to taking action are also necessary before an individual will take action and act responsibly (Hines 1984<sup>38</sup> and Hines et al. 1986<sup>39</sup>).

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