TEACHING LEARNING STRATEGIES OR METHODS BEING ADOPTED FOR TEACHING E.V.S AT PRIMARY LEVEL

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ABSTRACT

Environmental Studies (E.V.S) has been an integral component of school education in one form or the other for more than four decades. At present the concept, issues, and problems related to environment are either integrated with different disciplines or introduced as a subject. For example at the primary stage, environmental education is introduced as environmental studies as a subject. At the upper primary and the secondary stages, it is incorporated into different subjects, mainly science and social sciences. In the present thesis, we will look at what methods should be adopted for teaching E.V.S. at primary level. Because environmental education evolved many methods over the years and different approaches being followed in the country and elsewhere at school level.

INTRODUCTION

Genesis of E.V.S. At primary level

Indian Scenario

The importance for providing environmental orientation to education especially to school education, has been organized, recognized in India as early as 1970. The document titled “The curriculum for the ten year school-A framework. Developed by the national council of educational research and training (NCERT). New Delhi in 1975 identified environment education as one of the essential component of school education. Enumerating on the subject issue instructional objectives and content

It stated: “In the primary classes the science should be taught as environmental studies, in classes I and II as a composite course including both natural and social environment and later on as two subjects viz, environmental studies I (natural sciences) and environmental studies II (social science). The purpose should not be to stuff the minds of the children with facts and information, but to sharp their senses, to enable them to observe their environment and to enrich their experience.”
The reason behind to introduce this subject at such a tender age is that, primary education is the backbone of the whole educational system. If the quality of primary education is bound to improve, besides infrastructure at primary stage there is a great need to provide trained teachers and their methods of teaching need to be updated.

Keeping in view the developmental characteristics and needs of the child at primary stage (age group 6-11) are major recommendations which implemented as schemes for improving education in school level.

The National Policy on Education 1986

It stated that importance and need for inclusion of environmental Education as an integral component of education. The policy states that the protection of the environment is a value which, along with certain values, must form an integral part of the curriculum at all stages of education.

Meaning of E.V.S.

Various combinations of words such as environmental literature in the content of environment and education although according to semesters of the words, Ed, ES (Which national curriculum frame has adopted as E.V.S.) and E. A. have different meaning in the strict sense of the terms but one finds that these are being used a time synonymously and interchangeably. We consider here the implications of EE,ES and EA and among them we see in which context it is relevant and important and how those are related to teacher training.

According to Haque:

“Environmental studies is an approach through activity based on the child’s physical and social environment, which leads to the progressive development of attitudes and skills required for the observation, recording, interpretation and communication of scientific, historical and geographical data.”

Many others such as Evans and young, Helliman and Saxena have used that term E.S, E.V.S (Environmental studies) for similar meaning.

The concept of Es, E.V.S is mostly prevalent in the content of school education. Curriculums for environmental studies have been developed by the national council of educational research and training New Delhi. For class III to V, E.V.S is based on teaching of basic skills of computation, communication and knowledge about environment. The main emphasis here is on learning through enquiry. For this purpose both social and physical environments are taken as resources.

Aims of E.V.S.
The aim of E.V.S. (environmental studies) is to develop a world population that is aware of and concerned about the environment and its associated problems and which has the knowledge, skills, attitudes, motivations and commitment to work individually and collectively towards solutions of current problems and prevention of new ones.

In view of this aim, environmental studies should form an integral part of the educational process, be centered in practical problems and be of an interdisciplinary/multidisciplinary character.

The goals of environmental studies are following-

1. To foster a clear awareness of and concern about economic, social, political and ecological interdependence in urban and rural areas.

2. To provide every person with opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment.

3. To create new patterns of behavior of individual groups and society as a whole towards the environment.

The objectives of E.V.S. are categorized as under:

- **Awareness**: To help social groups and individuals acquire awareness of and sensitivity to the total environment and its allied problems.
- **Knowledge**: To help social groups and individuals gain a variety of experiences and acquire a basic understanding of environment and its associated problems.
- **Attitudes**: To help social groups and individuals acquire a set of values and feelings of concern for environment.
- **Skills**: To help the individuals in acquiring skills for identifying and solving environmental problems.
- **Participation**: To provide social groups and individuals with an opportunity to be actively involved at all levels in working towards the resolution of environmental problems.

**Environmental Education Programmes**-


- **Environmental Studies**: This is concerned with the environmental disturbance and minimization of their impacts through changes in the society. (Social science)

- **Environmental Science**: It deals with the study of the processes in water, air, soil and organisms which lead to population or environment damage and to know a scientific basis for
establishing a standard which can be considered acceptably clean, safe, and healthy for human and the natural ecosystem (Physical and natural science)

**Environmental Engineering**- This is the study of technical processes, which are used to minimize the pollution and the assessment of impact of these environment (Engineering Sciences).

**The United Nations conferences on Environment Stockholm June, 1972:** The UN conference was a major event for those concerned with the quality of environment of the. This conference resulted in the creation of the United Nations environmental Programmes. It also focused attention on an international environmental education programmes.

**United nation Environmental Programmes 1972:** Environment in the modern times was put on the political map when U.N.E.P was founded in 1972.

**International workshop on Environmental Education Belgrade (1975):** Stockholm conferences on environment was followed by international Environmental workshop of education at Belgrade. The workshop listed environmental goals and environmental education goals.

**Environmental conference on environmental education Tabilisi (USSR) 1997,** This conference is considered a land map in environment education. The declaration adopted at the conferences proclaimed to defend and improve the environment for present and future generations have become an imperative goal for mankind. The conferences also adopted a detailed programme of environmental education.

**MATERIALS & METHODS**

**Methods of teaching**

Method of teaching is a systematic procedure or process by which a contact is developed between the students and subject matter for attaining the educational goals.

**Charles Guide** has said that, “In scientific language, the term method is used to designate the road that must be followed to lead the discovery of truth.”

**Environmental Studies (E.V.S.)**

The Subject environment studies (E.V.S) which is introduced as a compulsory subject by NCERT at primary level.

**Primary level**

It includes classes I to V.
OBJECTIVES-

Following are the objective of the study-

1. To study the teaching methods being adopted for teaching of E.V.S. at primary level in Govt. school of Fatehabad District.
2. To study the teaching methods adopted for teaching of E.V.S. at primary level in public schools of Fatehabad District.
3. To study the difference between the teaching methods adopted for teaching of E.V.S. at primary level in govt. schools and public schools of Fatehabad District.
4. To study the teaching methods adopted for teaching of E.V.S. at primary level in urban area schools of Fatehabad District.
5. To study the teaching methods adopted for teaching of E.V.S. at primary level in rural area schools of Fatehabad District.
6. To study the difference between the teaching methods adopted for teaching of E.V.S. at primary level in urban and rural area schools of Fatehabad District.

HYPOTHESIS

1. There is a significant difference between the teaching methods being adopted for teaching of E.V.S. in govt. & public schools of Fatehabad District.
2. There is a significant difference between the teaching methods being adopted for teaching of E.V.S. in urban and rural area schools of Fatehabad District.

DELIMITATIONS

1. The study will be confined to E.V.S only.
2. The study will be delimited to Fatehabad district.
3. The study will be delimited to primary class only.
4. The study will be delimited to teachers of V class only.
5. The study will be delimited to 40 teachers.

METHODOLOGY

“If the scholar cannot describe his methods, the chances that are too vague and general to yield him satisfactory results,”

T. H. Hillway

Research methodology involves the systematic procedure by which the researchers start from the initial identification of the problem to its final conclusion. There are basically three types of methods in educational research:
1. Historical Method
2. Experimental Method
3. Descriptive method or normative survey Method

The survey approach to educational problems is one of the most commonly used approaches. It is used in studying local as well as state, national and international comparison, measurement, classification, evaluation and generalization, all directed towards proper understanding and solution of significant educational problems.

As far the present study is concerned, the investigator decided to adopt the descriptive method involving survey method of research to know the method of teaching being adopted for teaching of environmental science at primary level.

**TOOLS USED**

Having selected the sample the next step is to select the suitable techniques or tools for the collection of data. For collecting of data for collecting new and unknown data one may use various devices for each and every type of research. We need certain instrument to gather new facts or to explore new fields. The tools thus employed for data collection or the selection of tools for a particular study depends upon various considerations such as the objectives of the study, availability of suitable tests, and personal competence of investigator to administer score and interpret the results and reliability and validity of the scale.

One may use one or more of the tools according to the purpose of study. For the present investigation, SELF PREPAIRED QUESTIONNAIRE was used to know the methods of teaching being adopted for teaching of E.V.S.

A good questionnaire deals with a significant topic. All the questions should be relevant to the subject or problem. The question should be perfectly clear and unambiguous. The questionnaire seeks information that is not obtainable from other sources, like schools reports or census data etc.

For analyzing and interpreting questionnaire responses, qualification of the data obtained by the quantitatively is generally achieved through tabulation and counting. Refinement of results in tabular form in total, percentage of average is invariably required. The data is expressed quantitatively on the basis of number of persons whose replies are tabulated under the several categories of questionnaire. Independent categories of information, however, are necessary for extensive treatments of results.

**DESCRIPTION OF THE QUESTIONNAIRE**

Self prepared questionnaire

The questionnaire for studying the methods being adopted for teaching of (environmental studies) E.V.S at primary level is prepared by investigator herself. The first part of the questionnaire included general information about the teachers, viz, Name, School, Type of
school, Area and Qualification. The second part of the questionnaire consisted of 50 items in it covering the syllabus of E.V.S. of standard V. Each item consisted of a topic and five options of teaching methods. There was a fifth option also “Any other”. Here they were asked to tick the methods they adopted for the teaching of that particular topic. In the fifth option teachers were supposed to write the method they used and were not mentioned in the former four options.

COLLECTION OF DATA

In the present study the investigator collected the data personally. For data collection the investigator first took the permission from the head of the institute of the sample concerned. The investigator distributed the questionnaire to the teachers and assured all the teachers that their responses would be kept strictly confidential and would be utilized for research purpose only. The purpose of the questionnaire was also explained to motivate them. Though there was no time limit for questionnaire yet the respondents took 15-20 minutes in completing the questionnaire.

STATISTICAL TECHNIQUE:

SANDLER’S ‘A’ test technique is used for analyzing the data. SANDLER’S ‘A’ test technique same as ‘T’ test technique which is used for measuring the validity of analysis of the difference between mid values of two matched groups. In the same way SANDLER’S ‘A’ test is also utilized to show the difference between the two matched groups.

The formula is as follows:

\[ A = \frac{\sum D^2}{(\sum D)^2} \]

Here \( D \) is done through gathering obtained marks of two situations separately. After this, value of every obtained mark is squared. In the end \( \sum D^2, (\sum D)^2 \) is divided. Thus obtained answer is the value of ‘A’. Now we will see its degree of freedom whose formula is as follows:

\[ D.F= number \ of \ pairs -1 \]

\[ = n-1 \]

Then we find its degree of significance level at 5% through ‘A’ test.

Note: usually more the value of ‘T test shows that more will be the level of significance. In contrast to this, lesser the value of ‘A’ test more will be the level of significance.

Use of ‘A’ test is comparatively easier and comfortable.
RESULTS & DISCUSSION

1. Different methods are used for teaching of different topics by the teachers.
2. There is a significant difference between the teaching methods being adopted in urban and rural areas.
3. There is a significant difference between the teaching methods being adopted for teaching of E.V.S in govt. and public schools.
4. A.V. aids are used by maximum teachers of public for the teaching of “Our earth, its weather and climate” there is a difference between the teaching methods adopted in urban and rural area. In rural and urban schools 35% teachers are using a. v. aids.
5. Field trips method is used by most of the teachers (49%) in urban area for teaching of “natural regions of the earth; desert regions, grasslands and tundra regions” while in public schools discussion method (38%) is used by large number of teachers.
6. Illustrations with example method is most popular among the teachers of govt. schools for teaching of “ Means of transport and means of communication” in public schools a. v. aids and discussion methods are used by most of the teachers of public schools.
7. Illustration with example and activity method is most popular among the teachers of rural (40%) govt. schools (8%) and public schools (31%) and urban area schools for the teaching of “United nations & major problems of the world”.
8. Story telling method is most popular among the teachers of rural (40%) area, public schools (60%), govt. schools (28%), and urban schools (31.25%). Then illustration with example and activity is used by 25% govt. school teachers, 16.25% urban school teachers and 13% rural school teachers and 5% public school teachers for teaching “ India’s struggle for independence and the freedom struggle continues 1857”.
9. Storytelling method is most popular among the teachers of rural areas and govt. schools (42%) and (40%) respectively. In urban area and public schools it is used by (30%) and (35%) teachers for the teaching of “story of tools, machines and simple machines”.
10. Field trips method is most popular among the teachers of urban area (25%), public school (23%), rural area (20%) and govt. schools (17%). After that the most popular method is observed demonstration cum discussion method and discussion method for the teaching of “Plant reproduction”.
11. For the teaching of “Animals and their life styles” most popular methods among the teachers is demonstration cum discussion method which is widely observed in govt. schools and rural area i.e. 37% and 35% respectively. Then field trips method has given the importance for teaching this unit. The observation regarding field trips method are listed here 21% teachers in urban area, 28% teachers in govt. schools, 12% teachers in public schools, 8% teachers in rural schools.
12. For teaching “Bones, muscles, brain and nerves” most popular method among the teachers is a. v. aids which is widely observed public schools i.e. 44% govt. schools 40%
urban schools 39% rural schools 18%. After it demonstration cum discussion method attained the highest scores.

13. For teaching “Our health, hygiene, good habits and diseases” most popular method is illustration with example among the teachers their observed % is as 54% teachers in public schools 50% teachers in rural, 21% in urban, and govt. schools. After it Discussion method is observed widely used method for this unit.

14. For teaching “Air and its uses” illustration with example and activity is considered most popular method. Their observed % is as 50% teachers in rural, 30% teachers in public, 29% teachers in urban, 10% teachers in govt. schools. After it discussion method is observed widely used method for this unit.

15. For teaching “Force, work and energy” illustration with example and activity is considered is most popular method. Their observed % is as 36% teachers in public schools, 30% teachers in urban and rural, 10% teachers in govt. Schools. After it experimentation method is considered the most popular method for this unit.

16. For teaching “Shadows and eclipses a. v. aids method is considered most popular method. Their observed % is listed as 80% teachers in urban area, 56.66% in public area, 32.5% teachers in govt. area and 31.4% teachers in rural area. After it q. a method is considered the most popular method for this unit.

17. For teaching unit-14 “Miscellaneous chapters. Most popular methods are considered field trips, a. v. aids and demonstration cum discussion.

EDUCATIONAL IMPLICATIONS

The educational implications of the present study are as follows:

1. Proper teaching methods help the students to achieve the objectives not only related to lower level of cognitive ability but higher abilities related to meta-cognitive, psychomotor as well as affective domain.

2. Proper teaching methods help the students in self-learning, independent thinking the arousing curiosity amongst them.

3. With the help of proper and effective teaching methods, desired improvement in quality of teaching process can be achieved.

4. Teacher’s efforts and proper teaching methods can increase the students’ participation in classroom and can make them aware of the environment in which they are developing their personality and being useful to the environment.

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