

B.Ed.Semester II

Pedagogy of Physical
Science

Topic- Project Method

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3. Project Method

The rise of this method came into being by the effort of some American educationists in which the names of John Dewey, Stevenson and Kilpatrick are the main ones. In this method the creation of the whole unit is made around some such work that might be performed in the school or out of it. The important point of the method is some such useful work to which the students may accomplish by mutual co-operation. The basic principle of this method is 'Learning by doing' or 'Learning by living.'

The exponent of this method is W. H. Kilpatrick, a student of John Dewey. Due to his being the pupil of Dewey, a famous educationist, the stamp of Dewey's intentional principles comes to sight in his educational ideology. This method is regarded as a very current method of education. For a well understanding of project method, at first it is necessary to know the meaning of the word – 'Project' rightly. The educationists have defined it differently.

(1) "A project is a whole hearted purposeful activity proceeding in a social environment."
– Kilpatrick

(2) "A project is a problematic act carried to completion in its natural settings."
– Prof. Stevenson

(3) "A project is a bit of real life that has been imparted in to school."
– Ballard

Types of Project

Individual Project

Group Project

1. **Individual Project** – In it children work upon different plans, or taking only any one project every child is expected to fulfil the work separately in his manner.

2. **Group Project** – When a group of children or the whole class work collectively on some only one project, it is called group project. The people of intentional ideology regard the group project of be better, as it awakens the feeling of co-operation.

Fundamental Principles of Project Method

1. **Principle of Purpose** – Every work has some definite aim. The

children take much interest in aimful work and try their best to accomplish it. By it their energy does not go waste to and fro.

2. Principle of Freedom – The manner of performing every work is different. The students are provided freedom to select activities, by which the search out the solution of the problem sincerely.

3. Principle of Activity – Much enforcement is given upon behaviours than principles. That is why the students always remain active both physically as well as mentally.

4. Principle of Experience – The students themselves perform the earning work of experiences. In it they have to co-operate with one another. It develops the feeling of co-operation in the child, which also develops socialism.

5. Principle of Reality – The works which are given to students to be performed, are actual, in this method. They are also connected with their lives. They are accomplished only in realistic circumstance. So this method prepares them for their future life.

6. Principle of Correlation – The work accomplishment through this method does not depend on the knowledge vested in any one subject. So taking help in various subjects becomes compulsory. The students earn the knowledge of all subjects with coordination.

7. Principle of Utility – Projectivity enforces the students to learn only those things which are useful for their future lives. Utility makes him advance towards intellectual awakening, personal development & social growth.

Different Steps of Project Method

The students have to pass through different and following steps to fulfil any project.

1. Creating the Situation – In it more attention is paid upon the freedom of the child. The teacher creates such atmosphere and circumstances in which the student may work by his ability and capacity. Circumstance can be made before the students through exhibitions, fairs places worth seeing and by magazines and papers related with physics. So, only circumstance is motivation. It is the problem alone that creates the atmosphere of excitement.

2. Choosing the Project – The teacher enjoys an importance place in selection of the project. He may inspire the children through distant suggestion for selection. The physics teachers must pay attention that the project should be based on the curriculum of students, to which the teacher can control by providing direction at the level of selection and defining the project. Such a project should be taken in hand that along with being a part of curriculum, it should be a subject of the interest of the attached students and to accomplish that may be possible with a view of arrangement and means.

3. Planning of the Project—Planning has an important place in the solution of the problem by any project. This work should be accomplished in the direct direction of the teacher. Alongwith this planning, should be made with childrens' co-operation and should be done in such a manner that all the students might contribute in it.

4. Execution of the Project—After the project having been formed, every child performs his work himself on the basis of —“Learning by doing.” All the students bear their own responsibilities according to their ability and capacity. A student has to perform many works; as writing, reading, collecting things, discussing and creating etc. The habit of critical thinking should be grown in children. The teacher should also help, inspect and encourage in their work from time to time and also give order.

5. Evaluation of the Project—After the project having been completed the evaluation of the whole work is made by the teacher and the students, whether, how much success was obtained in the work. If there may have remained any defect in the project, the effort to search for it must be made. For which objective the project was taken in hand, how long was it accomplished ? This is evaluation of both the student and the teacher.

6. Recording of the Project—Every child has to keep the particulars of his activities. He has to keep the whole record related with the responsibility thrown on his shoulders. The teacher inspects it and tries to know that to what extent, the child is fulfilling his responsibility ? A full description of the whole project is also prepared.

Merits of Project Method

1. Psychological Method—It is a psychological method. Enforcement upon child centred education is given in it. Attention is paid to interests, mentalities and mental feelings of children. The development of the curiosity and investigative tendency of the child takes place by the principle of learning by doing.

2. Suitable for Mental Development—The students get chances of thinking, inspecting and acting freely. For the solution of the problem, the students thinking themselves, try to establish the relation of among various sides. As a result the possibility of developing their mental growth increases.

3. Development of Scientific Attitude—The students keep on experiment, thinking and minding about their problems like a scientist in this method. They reach at some solid result after investigating their truth by a minute experimental study. Thus the power of reasoning, inspecting and thinking is developed in the child. Thus this method is the method of research and invention.

4. Feeling of Sociality—This method develops the feeling of sociality among students. Working with mutual co-operation they get

education of citizenship. It develops in them the merits of self discipline and tolerance. The students have to make adjustment mutually.

5. Permanency of Learning—The student has to fulfil many kinds of works himself in solving the problems in this method. So he begins to understand the importance of labour. In this method, the children learn the reading matter in natural situations. By it, the earning of knowledge becomes permanent in this method.

6. Equal Chance of Development—This method provides enough chances of development of various aspects of the student's personality; as hard work, self confidence, co-operation, leadership and emotional stability etc.

7. Self Development—The students themselves evaluate themselves under this method. By it they attain fine chance of self dependence, Self confidence and self enlightenment.

8. Correlation—This method is really a link of unity. By it, effort is made to thread all the parts of knowledge in one formula knowledge is obtained in it by establishing the relation in the knowledge of all subjects. The knowledge obtained in this way is useful for daily life.

9. Teacher, Taught Relations—In it both the teacher and the student have to be active. Both become skilful behavioural skill. The teacher provides co-operation to students according to need in this method. This sweetens their relations.

10. No Problem of Discipline—In this method students remain busy upto the most of the time in their work, so no problem of in discipline takes birth.

Demerits of Project Method

1. Costly—This method is very costly. A lot of money is needed to accomplish the project. Different material, instruments, implements and books have to be bought for the success of the project.

2. Deep Study of Subject is not Possible—In this method, the reading matter is selected from various places. So to make the study of various sub topics serial wise, is not possible in this method.

3. Unsystematic Teaching—To finish the curriculum in an arranged form, is difficult through this method.

4. Lack of Experienced Teachers, Text Books and Teaching Materials—The proper text books are not available on the basis of this method and there is shortage of necessary means in schools. Due to the large number of students, the able, trained and experienced teachers in that ratio are not available.

5. Problem of Curriculum within Duration—If education may be imported by this method, the whole curriculum cannot be accomplished in a certain period. Its use is possible only in some topics.

6. Appropriate Evaluation Impossible—In this teaching method, the use of the present current evaluation techniques is very hard.

7. Not Applicable in Every School—While teaching by this method, there is found shortage of suitable helping materials and necessary means in most of the schools. Alongwith this even the skilled and trained teachers are not available.