

Problem-solving Method

Describing the problem-solving method, Yoakam and Simpson
have written : **“Problem-solving or reflective thinking is**

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regarded by many as the type of mental activity toward which all simpler types of learning lead."

It solves a given problem. By problem is meant some such situation for which some activity is needed for solution. In the words of Wesley and Wronski : "The word 'problem' usually indicates a challenge, the meeting of which required study and investigation."

For it, we can need mental as well as physical activities. The given problem is taken up by students as a challenge, and they undertake physical and mental activities for its solution. Now you can ask the question that there is difficulty or problem in other methods too, then how is the problem-solving method different from them? It is distinct from other methods in as much as that it lays stress on the process, and not on the previous knowledge, as is done by other methods. A problem can be solved only mentally, while the project method requires some concrete physical action. In the words of Wilson HB and Wilson GM : "The difference is that the problem-solving may end in thought, while the project can and only with the successful completion of an objective unit of work."

In it, teaching work is organized and constituted with the focus on a problem. This is an activity method in which a challenging problem is placed before the students and they are trained for its solution. Under this method, a real situation is created before the students and the students are trained to develop an ability to face the circumstances successfully by active thinking. C.V. Good has defined the problem-solving method saying that it is a teaching method in which learning is motivated by challenging situations. It is a specific process in which a chief problem is solved with the combined solutions of different minor problems. This method is very important in economics teaching, because the subject of economics can present before students a large number of problems, such as consumption, production, distribution, exchange and revenue etc.

Steps in the Method

The first type of problems mentioned above don't require any specific steps, as problems are introduced to students, their importance is mentioned and then students are asked to compile the data. In the end, an evaluation is conducted. Thus, students have to pass through our steps in problem-solving :

1. Formulation of a problem.
2. Mentioning importance of a problem.
3. Compiling, organizing and systematizing the data.
4. Evaluation of arranged data.

The other types of problems are complicated in nature. Students have to think about them. Such problems have been said to have different steps by scholars. **John Dewey** has, in his book *How We Think*, has mentioned the following five steps :

1. To ascertain a possible problem.
2. To assess the complexity of a problem.
3. To formulate a hypothesis.
4. To consider the hypothesis in detail.
5. To verify a hypothesis.

Bining and Bining have mentioned the following three steps :

1. To define a problem.
2. To construct a hypothesis.
3. To infer.

The emerging educationist, **Kamtaprasad Pandey** has, in his book on action research in Hindi, has mentioned the following six steps :

1. Identification of a problem.
2. Defining and limitation of a problem.
3. Analysis of tasks of the problem.
4. Formulation of a hypothesis.
5. Plan for verification of a hypothesis.
6. Taking a final decision regarding a hypothesis and taking its basis.

All of the steps have been constructed for higher classes. At the secondary level, we can construct some simpler steps out of the above. At this level, the following steps seem to be appropriate :

1. Formulation of a problem.
2. Finding out the importance of a problem.
3. Compiling, organizing and arranging the necessary data of a problem.
4. To analyse, criticize and discuss the facts.
5. To infer.

6. To evaluate the inference and verify their authenticity.

Merits of Problem-Solving Method

1. In the problem-solving method, students are attached to learning actively. They are not passive listeners or spectators, they take active part in problem-solving.
2. Students are not imparted the knowledge of only facts and concepts; they are also taught the skills of compiling, organizing, analyzing and inferring data or facts. It develops in them the ability to understand facts in their proper perspective.
3. An important aim of the teaching of economics is to cultivate in students the ability to solve problems in the future life, and the problem-solving method proves helpful in the realization of this aim.
4. The sequential process of teaching-learning develops the power of decision-making.
5. Going through the problem-solving process, the students experience that there are several aspects of a problem and each aspect can be looked at from different angles. This experience develops in them liberality of thought and tolerance.
6. The problem-solving method makes students feel that the problem at which they are working, is no imposed one, but is a necessary problem of their own which ought to be solved.
7. Close contact between teacher and pupils makes teaching effective, because the students are able to express their problems and difficulties to the teacher who can understand them in order to put them on the path to progress.

Demerits of Problem-Solving Method

1. The problem-solving method consumes much time in organization and execution. The teacher has to put in much time and effort, and it requires active participation of students in the class. It is almost difficult to find solution to a problem in one period if all students are made active.
2. This method can become monotonous due to excessive experiments.

Methods

3. The intellectual aspect is given more importance in the problem-solving method.
4. The problem-solving method may be useful only when all required material for problem-solving is arranged well.
5. Generally the problems taken up for teaching are not so complex.

Suggestions

1. While selecting and constructing a problem, a teacher should keep in view his and students' ability, economic and social stages of students, and availability of resources.
2. A problem should be constructed and selected as per students' mental level.
3. Students' complete cooperation should be sought in selection of a problem. If possible, a problem should be students themselves.
4. A problem should be related to students' life, and it should be practical.
5. If the analysis and synthesis method is blended with the problem-solving method, then good results can be expected.