

A Study of Difficulties in Teaching Mathematics of Secondary School Level of Miraj City

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Abstract

1.1 ABSTRACT :

Research is simply the process of arriving dependable solution to problem through the planned and systematic collection, analysis and interpretation of the data. Truly research is an important tool for the advancement of knowledge as well promotion of the progress. Teacher is important factor in teaching process. Some teachers have the inborn qualities of teaching and have a good command on the subject, but all are not blessed they face various difficulties while teaching so the teaching can be made effective by understanding it or by the study of the difficulties arising while teaching. Research is oriented towards the discovery of the relationship that exist among the phenomena of the world and the term Educational Research is restricted to the systemic study designed to provide the educators with the more effective means of attaining the worthwhile educational goals .Research has no doubt proved to be an essential as well as the powerful tool in leading man toward progress.

1.2 Introduction :

Mathematics is an immortal and hard subject. Concept new laws, rules properties and method are given importance in teaching of Mathematics. Teacher must try to teach this subject effectively, interestingly should check achievements of his objectives in teaching these things are expected for the achievement of these objectives. Various type of content are included in the syllabus. Students also vary in their mental capacity and interest in Mathematics. So the teacher must plan to try their level best to make children understand the lesson properly and should feel newness in teaching. Learning of the students is mostly depended upon teacher. Inventive attitude and way of the representing content that is going to be taught.

1.3 Meaning of Research

A research is a process involves a number of inter related activities or operations that overlap continuously rather than follow a prescribed sequence. The operations involved in the research process are so interdependent that the earlier steps. It is obvious that each one of the various operations will have an effect on the quality of research. A small omission anywhere will affect the quality of study just a small lapse will affect the satisfaction of the people from a recipe.

1.4. Problem of statement:

A study of difficulties in teaching Mathematics to the teachers of secondary school level of Miraj city.

1.5 Conceptual terms:

1. Mathematics: It is one of the compulsory subject from the secondary level syllabus.
2. Name of City: Miraj city of Miraj Taluka.

1.6 Objectives of the Research:

1. To find the difficulties in teaching Mathematics teachers of the secondary school level.
2. To compare the difficulties of teaching Mathematics teacher for the secondary school level.

1.8 Scope and limitations:

1. This Research is limited only for the Mathematics teachers.
2. This Research is limited only for the secondary level of the schools.
3. This Research is useful for the educational institute and the teachers of Mathematics that teach to the secondary classes.

4 This Research is limited only for the secondary level of the schools in Miraj city.

1.9 Research Method:

Survey method is used for the present Research.

1.10 Tools used in Research:

In this present research Self prepared questionnaires was used.

1.11 Selection of sample:

In this Research the teachers of Miraj city who teach Math’s subject at secondary level are selected. The total number of secondary school teachers is 21. The sample of mathematics teachers is 21.

1.12 Analysis and Interpretation

Table No.1

Percentage of Preamble of the Objectives of Lesson

Sr.No.	Objectives of Lesson	Able to decide	Unable to decide	Partly	Total
1.	Number of teachers	13	0	8	21
2.	Percentage	64%	0%	46%	100%

Observation:

In the above table no.1 it is observed that the number of teachers able to decide the objectives of lesson is 13 and their percentage is 64%. Those who are not able to decide objectives of lesson is 0 and who can partly do is 8 and percentage is 46%.

Interpretation:

The number of teachers that are able to decide preamble of the objectives of lesson is maximum.

Table No.2

Percentage of selection of Content Cum Methodology in teaching

Sr.No.	Content Cum Methodology	Able to select	Unable to select	Partly	Total

1.	Number of teachers	19	1	1	21
2.	Percentage	90.48%	4.76%	4.76%	100%

Observation:

In the above table no. 2 it is observed that number of the teachers who are able to select the content cum methodology is 19 and their percentage is 90.48%. Those who are unable to select is 1 and their percentage is 4.76% and partly are 1 and their percentage is 4.76%.

Interpretation:

The number of teachers who are able to select the Content Cum Methodology in teaching is maximum.

Table No. 3
Percentage of various examples in the content

Sr.No.	Various examples in content	Able to solve	Unable to solve	Partly	Total
1.	Number of teachers	19	1	1	21
2.	Percentage	90.0%	5%	5%	100%

Observation:

In the above table no.3 it is observed that number of the teachers who are able to solve the various examples in the content is 19 and their percentage is 90%. And those who are unable to solve is 1 and their percentage is 5% and who are able to partly solve the various examples are 1 and their percentage is 5%.

Interpretation:

The number of teachers who are able to solve the various examples in the content is maximum.

Table No. 4
Percentage of New Concept in the Content

Sr.No.	New Concept in the Content	Able to perceive	Unable to perceive	Partly	Total
1.	Number of teachers	21	0	0	21
2.	Percentage	100%	0%	0%	100%

Observation:

In the above table no.4 it is observed that number of the teachers who are able to perceive the new concept in the content is 21 and their percentage is 100%. And those who are unable to perceive is 0 and their percentage is 0% and partly are 0 and their percentage is 0%.

Interpretation:

The number of teachers who are able to perceive the new concept in the content is maximum.

Table No. 5

Percentage of teachers able to express previous knowledge of the students

Sr.No.	Express Previous knowledge of students	Able to express	Unable to express	Partly	Total
1.	Number of teachers	21	0	0	21
2.	Percentage	100%	0%	0%	100%

Observation:

In the above table no.4 it is observed that number of the teachers who are able to express the content considering the previous knowledge of the students is 21 and their percentage is 100%. And those who are unable to express is 0 and their percentage is 0% and partly are 0 and their percentage is 0%.

Interpretation:

The number of teachers who are able to express the content considering the previous knowledge of the students is maximum.

Table No. 6

Percentage of Motivation based on previous knowledge of the students

Sr.No.	Motivation based on previous knowledge of the students.	Able to give	Unable to give	Partly	Total
1.	Number of teachers	16	1	4	21
2.	Percentage	76%	5%	19%	100%

Observation:

In the above table no.6 it is observed that number of the teachers who are able to give motivation on previous knowledge of the students is 16 and their percentage 76%. And those who are unable to give is 1 and their percentage is 5% and partly are 4 and their percentage is 19%

Interpretation:

The number of teachers who are able to give motivation based on the previous knowledge of the students is maximum.

Table No. 7

Percentage of New Teaching Aids in teaching

Sr.No.	New Teaching Aids	Able to use	Unable to use	Partly	Total
1.	Number of teachers	10	3	8	21
2.	Percentage	48%	14%	38%	100%

Observation:

In the above table no.7 it is observed that number of the teachers who are able to make use of new teaching aids in teaching is 10 and their percentage is 48%. And those who are unable to use is 3 and their percentage is 14% and partly are 8 and their percentage is 38%.

Interpretation:

The number of teachers who are able to make use of new teaching aids in teaching is maximum.

Table No. 8

Percentage of use of Various Methods in teaching

Sr.No.	Various Methods in teaching	Able to use	Unable to use	Partly	Total
1.	Number of teachers	13	2	6	21
2.	Percentage	62%	9.5%	28.5%	100%

Observation:

In the above table no.8 it is observed that total number of the teachers who are able to make use of various methods in teaching is 13, their percentage is 62%. And those who are unable to use is 2 and their percent is 9.5% and partly are 6 and their percentage is 28.5%.

Interpretation:

The number of teachers who are able to make use of various methods in teaching is maximum.

Table No. 9

Percentage of Selection of Teaching Experience by Intellectual Capacity in teaching

Sr.No.	Selection of Teaching Experience by Intellectual Capacity	Able to select	Unable to select	Partly	Total
1.	Number of teachers	18	1	2	21
2.	Percentage	86%	5%	9.0%	100%

Observation:

In the above table no.9 it is observed that number of the teachers who are able to select teaching experience by intellectual capacity of the students in teaching is 18 and their percent is 86%. And those who are unable to use is 1 and their percentage is 5% and partly are 2 and their percentage is 9.0%.

Interpretation:

The number of teachers who are able to select teaching experience by intellectual capacity of the students in teaching is maximum.

Table No. 10

Percentage of use of Examples from Other Text Book in teaching

Sr.No.	Examples from Other Text Book	Able to use	Unable to use	Partly	Total
1.	Number of teachers	14	1	6	21
2.	Percentage	66.5%	5%	28.5%	100%

Observation:

In the above table no.10 it is observed that the number of the teachers who are able to make use of examples from other text book in teaching is 14 and their percent is 66.5%. And those who are unable to use is 1 and their percentage is 5% and partly are 6 and their percentage is 28.5%.

Interpretation:

The number of teachers who are able to make use of examples from other text book in teaching is maximum.

Table No. 11

Percentage of Co-relation of Examples Related in Daily life

Sr.No.	Co-relation of Examples Related in Daily life	Able to co-relate	Unable to co-relate	Partly	Total
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1.	Number of teachers	13	0	8	21
2.	Percentage	62%	0%	8%	100%

Observation:

In the above table no.11 it is observed that the number of the teachers who are able to co-relate examples in daily life is 13 and their percent is 62 %. And those who are unable to correlate is 0 and their percentage is 0% and partly are 8 and their percentage is 8%.

Interpretation:

The number of teachers who are able to co-relate examples in daily life is maximum.

1.12 Conclusions according to Objectives:

- 1 The number of teachers that are able to decide the preamble of objectives of the lesson is maximum.
- 2 The number of teachers who are able to select the content cum methodology in teaching Math's is maximum.
- 3The number of teachers who are able to solve the various examples in the content is maximum.
- 4The number of teachers who are able to perceive the new concept in the content is maximum.
- 5 The number of teachers who are able to express the content considering the previous knowledge of the students is maximum.
- 6 The number of teachers who are able to give motivation based on the previous knowledge of the students is maximum.
- 7 The number of teachers who are able to make use of new teaching aids in teaching is maximum.
- 8The number of teachers who are able to make use of various methods in teaching is maximum.
- 9 The number of teachers who are able to select teaching experience by intellectual capacity of the students in teaching is maximum.
- 10 The number of teachers who are able to make use of examples from other text book in teaching is maximum.
- 11The number of teachers who are able to co-relate examples in daily life is maximum.method of teaching is maximum.

1.13 New research Problem:

1. To discover difficulties in solving arithmetic calculation in secondary school level i.e. for standard IX & X.
2. To discover the importance of transactional examples of the Mathematics subject in day today life.
3. To discover the fear of the complex Mathematical calculation of the secondary school students.

1.14 Recommendations

1. This research is helpful in solving the difficulties faced by the teacher of secondary school level in teaching Mathematics.
2. In secondary school level use of advance technological apparatus and computer will be effective to the students.
3. This research is useful for the educational institutions, teachers and schools of secondary level.

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