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Upgrading Mathematical Teaching by Overcoming Challenges Faced in Ruler Areas

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Abstract

Today teaching mathematics has been a great challenge for the teachers, especially in ruler areas. The teacher is critical in shaping the lived task and directing students' activities so that students have opportunities to engage meaningfully in mathematics through them. A teacher could turn an open-ended task into a closed one or it closed one into an open one. He or she could treat a task of high cognitive demand as low level one or vice versa. It has been observed that mathematics teachers rarely utilize a wide variety of instructional media. There are several factors that could influence this, for example, the teacher's knowledge of content, knowledge of students' goal for tasks, instructional orientation and beliefs about mathematics. There are many ways to upgrade a ruler education system. Which includes boost free education, focus on internal infrastructure of school, bringing innovative teaching methods, special training for mathematics teacher. Mathematics is such a subject that can be dull and difficult to understand or very creative, entertaining, fun making and interesting if understood. If the subject can be taught in pictorial or with the help of body language or any creative method. This paper shows effective and creative methods adopted to teach mathematics in ruler areas.

Keywords: Students, mathematics, creative, knowledge.

Objective

- Recognize that mathematics permits the world around us.
- Appreciate the usefulness, power and beauty of mathematics.
- Enjoy mathematics and develop patience and persistent when solving problems.

Introduction

The study focuses on utilization of instructional resources in teaching of mathematics. Instructional resources includes our textbooks library books, charts, online CD resources, small videos, funny games related to maths. Mathematics teacher have to use instructional media to provide students with situation near to reality. Education goes beyond what takes place within the four walls of classroom. A student gets the education from his experience outside the school as well as from those with in based on some factors. There are three main types of education viz. 1. formal 2. informal and 3. Nonformal. Knowledge for teaching deals with the knowledge that the teacher need in order to first select and develop task, to promote the students' conceptual understanding of mathematics, support their development of mathematical thinking and capture their interest and curiosity and optimize the learning potential of such a task. The knowledge includes as follows. First one is understanding the nature of worthwhile task, for example, involves significant mathematical content can be solved in multiple ways. Also, use multiple representation and connect to other important mathematical ideas which are required for a student to justify, interpret and conjecture that how high cognitive demand is. Second, ability to identify, select a clear task that are rich in mathematical terms, content radiologically, in terms of affording the learning of mathematics. Meaningfully and with deep understanding, and personality for students in term of their interest and learning needs. Third, knowledge of levels of cognitive methods of task and the relationship of goals for the task in terms of the level of learning. An understanding of mathematics they can promote. Fourth is knowledge of students understanding, interests and experiences and the range of ways that diverse students learn mathematics. Fifth is understanding of how the task teachers select and how they can use them influence the students which makes sense of mathematics on doing calculations an applying mathematics with knowledge with respect to task. Also, it's important to highlight that how to organize the work of the students. What question to ask to

challenge those with a varied level of expertise and how to support the students without taking over the process of thinking for them and thus illuminating the challenges. Mathematical task knowledge for teaching them is multi-dimensional and is slightly challenging for a teacher to construct without meaningful intervention to build on our kids illusion series making of

Challenges faced by the teacher

The thing that makes maths difficult for many students is that it takes patience and persistence for many students to grasp. Maths is not something that comes into entity automatically. It takes plenty of efforts for understanding the subject, hard work and practice is very important. Also, the basic ideas of the subject must be clear. A teacher must have a skill and ability to create interest in maths. Poverty and lack of education in a family also impacts on the ruler education. A teacher generally has a heavy workload, he or she teaches many other subjects. Also, no provision of regular payment to a teacher. There is no proper infrastructure in ruler areas for most of the students, mathematics is very boring and difficult subjects. Ruler teachers are not well equipped with the latest technology. They are also not trained to use the technology properly and effectively. 85% of the teacher complain of non-availability of training facilities for them to develop effective model of teaching mathematics in their schools. Efforts must be made by the teacher for upgrading mathematical teaching. A teacher must create small groups of students and distribute a problem to solve so that each student in a group share his or her idea. A teacher must discuss related problems to the real-life situation, when applicable. Also, jumping directly into solving the problems can lead to frustration and confusion. So, work of any practice problem will be bit easier because practice makes perfect. Therefore if you are struggling with particular kind of problem you can improve by working on solving additional problems. A teacher should correlate a real life understanding of why and how math is important and give the motivation. They must try to think of real-world examples where math is applied and apply mass condition to the problems to build confidence. A teacher should help students to remove the anxiety of students by talking with them personally. The teacher in rural school should be provided with the sufficient quality of equipment's to create a creative an encouraging environment for teaching mathematics physically and most effectively. The teacher should be given high technical training to use highly sophisticated tools and equipment's to teach mathematics practically. Also, the school management should accumulate sufficient amount of funds to purchase highly sophisticated tools, equipment's, books, computers and toys and provide them to play, to provide them a teacher for creating a scientific environment in school, to attract the students to attend the school regularly. The teacher should create a challenging environment among the students by forming task groups and alerting tricky mathematical problems to solve. The teacher should also supervise the task groups and help them to get the solution. Motivation is an important factor which can solve many problems of the teacher. The teacher should judiciously as well as politely motivate the students to learn and attempt the problems.

Conclusion

Students of the primary level showed great amount of enthusiasm in learning mathematics. The teacher in the ruler areas seemed to have lost interest in teaching mathematics. Practically saying it is due to non-availability of funds for infrastructure and technological equipment's for effective teaching methods. Ruler teachers are not well equipped with latest technology and are not trained to use technology properly and effectively. Motivational factors are very poor among the teachers in ruler areas because there is no accountability for the teachers in their performance and academic achievements. Lack of motivation and positive attitude among the teachers has led to poor attendance, regularity, interest and performance among the students, which is leading to poor performance in mathematics.

References

1. Ball, D. L. Knowledge and reasoning in mathematical Pedder pdog biology. Bigly EG critical variables in mathematical mathematical education. Baldi on learning to teach mathematics. For learning of mathematics. J praise levy. The trouble with math. Lempert am knowing, doing and teaching multiplication.

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2. Begle, E. G. (1979). Critical variables in mathematics education: Findings from a survey of empirical literature. Washington DC: Mathematics Association of America and the National Council of Teachers of Mathematics.
3. Norwood, NJ: Ablex. Calik, C and et.al. (1979) In P. L. Peterson and H. Walberg (Eds.) Research on teaching: Concepts, findings and implications (pp 231-263)

