

PEDAGOGIC PROGRESS AND EFFORTS OF TEACHERS OF MATHEMATICS

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ABSTRACT

In the field of education, it becomes a burning problem that the numbers of low achiever students in mathematics in the school level are constantly increasing. In spite of the pedagogic progress and efforts of teachers of mathematics, results in general are unsatisfactory. It is a fact that, despite its utility and importance, mathematics is perceived by most pupils as difficult, boring, not very practical, abstract etc. For most students, the subject is not a source of satisfaction, but rather one of frustration, discouragement and anxiety.

Mathematics is an essential part of our everyday life now. Therefore denial of its fundamental education to a modern citizen will be a great handicap for him. Mathematics will stay compulsory during the compulsory and universal education. The place of a subject in the school curriculum depends upon its contribution towards the fulfillment of educational aims. The position of mathematics is to be determined on purely utilitarian and cultural grounds. Mathematics has got a number of characteristics such as abstractness, objectivity, symbolism, logical structure and brevity.

INTRODUCTION

For quite a number of years there have been certain groups of people, interested in mathematics, who have desired to strengthen the program in the secondary schools. Of course, mathematics has been an integral part of the high school program, not only in general education, but in the preparation of youth for the scientific and engineering professions. But many people now claim that a more rigorous curriculum should be provided, both in breadth and depth of content, in

order to more adequately prepare high school graduates to proceed towards high level scientific programs.

Mathematics is the one of the most importance subject in our human life. Without the knowledge mathematics, we can say nothing possible in the world. Now a day's mathematics is globally accepted but locally useless. Mathematics has been accepted as an importance component of formal education from ancient period to the present day. Our history shows that ancient scholars developed mathematics practically being obliged day-to-day problem. In the ancient period, mathematics has developed by great shepherds. Mathematics is the body of knowledge in the area of science and technology. The subject mathematics is beautiful and interesting because its own symbols, language, terms, technology etc. Mathematics is being main part of human lifestyle. In the world, each society has their own mathematical languages, terms, symbols, counting system in different countries like as Chinese, American, Japanese, Arabian etc.

The present apparent stress on mathematics seems to follow, quite logically, the great resurgence of scientific research during and following the Second World War and nothing has accentuated this stress in mathematics and science, more than the successful launching, by the Russians, of the first earth satellite in October 1957.

Some fruitful work has been continuing over the past years, by many groups of interested people. Since 1950 the Mathematical Association of American has sponsored a "Committee on the Undergraduate Program". The committee has sought to introduce some modern topics and to bring calculus to the freshmen. The College Entrance Examinations Board established the "Commission on Mathematics" to consider broadly the secondary-school college-preparatory mathematics curriculum and make recommendations on its modernization and improvement.

The Secondary- School Curriculum Committee of the "National Council of Teachers of Mathematics", is giving attention to the Mathematics program for all students in grades seven through twelve.

REVIEW OF WORK

Ngailankim (2005) led an examination on demeanor and study habits identified with accomplishment in mathematics of IX class students. The real discoveries of study were (1) no

noteworthy contrasts was found in the disposition towards mathematics of student assembled high normal and low in mathematics accomplishment, (2) no critical contrasts was found in the investigation habits score of high normal and low accomplishment in mathematics, (3) male and female students having a place with high normal and low gatherings scored on mathematics accomplishments did not demonstrate huge contrasts in their frame of mind just as study habits scores, (4) non innate students indicated higher demeanor score when contrasted with the ancestral students.

David et. al. (2005) led an investigation on removing logical comprehension of forthcoming basic teachers: role of sex, education level, courses in science, and frames of mind toward science and Mathematics . A various relapse examination of the connection between forthcoming teachers' logical comprehension and Gender, Education Level (High School, College), Courses in Science (Biology, Chemistry, Physics, Earth Science, Astronomy, and Agriculture), Attitude Towards Science, and Attitude Towards Mathematics is reported. Undergrad basic science students (N = 176) in a urban doctoral-level university in the United States partook in this investigation. The consequences of this investigation indicated Gender, culmination of courses in High School Chemistry and Physics, College Chemistry and Physics, and Attitudes Toward Mathematics and Science altogether connected with logical comprehension. In view of a relapse model, Gender, and College Chemistry and Physics encounters added critical predictive accuracy to logical comprehension among planned rudimentary teachers contrasted with different factors.

Vijayan (2005) in an exploration study entitles as 'A basic investigation of the effectiveness of social science curriculum to develop the values of secondary school pupils' seen that the substance of the secondary school social science is a rich collection of values. He distinguished 62 values among the aggregate of 83 referenced by NCERT. His significant discoveries were (I) just 69% of teachers could distinguish different values covered up in the curriculum. (ii) 76% of teachers had valued definition capacity. (iii) 84 % of teachers recognized tasteful values. (iv) Majority of teachers (85%) utilized just low degree of teaching activities in regards to development of values in students.

Adler (2005) attests that not at all like mathematicians, mathematics instructors need to outfit pre-administration teachers with the aptitudes to break down problems that emerge in the classroom so they comprehend their students better. For instance, they ought to have the option to complete a blunder examination of the students' reactions in a given exercise. For example, in the wake of requesting that the students take care of a problem like $-2(x + 3)$, the pre-administration teacher might be looked with the accompanying answers from the students: $-2(x + 3) = -2x + 6$, or $-2(x + 3) = (x + 3) - 2$. Understanding that the appropriate responses are correct or wrong isn't sufficient for teaching. The teacher ought to have the option to do the methodology and notice the foundation of the problem (Richardson-Koehler, 2011). In the primary case, the student has problems with growing the sections. The negative sign outside the sections has 34 just influenced the principal number inside the section and the other term kept up its sign. In the subsequent model, it appears the student has the knowledge of 'commutativity in duplication'. Along these lines, to the student, beginning with -2 increased by the section is equivalent to duplicating the section by -2 (-2 coming after the section). The student sees it as though the significance of the expression has not changed at this point truth be told, the duplication idea has been subsumed by expansion. It may not be feasible for pre-administration teachers to teach these operations on the off chance that they don't comprehend where the problem is exuding from. Subsequent to interpreting and assessing the root and nature of the mistake, it is thusly suitable for the teacher to do the problems and right the students.

Rajni Bala, S.C.Gakhar and Seema Chopra (2006) made investigation on "Teacher_ Parental help, Study habits, Aptitude for and Attitude towards mathematics as predictors of scientific Achievement". The objective of the investigation was to think about the predictive effectiveness of free factors of teacher parental help, consider habits, scientific fitness and numerical demeanor in predicting the accomplishment of students in mathematics. Review Method had been embraced for this investigation. An irregular sample of 756 students of XI class concentrating in various schools arranged in provincial and urban territories of Punjab state established the sample of the investigation. The apparatuses utilized were Teacher - Parental help scale developed by the specialists. Study Habits stock by Mukhopadhyaya and Sansanwal (1983), scientific bent test built and standardized by the examiners, numerical frame of mind scale likewise developed and standardized by the specialists and the signs of the individual students of X class in mathematics. The data were examined utilizing venture up relapse

conditions. The way that variable of teacher parental help was observed to be a decent predictor of numerical accomplishment of the students was the finding. The factors of study habits were observed to be an insignificant predictor of numerical accomplishment of the students. This variable of scientific fitness was observed to be a decent predictor of numerical accomplishment of the students. The variable of numerical frame of mind was observed to be unimportant predictor of scientific accomplishment of the students.

RESEARCH METHODOLOGY

Methodology in mathematics covers a wide scope of region. In any case, it might have accepted that methods have to do with the real presentation of materials to students in the classroom. The primary occupations are to clarify, to clarify, to challenge, to manual for disclosure and to develop understanding. The examination will be concerned with deciding the situation, where there is a plausibility that the kind of method is identified with school size, class size, of IQ level of the students. It is noted likewise that the outcomes acquired will be an emotional nature—the teachers accepted certain things without having a great deal of authentic proof to support that conviction.

- The studies mirror a need for state gatherings of teachers or national boards to distinguish urgent problems so some course may be given to look into
- There ought to be more prominent co-appointment of effort in tackling recognized issues. A whole mathematics staff may focus its examination efforts on a solitary problem,

DATA ANALYSIS AND RESULT

This report presents the data taken from the questionnaire sent to a sample of secondary s secondary schools. It included three principle segments:

- (1) Part I looked for data identifying with work force, class size, time distribution and administrative provisions;
- (2) Part II asked into methods of presenting and assessing materials 5 and
- (3) Part III requested data in respect to the mathematics library and teaching facilities

CONCLUSION

By and large, it might be said that there is an immediate connection between school size and the general sufficiency of instruction. The bigger schools give more opportunity to instruction, and improve provision for the extraordinarily brilliant students. They likewise give a more extensive mathematics program to those students who are not college bound. Their libraries contain a more prominent assortment of books, and they have more facilities and equipment for teaching mathematics.

India has advised education as a fundamental appropriate for all youngsters between six to fourteen years empowering them to legitimately request education from the administration by methods for the Right of Children to Free and Compulsory Education Act, 2009. In such conditions the importance of giving quality education at school level in all subjects can't be undermined. To the education that that school kids get it must be focused on that a quality mathematics education must be a necessary piece of their learning knowledge. Consequently examine in mathematics education remains a proceeding and crucial need in the educational situation. Scarcely any speculations have no exemptions. That seemed, by all accounts, to be genuine regarding the secondary school mathematics program in Uttar Pradesh. From perusing the returned questionnaires it was noticed that there were outstanding schools in every size classification. These were normally connected with the character, excitement and devotion of the heads and teachers. There were, additionally, a few insufficiencies. Both of these exemptions do have some relationship to the physical provisions or absence of them. Yet, one gets the impression that there is much advantageous and true effort given to the teaching of mathematics to Uttar Pradesh youth.

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