

NEW CURRICULUM AND TEXT BOOK OF WEST BENGAL-AN OVERVIEW OF THE PEOPLE OF SOUTH DINAJPUR DISTRICT

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ABSTRACT:

South Dinajpur District is a district of West Bengal situated in North Bengal. The literacy rate of this district is 72.82%. After the inception of the National Curriculum Framework-2005 and National Curriculum Framework 2009 and the Right to Education Act 2009 a drastic change in the syllabus of all subjects has been taken place in West Bengal. West Bengal Board of Secondary Education itself published the text book of mathematics of secondary level to maintain the exact form of the government policy or the suggestions of the Expert Committee on School Education. A new style of writing the text books of different classes has been followed. The writer or writers have tried to introduce mathematics as a language of science. The text books have been written in such a manner that the students can easily understand which method and formula are to be applied to solve the given problem. Moreover the language of the text book has been written in first person in such a manner that the students do not feel it burdened to solve the problem but they feel that the solving problem is their own task. The mathematical problems have been presented to the students connecting the problems with day to day life so that they can relate mathematics with daily life problems and they feel mathematics a necessary subject for their day to day living. Undoubtedly the text books of West Bengal Board of Secondary Education are the outcomes relentless labour of the expert writers. The researcher made an assessment to investigate the views about the syllabus of mathematics and text books of mathematics of West Bengal Board of Secondary Education of the students, teachers and conscious guardians of South Dinajpur district and varieties types of response have been observed.

Keywords: Mathematics syllabus, Text Book, Secondary level, WBBSE.

INTRODUCTION:

Mathematics is a very important subject in the secondary level curriculum to be taught. It is a most powerful tool to be learned and to be skilled. This subject has immense use in every part of our daily life. Mathematics is

nothing but a tool without which the science and technology will become blind and they will loss all the way of development. Mathematics helps a lot in many practical situations this subject helps the students in developing reasoning and rational thinking in solving complex problems and makes informed decisions. Mathematical knowledge helps every person to make it possible to communicate with the modern scientific and technological world. So mathematics has become an important subject of the secondary curriculum. Deeper understanding of mathematics is necessary for all students of secondary level. To develop the mathematical base among the students step by step the National Curriculum Framework-2009 has divided the mathematics curriculum upto secondary level into five forms depending on the aims of learning. These are Form-I, Form-II, Form-III, Form-IV and Form-V. Form I to Form-III are included in the curriculum of lower secondary level and its main objective is mathematical literacy among the students upto upper primary level whereas the Form-IV and Form-V are included in the curriculum of secondary level and its main objective is development of mathematical skill to solve complex mathematical problems and feel the power of mathematics. The curriculum is so designed that after completing the secondary level education the students will be skilled to apply their mathematical knowledge in different types of mathematical situations. The students will be able to use mathematical language and understand mathematical language in day to day communication and investigation. The students will be able to appreciate the pattern, structure and power of mathematics. They will be able to appreciate the interdependence of mathematics with other subjects. Logical reasoning and rational thinking skill will be developed in them. The intellectual curiosity to creative work depending on mathematical logic will be developed in the students. Giving weightage to all of these the text books of mathematics for secondary level has been prepared by the West Bengal Board of Secondary Education based on the suggestions of the Expert Committee on School Education for curriculum revision formed by the government of West Bengal. In the present study the investigator has tried to analyze the survey of the views of the students, teachers and conscious guardians of South Dinajpur District about the new syllabus and the text books of mathematics published by West Bengal board of Secondary Education.

OBJECTIVES OF THE STUDY:

The main objectives of the study are:

- (i) To study the view about the new curriculum and text book of West Bengal Board of Secondary Education of the students of South Dinajpur District.
- (ii) To study the view about the new curriculum and text book of West Bengal Board of Secondary Education of the teachers of South Dinajpur District.

- (iii) To study the view about the new curriculum and text book of West Bengal Board of Secondary Education of the conscious guardians of South Dinajpur District.

METHODOLOGY:

The methodology used in this study is Descriptive survey study. For this study three questionnaire were prepared by the investigator, one for students, one for the teachers and one for the conscious guardians. All these questionnaires contain both open ended and closed ended questions on mathematics syllabus of west Bengal and mathematics text book published by the West Bengal Board of Secondary Education. The data thus collected are used for analysis and discussion of the study.

POPULATION:

All the students, teachers and conscious guardians of South Dinajpur District comprises the population of this study.

SAMPLE:

For this study a sample of 327 students of class VIII and IX was taken from two randomly selected schools of South Dinajpur district. A sample of 84 mathematics teacher was taken by purposive sampling and a sample of 161 parents was taken by incidental sampling.

RESULT AND DISCUSSION:

The teachers of the South Dinajpur Districts are asked open ended questions about the curriculum of mathematics of West Bengal and 78.2% of them admitted that the curriculum and syllabus is good enough, 12.9% of the teachers told that the curriculum is of average quality and only 8.9% told that the curriculum is not proper. So it may be stated that the new curriculum of mathematics serves the purpose well. The teachers are also asked open ended questions about the text book of West Bengal Board of Secondary Education and they showed mixed reactions. 76.6% of the teachers told that the gifted students take a little heed of what have been written in the solved examples of the text book and they only pick the question of the solved examples and solve the problem themselves. So, though the languages of the text book and the writing style are good enough it bears a little significance to those students. At the same time the backward students have no interest in reading the solved problems at all. Therefore the style and language of the text books have no chance to cast an impression on the backward students. Though to the backward children solving mathematical problem is boring and they feel

solving problems a punishment, but to the gifted children solving of mathematical problem is an entertainment and so they always searches for more and more problems in the text book. But the number of exercises provided in text book is insufficient to them. As a consequence, the book cannot satisfy their need. The parents are also asked open ended questions about the curriculum and it is seen that 44.8% of them told that the curriculum is good enough, 27.5% of them gave no reaction and 18.3% told that curriculum is of average quality and only 9.4% told the curriculum is not proper. The parents are also asked open ended questions about the text book. 74.4% of the conscious guardians told that they read and use the solved examples to solve the exercises at the time of teaching their child at home and the rest 25.6% told that they do not read the solved examples of the text book or they do not teach their children. 51.2% of the conscious guardians told that the text books contain many a pictures and diagrams to make mathematics simple but to the parents the pictures and diagrams are burden at the time of teaching their child at home. 17.3% conscious guardians also iterated that there should be more exercises in the text books so that the book may satisfy the need of their gifted child. In the beginning of each of the text books it is now mandatory that the Preamble to the constitution of India is to be written. As a result the text book of mathematics also contains the preamble to the constitution of India at the beginning of the text book. The first question to the students was that whether they have read the page containing the preamble to the constitution of India (showing them the page the question was asked) and it is found that 4.6% of the students said that they have never read that page, 91.8% of them said that they have read once or twice in their life but they have never read in the later times and 3.6% of them said that they have read several times but not understood what that means. So, though the purpose of including preamble at the beginning of the text book is great but it bears a little significance to the students. The text books of mathematics of WBBSE are written in first person and not in interrogative sentence so that the students feel comfortable with the problem and feel that solving the problems are their own work and they do not feel it pressure in solving the problems. The languages are written not like "Solve this problem" instead of it is written as "I am solving this problem". As for example, the problem is not written as "Shyambabu went to market with 250 rupees and bought 5kg of wheat flour by 140 rupees. How many rupees is in his hand now?" Instead of that the problem is written as "Shyambabu went to market with 250 rupees and bought 5kg of wheat flour by 140 rupees. I shall calculate how many rupees is in his hand now?". The investigator has a curiosity to study how these types of language affect their learning. So, the researcher investigated and the result shows that though the problem is written as "I shall calculate how many rupees he has in his hand now " , but the students start solving the problem keeping in view that he has to calculate that "How many rupees is in his hand now ?". It is observed that 75.3% of the students do not read the solved examples of the book. So the style of the language of the solved problems of the text book has a little impact on the students though the purpose of writing the language of the text book in new style is great. So, what language has been

written in the solved problems of the text book has little effect on the students? One of the main purposes of the mathematics curriculum is to produce creative mathematical thinking among the students. So the investigator has a curiosity whether the mathematics text books serve the problem of developing creative mathematical thinking in them. The students are tested about their creativity of problem solving by various types of creative mathematical problems. The result shows that 29.7% of the students have high power in solving creative mathematical problems, 28.4% have low power of solving creative problems and the rest 41.9% have medium capacity. So, it may be said that the development of creative thinking is as per expected level. One of the other main purposes of mathematics curriculum is the development of ability of mathematical communicative power, that is, the ability to speak and understand mathematical language. So the investigator tested the development of this mathematical communicative power and the result shows that 25.2% of them have high communicative power 41.7% of them have medium and the remaining 33.1% have low mathematical communicative power. Mathematics is the only subject which has the strong power of developing reasoning ability among the students. Mathematics plays a great role in developing the logical mind of the students and it makes the habit of logical thinking among the students and the students always applies this logical thinking in all practical problems. The investigator has the curiosity to know whether these types of reasoning ability and logical thinking ability have been developed in them or not. The result shows that the curriculum has served this purpose. 32.6% of the students have high logical power, 38.2% have medium and the rest 29.2% have low logical power. The other main purpose of the curriculum is to develop the power in the students to apply mathematics to the other subjects and in different practical situations. The result shows that 27.4% have high power, 42.3% have medium and the rest 30.3% have low power of applying mathematics in different mathematical situations.

CONCLUSION:

The above discussion reveals that the curriculum of mathematics of West Bengal designed by the Expert Committee on School Education serves almost all the purposes of mathematics curriculum. The curriculum is undoubtedly good enough as per teachers, students and parents. The inclusion of the preamble to the constitution of India at the beginning of the text book has an important significance, its purpose was undoubtedly great but the students take a little heed of that. So it is the duty of the teachers to make the inclusion of the preamble a success. The text book contains insufficient numbers of mathematical problems and so it fails to satisfy the need of the gifted children. According to the conscious guardians the solved examples provided in the text book is very helpful to the parents who has not sufficient knowledge of mathematics but the gifted students and the teachers only pick the question and solve themselves. So the languages of the solved examples become insignificant to those students. The languages of the mathematical problems are written in first person, but the students, while

solves the problem thinks in interrogative sentence. So, the purpose of writing the questions in first person and assertive sentence instead of writing in interrogative sentence become fruitless.

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