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SUMMARY OF THE FINDINGS AND RECOMMENDATIONS

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SUMMARY OF THE FINDINGS AND RECOMMENDATIONS

5.0 In this chapter the investigator presents a summary of the findings from the study, draws educational implications, discusses on various aspects, gives recommendations, provides suggestions for further research and ends with conclusions.

The purpose of the study was to develop Programmed Learning Material for teaching Mathematics to blind students at primary level and test its effectiveness with the help of scores in Achievement tests as compared to existing traditional method of teaching. In Chapter-IV the analysis of the achievement scores has revealed certain findings. The salient findings of the study are brought together in this chapter on the basis of results that have come to light following the experimental technique of research to investigate relative effectiveness of the two techniques/strategies. Educational implications of the findings from the present research are also presented in this Chapter. In this chapter the investigator also suggests further research in some additional areas.
5.1 FINDINGS OF THE STUDY

The investigator conducted research through the experimental design to study the relative effectiveness of programmed learning method as compared to traditional method of teaching mathematics. The findings that have come up as a result of the analysis are as follows:

5.1.1 The mean and Standard Deviation of 30 students taught through programmed learning was 80.06 and 8.36 as compared to 67.13 and 8.2 of those who were taught through traditional method. The t-value of the two groups was 6.04, which was significant at .01 level. Thus one of the most important findings of the study is that programmed learning method of teaching Mathematics to blind students is distinctly more effective than the traditional method.

5.1.2 The mean score of girls and Boys taught through traditional method was 68.2 and 66.06, while the Standard Deviation was 8.36 and 7.88, respectively. The t value was 0.69, which is much less than the critical value 1.96 at 0.05 level of significance. Thus another finding of the study was that there is no significant difference in the level of achievement scores between blind girls and boys when they were taught Mathematics through traditional method.

5.1.3 The mean achievement scores in Mathematics of blind girls and blind Boys taught through programmed learning method was 81.5 and 78.6, while Standard Deviation was 8.19 and 8.27, respectively. The t value was 0.94, which is less than the critical value 1.96 at 0.05 level of significance quite similar to the Controlled Group. Thus yet another finding of the study was that there is no significant difference in the achievement scores of blind girls and blind boys in Mathematics.
when taught through programmed learning method. Both girls and boys do equally well and the sex difference has no or insignificant effect on the achievement scores.

5.1.4 The mean of Achievement Scores of blind students in the Concept of Large Numbers taught through Programmed Learning Method and Traditional Method was 15.26 and 12.36, the Standard Deviation was 4.71 and 2.69, respectively. The t-value was 2.93, which is greater than the critical value 2.58 at 0.01 level of significance. Thus the analysis revealed that programmed learning method for teaching the concept of Large Numbers to blind students is more effective than traditional method.

5.1.5 The mean of Achievement Scores of students in the Concept of Mathematical Operations, time and Money taught through Programmed Learning Method was 30.76 with Standard Deviation of 3.42 and those taught through Traditional Method was 27.93 with Standard Deviation of 3.08. The t-value was 3.37, which is greater than the critical value 2.58 at 0.01 level of significance. Therefore, it was found that programmed learning method is more effective in teaching the concepts of Mathematical Operations, Time and Money to blind students than the traditional method.

5.1.6 The mean of Achievement Scores of students in the Concepts of length and speed taught through Programmed Learning Method and Traditional Method was 16.03 and 13.26 while the Standard Deviation was 1.81 and 1.89 respectively. The t-value was 5.31, which is greater than the critical value of 2.58 at 0.01 level of significance. Thus it was found that the Concepts of Length and Speed can be taught...
through programmed learning method in a more effective manner as compared to traditional method to blind students.

5.1.7 The mean of Achievement Scores of students in the Geometrical Concepts taught through Programmed Learning Method and Traditional Method was 17.46 and 13.5 while the Standard Deviation was 1.67 and 1.74 respectively. The t-value was 8.96, which is greater than the critical value 2.58 at 0.01 level of significance. Therefore, another finding was that the geometrical concepts can be more effectively taught through programmed learning method as compared to traditional method to blind students.

Thus it was evident from the findings that programmed learning method of teaching various concepts of Mathematics to blind students was more effective than the traditional method. It was also evident that there was no or insignificant difference in performance of girls and boys in learning Mathematics. Boys and girls performed equally well when taught through programmed learning method. The achievement score of girls equalled that of boys when taught through traditional method also. Thus it was evident that gender had no or insignificant influence on the performance in learning Mathematics.
5.2 EDUCATIONAL IMPLICATIONS OF THE FINDINGS

The educational implications, the investigator could draw from the findings of the study, are as follows:

5.2.1 In general, the achievement of students differs to a great extent on the basis of the strategy adopted for teaching Mathematics to blind students. A comparative study of the two teaching strategies revealed that programmed learning method results in higher achievement than traditional method. Thus there is need to develop programmed learning material on various concepts of Mathematics and made extensive use in the education of the visually impaired children. The programmed learning technique can become an effective tool in the hands of teachers of Mathematics. The advantage of self-pacing and reinforcement can ensure the achievement of desired objectives in teaching Mathematics to blind students.

5.2.2 As there was no difference in the achievement levels of boys and girls in learning Mathematics at this stage, it can be inferred that both of them should be equally encouraged to take Mathematics and study it to their benefit. Since, programmed learning method was more effective as compared to traditional method for both boys and girls, therefore, it could be inferred that there is an urgent need to develop extensive material in programmed learning for Mathematics, which shall provide with progressive layout from simple to complex and from known to unknown.

5.2.3 As both boys and girls performed equally well when taught through traditional method and girls' achievement scores matched that of boys' when taught through
programmed learning method, thus inference can be drawn that there is no need to develop different strategies for boys and girls rather uniform strategy can serve the purpose of teaching Mathematics to both girls and boys.

5.2.4 Since, programmed learning method came out to be superior in teaching the concept of large numbers as well as the concepts of mathematical operations, time and money, therefore, it could be inferred that there is need to develop more and more programmed learning material to teach these concepts to visually impaired students.

5.2.5 With the establishment of the fact that programmed learning method is more effective in teaching the concepts of length and speed as compared to traditional method, the inference can be drawn that the programmed learning method should be encouraged among teachers and they may be trained to make its use. The advantages of the programmed learning method should be brought to the forefront. This would encourage the teachers to use it.

5.2.6 It has been observed during the study that programmed learning method was considerably more effective in teaching geometrical concepts to blind students as compared to traditional method. It implies that the students need to be motivated to make use of programmed learning material to study geometrical concepts. Under the circumstances, there is an urgent need to produce more and more Braille books incorporating the principles of programmed learning and their availability to the students should also be ensured.
5.3 DISCUSSION:

Discussion deals with various outcomes of the study in the light of previous investigations:

The investigator carried out extensive review of related literature on teaching Mathematics to blind students, using all possible avenues including browsing on the internet with the help of search engines. She could not locate any study, which has explored the possibility of using programmed learning technology and its effectiveness in teaching Mathematics to blind students at any stage of education. Hence, the findings of the present study are discussed in this section in the light of available literature on the use of this technique in teaching various school subjects in general and Mathematics and Science in particular. This has been done on the assumption that if this technique is useful for seeing children, then it should be equally useful in the case of blind children provided the needed improvisations could be made without compromising with the basic tenets of the technique.

The investigator in the present study found a significant difference in the achievement levels of blind students taught through Programmed Learning Method and those taught through Traditional Method. In accordance with the findings from the present study, Sharma (1966) and Kulkarni (1969) also proved that Programmed Learning Approach is more effective.

Mathematics can be effectively learnt through programmed learning method by the blind students. It also makes use of their power of imagination. As mathematical concepts are abstract in nature, therefore, these can be taught to blind students
through systematic experiences in a sequential form. This is all the more important for blind children at elementary stage.

Appropriate programmed learning material, tactile material and aids need to be made readily available in schools to help the teachers of blind children to provide missing visual experiences and develop fundamental mathematical concepts and skills like counting, concept of shape, size and spatial relations, measuring and computation etc. Secondly, the pace of learning Mathematics by blind students and their individual differences can be taken care by a teacher with the help of programmed learning method. Hence, there is an urgent need to utilize technique of programmed learning, which provides appropriate teaching material for learning Mathematics effectively and also takes care of the pace of learning of blind students.

Programmed learning technique makes use of adapted equipment, textbooks and material to teach Mathematics to the blind students. In programmed instruction, the learning material is presented in such a way that learning becomes an interesting game. Programmed learning technique does not provide any scope of passivity and inertia for the students. Programmed learning technique is based on Skinner's Theory of Operant Conditioning. In programmed learning an information to be learnt is broken into small sequential units or frames. The learner makes a response to the questions in each of these frames. The learner is immediately reinforced for his correct response, which motivates him. Also, the material is organised into hierarchical order of simple to difficult, thus providing greater chances for the correct response. Thus, developing programmed learning material for teaching Mathematics to the blind students ensures the teaching of Mathematics as an interesting and successful process.
Programmed Instruction implies self-instructional and self-controlled, carefully specified and skillfully arranged learning experiences. It is an application of the principles of behavioral sciences and technologies in the field of education. Sidney Pressey had actually designed several self-testing devices in 1920s. It was Professor Skinner who pleaded for application of the knowledge derived from behavioral psychology to classroom procedures and suggested automated teaching devices as a means of doing so.

Professor Skinner emphasized that to acquire or learn a behavior, student must engage in behavior. It is not enough to attract students' attention but, more important, the attention of the student should actually be directed to what the teacher wants them to learn. Reinforcement i.e. the knowledge of the correctness of learning behavior, must be immediate and frequent; the knowledge that student is right is sufficient reinforcement to encourage him to learn more. He also pointed out that "holding students together for instructional purposes in a class is probably the greatest source of inefficiency in education". In his view, if a certain behavior is expected of a student after the learning experience, he must be encouraged to perform in that manner during the learning sessions itself. A student learns better and is motivated to learn more if the step taken by him is confirmed to be correct, that is to say if the learnt behavior has been reinforced. The findings of the present study confirm the above said views of Professor Skinner. The investigator established the effectiveness of the programmed learning method with respect to teaching of Mathematics to blind students.
The investigator experienced that it was easier to learn one step at a time by the blind students. If the behavior to be learnt is divided into properly spaced and logically sequenced steps, it is easier to learn the desired behavior by learning one step at a time. There are fewer errors in the learning process so that the student practices correct responses and these responses are reinforced immediately by the knowledge of results and he makes closer approximation to the responses, which are the desired outcomes.

The investigator made use of the five principles of programmed learning, viz., Principle of small steps, Principle of active responding, Principle of reinforcement, Principle of self-pacing and Principle of student testing.

The investigator observed some important aspects about the programmed learning as follows:

1. Programmed instruction is the process of constructing sequences of instructional material in a way that the rate of learning is maximized, motivation of the student is enhanced and understanding is fostered.

2. Assumptions about the learner related to particular level of reading competence, command of vocabulary and his background in the subject matter are closely stated and put in definite terms.

3. The objectives underlying the programme are defined in explicit and operational terms.

4. The subject matter of the programme is presented by breaking it into small steps in a logical sequence. The small steps gradually increase in complexity and the information grows in depth. Changes occur in quality and quantity. Programmed learning emphasizes on the interaction between learner and the programme.
5. The learner is made to respond actively. For doing it correctly the student receives reinforcement and establishes a pattern of stimulus-response interaction.

6. A programmed instruction sequence takes into consideration the initial behavior of the learner with which it starts and the terminal competence in subject matter, which the learner is to achieve.

7. A programmed instruction provides for immediate feedback information. It is based on the theory of reinforcement.

8. Programmed instruction is based on the behavioristic principles of psychology. A fair amount of stress is given on the development of understanding through the handling of various cues in the learning process.

9. In a programmed learning situation the learner progresses at his own pace.

10. Programmed learning enhances the capacity of the learner to discriminate or to generalize by frequent application and thus offers the learner an interesting and challenging project.

11. Programmed learning provides for constant evaluation through the record of learners' responses. The quality of the programme can be improved through checking the number of errors at each step.

12. Programmed instruction enables the teacher to diagnose the problems of the individual learner.

13. The teacher can give explanation in the classroom if the error is common or he may arrange individual conferences on specific points.

14. Teachers are freed from the boredom of routine classroom teaching and they are in a position to devote their time to more creative activities.
Technique involved in Programmed Instruction can be used in teaching different subjects. Teaching of Mathematics, along with the subjects like Science, Geography, etc. can be done effectively with the help of this new technique. The teacher has to formulate objectives of teaching a particular subject, undertake content analysis of the subject matter in the light of objectives, frame a chain of questions, which will lead the pupils in the direction of the objective and present the questions to the students.

The teacher plays the role of a friend, guide and philosopher in the class when the pupils are engaged in solving their riddle. The teacher does remedial teaching, as the weaknesses of his pupils are located in the very act of learning. The pupils also undergo a process of self-evaluation as they complete their work.

When the achievement scores were analyzed in terms of gender, investigator found that both boys and girls performed equally well. The results are in accordance with the study conducted by Bhatt (1922), which revealed that there was no clear cut evidence of differences in performance on the basis of gender in the area of teaching of science.

The results of the present study are in conformity with Keislar (1959), who devised a programme to teach rectangles in the fifth and sixth grade class to find out the effectiveness of programmed instruction in the teaching areas of rectangles. His conclusion was that a group taking programmed learning had significantly higher gain scores than controlled groups.

Similar were the finding of Kaslar and McNail (1961), who taught Molecular Theory particularly related to evaporation and condensation to a group of 13 first grade
children to test the ability to teach scientific theory to first grade children with programmed learning material. The study showed that the experimental group attained significantly higher gain scores than controls.

The McNeil study (1964) showed that boys scored significantly higher on word recognition in Kindergarten using programmed instruction while the girls made better gains in reading in grade one. No significant difference was found in the achievement levels of boys and girls in the present study, clearly showing that sex difference has no role in the selection of method of teaching.

The findings of present study are in accordance with that of Home and Glaser (1958). They made comparisons between groups who learned using programmed textbooks and groups who used standard textbooks. Two types of subject matter was used, in both cases the experimental group showed greater gain scores than controlled group.

Shah (1963) found that experimental group taught through programmed learning material achieved more in less time and the same has been the outcome of present study with the blind students.

The studies of Sharma, Desai and Gibson (1965) confirmed the view that performance is better if taught through programmed learning material.

In 1967 enthusiastic persons interested in programmed learning movement formed an association of programmed learning, now registered as Indian Association of Programmed Learning (IAPL). The Association is doing very useful work in
organizing annual conference on programmed learning and mobilizing researches for preparing programmed material on different units of curriculum.

Deevan and Kulkarni (1967) had explored the possibility of applying programmed learning principles to television instruction. Findings show the superiority of experimental group over the conventional television lesson group just the way the present study has revealed.

Mullik and Kulkarni (1968) investigated effectiveness of Programmed Learning Material in a correspondence course situation. Their findings revealed that programmed learning material proved more useful than conventional material. The present study has also established the similar facts.

The experiments by Sharma (1966) and Kulkarni (1969) revealed that programmed learning material is effective not only in terms of achievement, but also in terms of the time taken to learn a topic.

In accordance with the results from the present research Rabindra Das (1984) found that self-instructional material on health education developed by him for school students resulted in better learning than the conventional classroom teaching. Learners also expressed a more positive attitude towards the self-instructional material, based on the principles of programmed learning technique.

Similarly Sangnan (1984) reported better performance of B.Ed. students who learnt through programmed learning material developed in linear style when compared to the achievements of the students who were taught in the usual classroom.
The findings of the present study match with that of Chaudhary (1985) who had worked on preparation and evaluation of Programmed Learning Material in Geography for the secondary level. His findings affirmed the effectiveness of Programmed Material in inducing learning among the students. The programmed material can be effectively used to teach the contents to the students of classes IX and X without any fear of failure. It could be used with junior students as well.

A similar study by Desai, K.V. (1985) compared the programmed learning approach with learning through experiments, slides with discussion, the traditional way of teaching Science to students of class VIII. He concluded that the programmed learning approach was better than the traditional method.

Most of the studies point that programmed materials can increase the effectiveness of individualized instruction through careful designing, testing and improving.

In India, research in programmed learning started in 1960s. The most of research has focused on testing its effectiveness. The availability of Programmed Learning Material is very limited in India as compared to that in the western countries. There is severe scarcity of suitable programmed learning material based on prescribed syllabi. So there is enough scope for developing programmed learning material to meet the needs of Indian classrooms.
5.4 RECOMMENDATIONS:

The following recommendations emerge as a result of this study:

The teachers of blind students who are entrusted with the responsibility of teaching Mathematics should be given intensive exposure to Programmed Learning Method and efforts should be made to develop effective Programmed Learning Material for teaching Mathematics to blind students. Mathematics plays a very important role in the development of personality of the students including blind students thereby helping them to be able to develop logical and scientific thinking and become productive citizens of our society. It makes them intellectually enlightened, vocationally fit and morally sound. Mathematics makes them analytical and organised. Because of the above-mentioned reasons Mathematics finds an important place in the curriculum designed by N.C.E.R.T. at all levels.

Teaching of Mathematics must be undertaken with the understanding that the focus is on learning problems and not just classroom failure. Classroom failure may be the result of (a) inappropriate placement, (b) the selection of courses of study that are too difficult, (c) a mismatch between learners' needs and teacher practices, or (d) motivational problems that influence performance.

Understanding and learning of Mathematics is directly influenced by the methods of teaching. The study reveals that those who are exposed to Programmed Learning Method have performed better in their Achievement tests than those taught through traditional approach. Organizing in service courses in the programmed learning technique becomes the need of the hour. The curriculum of teacher training should give ample emphasis on Programmed Learning Method, so that teachers make use of it when they are in their classrooms. Teacher preparation is an important area for
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bringing about desirable changes in the educational methodology. Teacher education curriculum includes training techniques such as micro-teaching, models of teaching and macro-teaching. Programmed learning may be made compulsory so the teachers develop right attitude towards the new technique.

Experiences of voluntary organizations such as All India Association for Educational Technology (A.I.E.T.) and Media Centre should be included in introducing and implementing the programmed learning technique. Administrative heads of Institutions particularly at school level must be motivated for implementing the technique. Suitable workshops may be organised to transfer the benefits of the findings of the researches to the educationists who are playing key role in the implementation of education. State Education Departments through S.C.E.R.T. may organize orientation courses in programmed learning method for Headmasters and Principals of the schools.

For an individual it is not merely surviving but surviving as the fittest. The question of survival is linked with new social order. One needs to survive not as a dependent but as a self-reliant and self-dependent person. Programmed learning is one such bold step in this direction. The individual learns as he commits mistakes and develops the habit of self-activity, self-analysis and self-correction. In programmed learning technology, the teacher plays the role of a gardener and provides necessary guidance with minimum interference. Teacher as a facilitator has to provide opportunities to enable the children to learn things both at school and at home. NPE envisages the child centred and activity-based process of learning. Our future society demands this, as we require citizens with competence, imagination and creativity. Education is a unique investment in the present and future. It carries the motto of
ideal education scenario, which can prepare them to face 21st century with confidence.

It is important to distinguish between the terms learning and achievement. Achievement is the condition in which a child is assessed at a given point of time. The child either understands or fails to understand, but the teacher proceeds to a new lesson. Learning, by contrast, is that condition in which a baseline is obtained and the amount of time, number of repetitions or variations in instructional practices are determined. The more important consideration is a reduction in the amount of time or number of repetitions. This may be achieved by modifying the instructional procedures.

In the past, textbooks have dominated the classrooms. The textbooks are means to an end rather than an end in themselves. Text designed in programmed learning motivates thinking, comprehension and application of mind. The programmed text maintains the curiosity of the student and satisfies it, through reinforcement, step by step. This promotes the sense of judgment and taking decision. The logical interpretation gets in-built in them. The programmed learning material develops the intellectual ability of students. Programmed learning is most effective in modifying cognitive behavior of the child. Programmed learning method brings out the creativity of the child and results in better achievement scores. The investigator is of the view that experts in the field of programmed learning should be entrusted with the responsibility of developing programmed learning material and revises it from time to time based on the feedback.
The immediate need is to emphasize on developing programmed learning material for teaching Mathematics. Prime Institutions like National Institute for the Visually Handicapped, Dehra Dun and other leading organizations in the field of education of the visually handicapped children, N.C.E.R.T. and similar other Govt. agencies should make a serious effort in this direction. As envisaged in the National Policy on Education, innovative instructional strategies should be used effectively in various programmes of formal and non-formal education. The present study is in conformity with that of policy perspective of N.P.E. especially in the area of educational methodology.

Parents derive pride out of their child's achievement but few plan their child's education. Children emulate their parents and tend to copy them. Children are greatly influenced by the way their parents think. Spreading awareness about Programmed Learning Method among the parents will have lot of positive effect on the education of the child. The investigator during her study observed that awareness about programmed learning strategy among the parents was totally absent. It was strongly felt that programmed learning material needs to be developed and published on various subjects in general, particularly Mathematics. All those who are in the field of education be made aware of the method and its advantages.

The programmed learning strategy is known to be in extensive use for teaching computer software. The fruits of the strategy have helped to increase computer education at an alarming pace with greater degree of comprehension. Investigator observed that similar gains could be reaped in other subjects. The spread of computers and greater access to them can be a good facilitator for the spread of the effective technique of programmed learning.
Experiences gathered by the investigator revealed mixed reaction among the blind students as well as their teachers with regard to the acceptability of programmed learning method. Initially teachers were of the view that the blind students will not be able to learn through it. Slowly and gradually, they were quite convinced and felt that it can be an effective additional tool in their hand. The students were told that they are going to assess themselves at each step, they were enthusiastic. The pace of learning differed in different students. All were grossly involved in going through the programmed learning material. They felt that it is easier to follow and understand it in comparison to their textbook.

Analysis made in previous Chapter reveals the findings, which have bearing in future. Education is a complex process and includes cognitive activities, development of values and total personality development of the individual. There is always scope for trying new strategies to make education for visually handicapped more and more effective. The advent of computers in the education of visually handicapped children make it imperative to optimally utilize the technology and programmed learning method can be an effective tool to achieve it.

5.5 SUGGESTIONS FOR FURTHER RESEARCH

Any research work in Education aims at finding answers to questions related to effectiveness of methods of teaching, learning, classroom management, attitudes, discipline, cognitive development, interaction, evaluation, etc. for the education of children in general and for children with special needs. Investigation of a single question does not and cannot answer all the related research questions. Investigations by other researchers may be taken up on related problems.
The present research has primarily restricted itself to the subject of Mathematics and the sample has been from primary sections of the special schools for the blind. It involved developing of Achievement Tests and programmed learning material in accordance with the syllabus prescribed by N.C.E.R.T. Tremendous care was taken in selection of sample as well as in the development of tools. These posed certain limitations, which the investigator could foresee and carefully planned the research.

The findings of the research have already been stated and discussed. The investigator is of the view that there is need for further research to investigate many related issues. In the light of foregoing discussion, the suggestions for further research are as follows:

5.5.1 The research done by the investigator was restricted to Class-III, IV & V. The research needs to be replicated with the blind students of higher classes for the subject of Mathematics.

5.5.2 The study could be extended and tried for other subjects like Natural Science, Physical Science, Social Science, Language, Arts, etc. to validate the effectiveness of programmed learning method.

5.5.3 This study was conducted in the State of Delhi only and it is desirable to extend it to other States of the country.

5.5.4 The present study limited itself to Special Schools for the Blind and may be extended to Schools with Integrated Settings.
5.5.5 The present study restricted to developing of programmed learning material and testing its effectiveness for the blind students and can be replicated for students with other disabilities in accordance with the prescribed syllabus for each category.

5.5.6 The present study restricted itself to the comparing of achievement scores. The research may be extended to study the attitudes of students and teachers towards programmed learning strategy.

5.5.7 The present study restricted itself to the effectiveness of linear programmed learning method. With the innovations in technology computers have become fully accessible to blind persons. Under the circumstances it is quite possible to replicate the study with the help of branched programmed learning method.

5.6 CONCLUSION

The present research was envisaged primarily to investigate a effective method of teaching Mathematics to visually impaired students. Having observed that an extremely important subject like Mathematics is not being given due place in the curriculum of education for the blind students and having understood the importance of the subject in the life of an individual the investigator took up the present research. The findings have revealed that a scientific method of teaching i.e. programmed learning method, which has certain distinct advantages like that of small steps and self-pacing came out to be a method, which is more effective than the method being presently followed.

In the present scientific world Mathematics has a very important role to play in the building up of each individual’s personality. educationists of today, therefore, have
formulated school curriculum in such a way that Mathematics finds very crucial and significant place in it. Teaching of Mathematics is compulsory right from the primary level to the secondary level. Learning of Mathematics can be effective only when the subject is made interesting by making use of innovative strategies of instruction such as programmed learning. Another important aspect is building the readiness in the child to study the subject. Teaching of Mathematics through programmed learning method can really make a difference in the achievement of the students and make the teaching learning process interesting, effective and purposeful.

The present study by the investigator is a small but significant contribution to the field of teaching of Mathematics to the blind students. The study is an attempt to lay stress to the fact the blind students can be and should be taught Mathematics and the need is to look for methods, which would give them greater tactile experiences to fill the gaps, which occur due to loss of sight. There is enough potential, which needs to be explored. The blind individuals have excelled in the subject of Mathematics in the past and can do so in the future too. There is no reason to provide exemption from Mathematics rather suitable modifications need to be made in the process of teaching and taking of examination. While assessing a visually impaired persons' ability in Mathematics the stress should be that he knows the concepts and operations rather than the accuracy of diagrams and answers to the problem.