

Mathematical Skills of Students with and without Learning Disabilities: An analysis

Deeksha and Navleen Kaur

*Dept. of Community Education and Disability Studies, Panjab University, Chandigarh, Punjab, India

Corresponding author: na_vl_eeen@yahoo.co.in

Abstract

In classroom teaching a teacher comes across several learning problems faced by students. Popularly referred to as 'Learning Disability', point towards those individuals who face problems relating to reading, writing, spelling and mathematics. It is a disorder which may occur in one or more of the processes of speech, language, reading, spelling, writing or mathematics. These problems faced by individuals can also adversely affect other skills like social skills etc. Mathematical Skills, the master of all skills, is the conceptual understanding of different mathematical relations and functions. If one has knowledge to use and apply mathematical skills in one's daily life, one would enjoy every phase and action of life. But if otherwise, then one will suffer in every activity of life and possibly will result in mathematical learning disability or 'Dyscalculia'. Amid discrepancies between actual and expected performance of the child, dishearten them to compete in the competitive world. As they do not get proper attention towards their abilities, their hidden handicap tends to increase. This leads to breakdowns which turn out to be a hurdle in the path of academic progress. As a result the students face poor academic, behavioral and social problems. If these troubling concerns faced by primary school students are not known in time, then poor scholastic performance will be promoted in higher classes. Researches have proved that mathematical learning disability is more prevalent in school children than the other learning disabilities. A small amount of research studies throw light on abilities and inabilities of learning disabled. Therefore, this study is an effort to identify mathematical skills of learning disabled students at the primary level, so that all efforts are made to assess and repair this specific learning problem.

Keywords: Learning Disability, Mathematical skills, Dyscalculia, Scholastic performance.

A discerning notion has been encompassing that learning problems are rising day-by-day. Speckled blemishes in our education system have widened the gap between actual and expected performance

of the child. These inconsistencies dispirit the students to race in the competitive world. Seeing that they do not get proper attention towards their abilities and capabilities, their unseen handicap tends to increase. This leads to failure which becomes an impediment in the pathway of their academic progress. The students face poor academic achievement, which could result into many behavioral and social problems. As we all are familiar that every child is born with individual differences. Not many resources are on hand to teach them according to their individual differences. So the students do not get attention according to their needs, interests and abilities. Our education system has these weaknesses. No proper initiatives have been taken to

encourage these children to deal with their difficulties. Especially during the formative years of schooling, these problems if not identified in time affect the scholastic performance even at their higher education level. Special Education plays an important role in finding ways for the development of children with particular differences. Every individual with special needs must be provided with special instructions according to the field of special needs, whether s/he is normal or physically or mentally challenged.

Education focuses on over-all development of the child, nevertheless Special Education focuses on their special educational needs. School is the place which develops different types of skills in an individual by providing conducive environment. The prime obligation of school is providing teaching and learning. Learning is not a one-step task; it is multi-level and a gradual process. It involves use of various resources, teacher's skills of teaching, their methods of teaching etc. In classroom set-up, a teacher comes across several learning problems faced by students. Particularly, the expression 'learning disability' has been agreed upon those children with low academic achievement, reading problems, writing problems etc. These problems are highly noticeable in the present educational structure.

'Learning Disabilities' is an umbrella term describing specific learning disabilities, like Dyslexia(Reading disorders), Dysgraphia (Writing disorders),and Dyscalculia(Arithmetic Disorders). Normally, Intelligence Quotient (IQ) level of a learning disabled is average or even above average. This handicap occurs due to various biomedical, genetic and environmental conditions. Difficulty in one academic area also affects another academic area. In the midst of these difficulties area of mathematics is shaky. Mathematics is based upon linear thought, as it requires frequent interpolations. Children with mathematical learning disabilities show symptoms like- problems in understanding number patterns; problems in understanding the concept of time; problem of sequencing; problems in identifying the objects of different size/shape; and problems in understanding place values. Since disorders in reading, writing and/or mathematics are recognizable disorders during the school years, yet they do not receive an evaluation. They only become aware of it when they are in higher education or at some workplace. There are still some individuals with learning disabilities who may never receive an evaluation throughout their lifespan. Consequently they are always confused about their trouble in academics, with their jobs, in relationships with family members or friends. This is why learning disabilities are also called as "hidden disabilities", in which the person looks normal but may be unable to demonstrate the skills which are expected from the similar age group.

Understanding Mathematical Skills Construct

Mathematical Skills refer to the conceptual understanding of different mathematical relations and operations. Mathematics is also about generalizations because it includes shapes and their measurement and several related concepts. These skills are very much helpful during early years of a child which help him/her to understand the world by connecting it with different ideas and developing logical and abstract thinking. These skills become the basis to students' success in school and in later life. These skills are also helpful in multiple subject areas which ensure them to get academic achievement. These skills include: Skills of computation, Skills of problem solving, Skills of interpreting and constructing graphs, Skills of estimation, Skills of understanding and applying the concepts of measurements, Skills of understanding and applying the concepts of geometry etc.

Mathematical skills can be categorized into two types of knowledge which are- Procedural knowledge and Conceptual knowledge. Procedural knowledge is an ability to execute action sequences to solve problems. This type of knowledge is applicable to only specific types of problems, thus cannot be generalized. Procedural knowledge includes many components of mathematical skills as: Select and apply appropriate procedures correctly; Verify or justify the correctness of a procedure using concrete models or symbolic methods; Extend or modify procedures to deal with factors in problem solving; Ability to reason through a situation

On the other hand, Conceptual knowledge is an understanding of the principles that govern a domain and of interrelations between units of knowledge in a domain. This type of knowledge is not applied only to specific problems, thus it is a generalized one. Conceptual knowledge includes many components of mathematical skills as: Ability to reason; Know and apply facts and definitions: Compare, contrast and integrate related concepts and principles: Identify and apply principles.

These two mathematical skills must go together in a balanced form. When talking to a non-mathematician, mathematical skills can be usefully compared to musical skills. Like music, mathematics is a personality-building activity. It shapes the way the learner thinks and sees the world. Like music, each new mathematical skill needs to be built on a solid foundation laid at earlier stages. Like music a good mathematics education has a lasting impact in the life of large number of children. Like music, success in mathematics depends on systematic, cumulative learning, and each new skill needs to be built on a solid foundation laid at earlier stages. Though mathematics is often thought to be a "cold" subject, this is only a misconception. Mathematics also requires a high level of motivation and emotional involvement on the part of the learner, as with music. The need of the hour is to experience real difficulties faced by the learner.

Mathematical skills are very important in our daily life activities. On deep reflection it appears that without the knowledge of mathematical skills, our actions become meaningless and unmanaged. It is from cradle to grave, from a new born baby place to burying place, from weight of new born to measurement of burning body; the importance of Mathematical skills cannot be separated from the real life. Mathematical skills are the master of all skills. If one has knowledge to use and apply mathematical skills in one's daily life, one would enjoy every phase and action of life. But if one is not able to use

or apply these skills, then one will suffer in every activity of life and may result in Mathematical Learning Disability.

Mathematical learning disability has been termed as 'Dyscalculia'. It refers to an 'inability to calculate'. Mathematics includes such type of knowledge which enhances the computation skills of an individual. According to Kosc (1974) has given some cases of Dyscalculia as its classifications which are as under:

- Verbal Dyscalculia: In this type of Dyscalculia, difficulties occur in remembering various terms and symbols of Mathematics.
- Practognostic Dyscalculia: In this type of Dyscalculia, when applying mathematical concepts, difficulties occur in using manipulatives. A student will be unable to understand the concepts of weight, space and time.
- Graphical Dyscalculia: This refers to problems occurring in writing mathematical symbols. As the name graphical indicates writing, Graphical Dyscalculia indicates a person's inability to write mathematical numbers and symbols.
- Lexical Dyscalculia: As 'Lexical' indicates Reading, Lexical Dyscalculia indicates difficulties in reading mathematical vocabulary. A student with this type of dyscalculia often mix up the numbers such as 6 and 9, may get confused among symbols while reading.
- Operational Dyscalculia: As the name indicates, operational dyscalculia refers to difficulties occurring with basic mathematics operations. This results in difficulties in memorizing basic mathematics concepts and doing basic calculations.
- Ideognostical Dyscalculia: This refers to difficulties occurring in grasping mathematical ideas and mathematical calculations.

Thus, these are the basic classifications of Dyscalculia which indicate different difficulties occurring in writing and reading or using mathematical symbols or doing mathematical operations. Children with mathematical learning disabilities show symptoms like - Problem in understanding number patterns; Problem in understanding the concept of time; Problem of sequencing; Problem in identifying the objects of different size/shape; and Problem in understanding place values. These types of problems affect an individual's activities involving mathematical skills. Both formal and informal methods of assessment can be used to assess mathematical disorders.

For the present study, Learning Disability is operationally defined as a kind of disorder in a child who is average or below average, showing difficulties in basic academic skills- reading, writing, spelling, arithmetic and displays poorer academic performance than their peers. Mathematical skills include skills of computation, problem solving, interpreting and constructing graphs, estimation, understanding and applying the concepts of measurements. For the present study, Mathematical Skills are operationally defined as the skills of the student to understand and apply the various concepts of Mathematics in their daily life. Hence this study is an effort to identify mathematical skills of learning disabled students at the primary level so that a teacher can make efforts to assess and remediate this specific problem.

Objectives

1. To compare the mathematical skills among male and female students of class-IV without learning disabilities.
2. To compare the mathematical skills among male and female students of class-IV with learning disabilities.
3. To compare the mathematical skills among male students of class-IV with and without learning disabilities.
4. To compare the mathematical skills among female students of class-IV with and without learning disabilities.
5. To compare the mathematical skills among students of class-IV with and without learning disabilities.

Hypotheses

1. There will be no significant difference between mathematical skills of male and female students of Class-IV without learning disabilities.
2. There will be no significant difference between mathematical skills of male and female students of Class-IV with learning disabilities.
3. There will be no significant difference between mathematical skills of male students of Class-IV with and without learning disabilities.
4. There will be no significant difference between mathematical skills of female students of Class-IV with and without learning disabilities.
5. There will be no significant difference between mathematical skills of students of Class-IV with and without learning disabilities.

Review of Related Literature

Incessant increase in arithmetic problems have forced the researchers to get into this area to find out nature of the problems, their causes for existence, their prevalence among different populations, their impact on academic achievements and on many more fields like behavior and social fields. Mostly research studies in this area have revealed that mathematical performance of students with mathematical learning disabilities shows poor level as compared to their normal peers. Researchers also found that these poor mathematical performances have put a bad impact on the achievements in other fields also. Since the field of special education in learning disabilities is still at a nascent stage in India, very few studies have been conducted in the field of mathematical learning disabilities. In developed countries as compared to India, more studies have been conducted in this field.

Scruggs and Mastropieri (2002) proposed several alternative methods for identification of learning disabilities. Which include deficits in level and slope of academic performance as assessed by curriculum-based measurement, deficits in phonological core processes, and failure to respond to validated treatment protocols. The major problems of identification of learning disabilities - including over identification, variability, and specificity - can be eliminated by increasing specificity and consistency of state criteria and strict adherence to identification criteria on the local implementation level.

Kohli, Malhotra, Mohanty, Khehra and Kaur (2005) study of clinical diagnosis and assessment of specific learning disabilities and neuropsychological functions in the clinic population (Thirty-five children, age 7-14 years) showed deficits in language and writing skills and impairments in specific areas of memory, executive functions and perceptuo-motor tasks.

Sujathamalini (2007) study on primary school teachers' (Madurai district of Tamil Nadu State) competencies to handle learning disabilities in children reveals that primary school teachers have evinced low level of competencies on the aspects of different problems faced by students with learning disabilities, in identification and assessment of these students, in structuring individualized education programme etc. It also revealed that there exists moderate level of competencies in identifying children with organizational difficulties, providing appropriate placement services according to the nature and extent of learning difficulties in children, high level of competencies in choosing appropriate instructional timings with proper duration, sequencing instruction, using creative techniques etc.

Vijayanthi and Meera (1997) study on academic problems of primary level learning disabled children (sample of 120 learning disabled from 34 schools in Coimbatore) reveals that an average learning disabled face 33 out of 50 academic problems mentioned in the checklist used. Study also reveals that the most serious type of problems were found to be reading problems followed by arithmetic, behavioral and oral language problems. The study indicates that 76% of learning disabled had attention problems, 65% had frustration problems, 60% were self-centered and 81% had vocabulary problems, which indicate that there are no significant differences among learning disabled boys and girls from different types of schools.

Drueck (1998) study on examining second grade Average Math Achievers (AMAs) and Low Math Achievers (LMAs) at risk for mathematics learning disabilities, studied factors related to conceptual understanding and solution procedures for two-digit addition and subtraction. This study reveals that the AMAs and LMAs do not differ on the accuracy of their computations but rather on their use of conceptual structures and representational methods.

Ramaa, Gowramma (2002) study on 'A systematic procedure for identifying and classifying children with dyscalculia among primary school children in India' reveals that 5.98% figures came out for Dyscalculia in case of inclusionary criteria and 5.54% came out in case of exclusionary criteria.

Mazzocco and Myers (2003) study on 'Complexities in Identifying and Defining Mathematics Learning Disability in the Primary School-Age Years' reveals that 22 participants (out of 209) reflected Persistent Math Disability (MD). The prevalence of reading disability was found to be 25 percent in this group

while only 7 per cent was found in other subgroups. Results also revealed that reading related skills were correlated with maths achievement.

Venkateswarlu (2005) study on 113 students (out of 1480) identified as mathematical learning disabled from the schools of Bareilly city (Uttar Pradesh) reveals that mathematical learning disabled boys did not differ from girls regarding achievement in mathematics. Remedial treatment had equal effect on the achievement of rural and urban mathematical disabled boys and girls.

Rousselle and Noel (2006) study of comparison between forty-five children with mathematics learning disabilities, with and without reading disabilities and forty-five normally achieving peers reveal that students with mathematical disabilities were only impaired when symbolic number magnitude was compared but this was not in the case of non-symbolic number magnitude. Differential patterns of performance between mathematics disabilities/reading disabilities was not found evidently.

Geetha and Jaya (2009) study on 115 students identified as low achievers in mathematics out of 1442 primary school children reveals that higher the class, greater was the number of primary school children with difficulties in mathematics. The result also showed 87 % low achievers in mathematics exhibit behavioural problems. An analysis of arithmetic errors committed by dyscalculics showed that a little above 50% of the children had problems to memorize multiplication tables, writing the numbers mentioned (42%), reading digit wise (36%), wrong operation and problem solving difficulties (each 39%), spelling errors and difficulty with written symbols (28%) were observed.

Mussolin, Mejias and Noel (2010) study of thirty (10- and 11-year-old) children reveal that developmental dyscalculic children were not slower or less accurate than their normal peers. There is greater effect of numerical distance among developmental dyscalculic children than normal children, irrespective of number format.

Geary, Hoard and Bailey (2012) used four years achievement scores in Mathematics, on the basis of which different groups of typically achieving children ($n = 101$), low achieving children with mild fact retrieval ($n = 97$), severe fact retrieval ($n = 18$) deficits, and mathematically learning disabled children ($n = 15$) were identified. Study focused upon contrast of developing retrieval competence from second to fourth grade in various arithmetic procedures which reveals that the children with retrieval deficits (group of Low achievers–severe) were at least as low at functioning normally as those of the children with Mathematical Learning Disabled and also reflected less improvement across-grade.

Defever, Smedt, Reynvoet (2013) study on 25 children with Mathematical learning disability (MLD) and 25 matched controls taking deficits in the innate magnitude representation (i.e. representation deficit hypothesis) and deficits in accessing the magnitude representation from symbols (i.e. access deficit hypothesis) indicates that children with MLD were slower than controls on the mixed notation trials but no difference was found for the non-symbolic trials and children with MLD have difficulties in linking a symbol with its quantity.

Jovanovic G, Jovanovic Z, Gajic, Nikolic, Svetozarevic, Ristic (2013) study on 1424 third-grade students (aged 9-10) of all primary schools (in the City of Kragujevac, Serbia) reveals that the prevalence of

dyscalculic children was found to be 9.9% and difference between boys and girls was statistically significant.

Martin *et al.* (2013) study on ‘ Prediction and Stability of Mathematics Skills and Difficulty’ focused on 144 students who were initially identified as having maths difficulty (MD) or no learning difficulty according to low achievement criteria in Grade 3 or Grade 4. These Students were reassessed 2 years later. Whether assessed categorically or continuously, a similar proportion of students changed for both measure types.

Brankaer, Ghesquiere and Smedt (2014) study of examining numerical magnitude processing in matched groups of 7-to 8-year-olds ($n = 42$) who had either discrepant Mathematical difficulties(MD) (poor math scores, average IQ), non-discrepant MD (poor math scores, below-average IQ) or no MD reveals that both groups of children with MD showed similar impairments in numerical magnitudes processing compared to controls. This suggests that the association between numerical magnitude processing deficits and MD is independent of intelligence.

Shin and Bryant(2015) study on synthesizing the findings from 23 articles compared the mathematical and cognitive performances of students with mathematics learning disabilities (LD) to (a) students with LD in mathematics and reading, (b) mathematical-ability-matched younger students with no LD, and (c) age- or grade-matched students with no LD. This study revealed that students with mathematics LD indicating higher word problem-solving abilities compared to students with LD in mathematics and reading. Study also reveals that students with mathematics LD demonstrated significantly lower performance compared to age- or grade-matched students with no LD on both mathematical and cognitive measures. It also showed mixed outcomes on mathematical measures and generally no significant group differences on cognitive measures when comparison between students with mathematics LD and younger students with no LD has been taken into account.

Hunt (2015) study examined the strategy usage and multiplicative thinking of three third class children (i.e., Bill, a child identified as having a learning disability specific to mathematics, Carl(a child labeled as low achieving in mathematics, and Albert, a child labeled as typically achieving) before, during, and after participating in tutoring sessions consisting of student-centered pedagogy and equivalence tasks presented through an underutilized interpretation of rational number: namely, the ratio interpretation. Results seemed to indicate that all three children increased their use of viable strategies, with notable differences in the sophistication of the strategies as well as the level of multiplicative thinking utilized before and after the ratio-based tutoring sessions.

After reviewing the literature stated above, the present study is an effort to fill-in the following gaps in research:

- There are no sufficient research evidences found in the field of mathematical learning disability in the Indian context.
- The research evidences have indicated less emphasis on the identification of mathematical learning disability at the primary level.

This study will be helpful to policy makers, administrators, school teachers, special educators in the field of learning disabilities

Method and Procedure: In the present study, a systematic procedure was adopted for the collection of data by using descriptive survey method. This helped in testing the hypotheses of the study under investigation. The method is not used merely for gathering the data but also for interpretation of results. The sample for current study comprised of 40 students taken from five private schools of Chandigarh. Further 40 students were categorized into students with Learning Disability (LD) and students without Learning Disability or Non-Learning Disabled (NLD). Thus 20 LD students and 20 NLD students were taken as a sample for this study. The sample of 20 LD students was further split into 10 males and 10 females. Similarly, the sample of 20 NLD students was further split into 10 males and 10 females. The learning disabled and non-learning disabled students were chosen on the basis of their class work, their academic performance, and the class teacher’s feedback.

The present study was delimited to only schools affiliated to Central Board of Secondary Education (CBSE).The study was confined to only English medium private schools of Chandigarh and restricted only to Class-IV students. Data was collected by using Grade Level Assessment Device (GLAD) tool for children with learning problems in schools (Mathematics portion) by Jayanthi Narayan (2008). In order to determine the nature of scores, descriptive statistics such as mean and standard deviation was used. For making a comparative analysis of different groups, t- test was used.

Analysis and Interpretation of Data: Against this backdrop the analysis and interpretation of the results obtained in the present study have been discussed. Hypotheses of the present study have been tested with the help of statistical techniques. Results have been interpreted hypothesis wise, as under-

Hypothesis-1 “There is no significant difference between mathematical skills of male and female students of Class-IV without learning disabilities” was tested by employing t-test. The results are entered in Table 1.

Table 1: Mathematical skills of male and female students without Learning Disabilities

Groups	Mean	Standard Deviation	t-value	Level of Significance
Male	74.90	8.06	0.708	Not Significant
Female	72.20	8.97		

Results and Discussion: The mean score of mathematical skills of male students without learning disabilities was found to be 74.90 and that of female students without learning disabilities was found to be 72.20. The Standard Deviation scores of male students without learning disabilities were found to be 8.06 and that of female students without learning disabilities was found to be 8.97. The calculated t-value between the two mean scores was found to be 0.708, which is not significant. Thus, it can be said that there exists no significant difference between mathematical skills of male and female students without learning disabilities. So, Hypothesis-1 stands accepted. However, higher mean scores of male students show that they have higher level of mathematical skills as compared to female students.

Hypothesis-2: “There is no significant difference between mathematical skills of male and female students of Class-IV with learning disabilities” was tested by employing t-test. The results are entered in Table 2.

Table 2: Mathematical skills of male and female students with Learning Disabilities

Groups	Mean	Standard Deviation	t-value	Level of Significance
Male	55.20	12.08	1.186	Not Significant
Female	48.30	13.81		

Results and Discussion: The mean score of mathematical skills of male students with learning disabilities was found to be 55.20 and that of female students with learning disabilities was found to be 48.30. The Standard Deviation scores of male students with learning disabilities were found to be 12.08 and that of female students with learning disabilities was found to be 13.81. The calculated t-value between the two mean scores was found to be 1.186, which is not significant. Thus it can be said that there is no significant difference between mathematical skills of male and female students with learning disabilities. So, hypothesis-2 stands accepted. However, higher mean score of male students shows that they have higher level of mathematical skills as compared to female students.

Hypothesis-3 “There is no significant difference between mathematical skills of male students of Class-IV with and without learning disabilities” was tested by employing t-test. The results are entered in Table 3.

Table 3: Mathematical skills of male students with and without Learning Disabilities (LD & NLD)

Groups	Mean	Standard Deviation	t-value	Level Of Significance
LD(Male)	55.20	12.08	4.289	0.01
NLD(Male)	74.90	8.06		

Results and Discussion: The mean score of mathematical skills of male students with learning disabilities was found to be 55.20 and that of male students without learning disabilities was found to be 74.90. The Standard Deviation scores of male students with learning disabilities were found to be 12.08 and that of male students without learning disabilities was found to be 8.06. The calculated t-value between the two mean scores was found to be 4.289, which is significant. Thus, it can be said that there exists a significant difference between mathematical skills of male students with and without learning disabilities at 0.01 level of significance. Further, higher mean score of male students without Learning Disabilities shows that they have higher level of mathematical skills as compared to male students with Learning Disabilities.

Hypothesis-4: “There is no significant difference between mathematical skills of female students of Class-IV with and without learning disabilities” was tested by employing t-test. The results are entered in Table 4.

Table 4: Mathematical skills of female students with and without Learning Disabilities (LD&NLD)

Groups	Mean	Standard Deviation	t-value	Level of Significance
LD(Females)	48.30	13.87	4.574	0.01
NLD(Females)	72.20	8.98		

Results and Discussion: The mean score of mathematical skills of female students with learning disabilities was found to be 48.30 and that of female students without learning disabilities was found to be 72.20. The Standard Deviation scores of female students with learning disabilities were found to be 13.87 and that of female students without learning disabilities was found to be 8.98. The calculated t-value between the two mean scores was found to be 4.574, which is significant. Thus it can be said that there exists a significant difference between mathematical skills of female students with and without learning disabilities at 0.01 level of significance. So, hypothesis-4 stands rejected. Further, higher mean score of female students without Learning Disabilities shows that they have higher level of mathematical skills as compared to female students with Learning Disabilities.

Hypothesis-5: “There is no significant difference between mathematical skills of students of Class-IV with and without learning disabilities” was tested by employing t-test. The results are entered in Table 5.

Table 5: Mathematical skills of students with and without learning disabilities (LD & NLD)

Groups	Mean	Standard Deviation	t-value	Level of Significance
LD	51.75	13.14	6.245	0.01
NLD	73.55	8.41		

Results and Discussion: The mean score of mathematical skills of students with learning disabilities was found to be 51.75 and that of students without learning disabilities was found to be 73.55. The Standard Deviation scores of students with learning disabilities were found to be 13.14 and that of students without learning disabilities was found to be 8.41. The calculated t-value between the two mean scores was found to be 6.245, which is significant. Thus it can be said that there exists a significant difference between mathematical skills of students with and without learning disabilities at 0.01 level of significance. So, hypothesis-5 stands rejected. Further, higher mean score of students without Learning Disabilities shows that they have higher level of mathematical skills as compared to students with Learning Disabilities.

Summing up: Thus, subsequent to the testing of different hypotheses, results have been interpreted accordingly through discussing the mean scores, standard deviation, t-value and the level of significance. These have helped to compare the mathematical skills of dissimilar groupings. Seeing as the learning disabled have shown lower level of mathematical skills, hence the teachers must encourage the students to work hard in this subject. Awareness of mathematics skills will help in preventing the failure in

mathematics through proper remediation in on a daily basis by the teachers. This will inculcate a feeling of hard work among the students and they will try to improve their skills. It is recommended that children with learning disability and with low mathematics skills should be made to monitor and regulate their activities by themselves so that they become aware of what they are presently doing and what their needs are. In inclusive education, the children with learning problems in mathematics should be kept in regular schools and equipping the teachers in assessing their problems will help in reducing the specific problems of students at an early age. To cope with the needs of individual differences of students, teachers will use those methods which can easily reduce the learning problems in mathematics. Awareness of the various types of problems in mathematics will help a teacher to give remedial training to the child in any deficient skill. Mathematical learning disabled and normal children can be taught together so that learning can take place in a better way. Teachers and schools can provide such environment to facilitate the development of mathematics skills among students. As the students become harder working, more shall be their knowledge of their abilities and inabilities, which they can use or remove respectively, so that success can be generated. Thus the findings of the study would help the teachers, encourage the policy makers and the administrators to make some serious plans and take certain positive initiatives to remove the learning problems faced by students in the respective schools of Chandigarh. Serious implementation of the plans will help to succeed in educating the students with learning problems in mathematics.

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