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Influence of metacognitive strategies in overcoming learning disabilities among primary students

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Abstract
The educational scenario in India is meretricious. We speak of education for all; but in reality a majority of the students remain academically backward. Their number is alarmingly high at all stages of education. In primary education, especially in foundational courses, where there is much competition, the low performing students are pushed out. Education is, thus, the monopoly of a handful of able students. The low performing students labeled as the learning disadvantaged or learning disabled become ossified. Learning disability affects reading, listening, arithmetic, oral language and social skills. In primary schools in india there are lot of financial expenditure made for the performance of primary school children Many of the noted education commission has recommended primary education one among the vital part for strengthening the students who want become a high achiever. In India met lot of problems in education system especially in primary education there is no standardized instructional strategies for the teaching subject. Primary education have minimum amount of transactional curriculum which combined together language, mathematics, social science and science. Especially mathematics one among the important subject in primary education which required high level of comprehensive to solve the mathematical problems. In primary school children have many disabilities in mathematics that should be overcome by the class teacher through certain selected strategies. These strategies can be prepared by the class teacher by applied their own experiences gained from the classroom environment. Because every teacher must understand the real capacity of their students who studied under his/her control. In order to overcome the learning disabilities among the primary children the present metacognitive strategies helps the students to overcome the same in school environment.

Keywords: metacognitive, learning disabilities, primary education

Introduction
Primary school education is very important and that should be strengthened by the administrators and teachers to survive the primary children who will become in the modern world. Primary education is playing a major role for the students comprehensive understanding in the subject and future perspectives. Many of the education commission stated that primary education to be strengthened because it is the backbone of higher education system as well as the overall development of the nation. If the primary children obtained the fruitful education it will help them to become a scientist and other professionals, good citizen of India. In education system primary education is the backbone of the all other higher education system such as medicine, engineering, scientific and new innovation. In India there are lot of discrepancy in education system due to the various physical and psychological problem. In school children dyslexia and dyscalculia two among the major crisis students who will not understand properly in mathematics and other subjects. It should be identify the teachers immediate concern and develop a certain strategies to overcome these problems among the primary children. According to nature of the students some of the selected strategies prepared by the concern class teachers through his /her own experiences gained from the classroom settings because the good teacher can able to identify the problems among the students who suffered either dyscalculia or dyslexia. In this above consideration and based on the own experience gained by the investigator. The investigator has prepared metacognitive intervention strategies to overcome the learning disabilities of such as dyscalculia and dyslexia among primary school children.

Metacognitive Strategies
The investigator through the present study focus more attention on above elaborated Metacognitive strategies so as to make the disabled children away from the problems faced in acquiring knowledge on language reading and arithmetic
The present study metacognitive strategies in Task based for language learning and maths have been illustrated as follows

Metacognitive Strategies Before task
Plan/Organizer
Set goals, Plan the task or content sequence, Plan how to accomplish the task (Choose strategies), Preview the text

Monitor identify the problems
Check your progress on the task, Check your comprehension as you use the language do you understand not if not what is the problem

Manage your own learning
Determine how you learn best, Arrange condition that help you learn, seek opportunities for practice, Focus your attention on the task

Metacognitive Strategies after task
Use what you know (use background knowledge)
Think about and what you already know to help them do the

task. Student may be made to associate between new information and their prior knowledge.

Make inferences (Use clues)
Making students what they know to figure out meaning, Read and listen between the lines, Understanding its meaning

Make prediction (Crystal ball)
Anticipate information to come, Make logical guesses about what will happened, Make on estimate (Maths), Make hypothesis (Science).

Children's kinesthetic sense
Imaginative action by children, Real object to help children remember words, sentences or content information

Role of Metacognitive Strategies in Overcoming Learning Disabilities
Metacognition is one among the brain related self performance strategies any individuals who can accumulate themselves and solve any problems with his /her own experience. Metacognitive strategies is best strategy for students level to solve the any mental operations through his /her own experiences gained through internal and external stimuli which activated in their own brain. Any individuals who can involve themselves any problems by applying metacognitive strategies. Because it gives a direction through cognition oriented activities by their own brain function. Cognition is nothing but thinking of thinking any individuals to solve their problems by the way of thinking and thinking in any complicated issues for the personal and academic side. In school particularly primary education the performance of students with different subjects is vital for the betterment of future education. In the modern world there are lot of exposures gained by the teachers through his/her classroom environment. One of the major issue in primary children who suffered dyslexia and dyscalculia in long period. In order to eradicate the same the teachers is take necessary steps to overcome the learning disabilities among the students. The following metacognitive strategies prepared by the investigator to overcome the learning disabilities of primary school children according to their nature. Meta cognitive strategies can be categorized before and after task strategies. (Dr. M. Parimala Fathima, 2013) [4].
One of the most effective way to teach Metacognitive strategies is the think aloud. This include a teacher talking in the class through thinking as teacher tackles a class, like a piece of text with new vocabulary or a new maths concepts. Based on such view the investigator decided to implement lesson plan through the following strategies so as to make the students comprehend reading and arithmetic.

Need and Significance of the Study
The primary school stage plays a vital role in making in the children develop language reading skill and arithmetic especially disabled children a primary level cannot cope up with normal children in regular classroom settings. Most of the disabled children feel difficulties and hindrance especially in acquiring language skill and mathematics in primary education.
The Indian Government lays emphasis on primary education and also referred as elementary education, to children aged 6 to 14 years old. This present study becomes to deal with lower primary school students (6 to 10 ages) with learning disabilities of dyslexia and dyscalculia.
A learning disability is a neurological disorder of children with learning disabilities are as smart or smarter than their peers. But they have difficulty reading, writing, spelling, reasoning, recalling and organize information if left to figure things out by themselves or if taught in conventional way. Therefore, there has been misconception of primary school teachers on the students with learning disabilities. Learning disability in general refers to an intellectual disability, while difficulties such as dyslexia and dyscalculia or usually refers to as learning disabilities. Disorders refer the significant learning problems in an academic area.
In this point of view the investigator is to become aware to introduce innovative Metacognitive strategies for the children at primary level to overcome problems in their regular school settings. Metacognitive strategies refers to methods to help children understand the way they learn; in other words it means processes designed for students to think about the thinking with related to their previous experiences. With the consideration of learning difficulties of the students at primary levels, the investigator of the present study made an attempt to minimize the problem of learning disabled students through metacognitive strategies.

Objectives of the Study
1. To find out the significant difference if any between the selected demographic variables of the learning disabilities of primary school children

Experimental Design
Experimental design is the process of planning a study to meet specified objectives. Planning an experiment properly is very important in order to ensure that the right type of data and a sufficient sample size and power are available to answer the research questions of interest as clearly and efficiently as possible. The present study single group experimental design

Sampling Technique
The investigator has taken 25 samples from 10 schools for the present investigation by using purposive random sampling techniques. The sample consist of students of V standard in Kalayarkoil block, Sivagangai district, Tamil Nadu.

Tools used for the Study
- Questionnaire for pre test and post test

Construction of Tool
The investigator has taken utmost care to frame questions for pre- test and post- test to meet out the need of the students who belonged to dyslexia and dyscalculia

Hypothesis Testing
1. There is significant difference between the selected demographic variables of the learning disabilities of primary school children

Table 1: Table shows significant difference among the dyscalculia children in their learning achievement through metacognitive strategies with the relation to gender

Dyscalculia	N	Mean	SD	t	Level of Significance
Boys	15	54.93	3.71	14.34	S
Girls	10	36.6	1.89		

Significant at 0.05 % level (2.06)

The above table reveal that the calculated t value 14.34 is greater than the table value 2.06 level and therefore it is inferred that research hypothesis is accepted. It is found that the girls dyscalculia students achieved more than boys in their learning achievements.

2. There is significant difference among the dyslexia children in their learning achievement through metacognitive strategies with the relation to gender

Table 2: Table shows significant difference among the dyslexia children in their learning achievement through metacognitive strategies with the relation to gender

Dyslexia	N	Mean	SD	t	Level of Significance
Boys	15	53.86	7.90	2.20	S
Girls	10	47.8	4.39		

Significant at 0.05 % level (2.06)

The above table reveal that the calculated t value 2.20 greater than the table value 2.06 level and therefore it is inferred that research hypothesis is accepted. It is found that the girls dyslexic students achieved more than boys in their learning achievements.

Conclusion

School at primary level has significant role in shaping the children in their learning disabilities problems and development of personality. Especially disable children suffer a lot in their regular classroom teaching and learning and same to be minimized by the teacher. Acquiring language reading skill and learning Mathematics for primary school remains important aspects and same to be enlarging in primary school it self through some instructional activities. Teachers at primary level have insist the students to made a self learning among the children so that children can think in their own and do anything for the betterment of the problems who suffered

The use of these strategies can help improve students" critical thinking skills, help them differentiate truths from lies in the media, give them new tools for organizing their thinking in academic course work such as heuristics and cognitive organizers, and teach them about the neuroplasticity of their brain and why a growth mindset is so important for success in school and life. Mathematics is a curious subject, compared with other science subject. It requires high level of concentration to perform effectively in mathematical problems in successful manner for students.

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