

METHODS OF TEACHING TO CHILDREN WITH LEARNING DIFFICULTIES IN RESOURCE ROOM

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Abstract

The field of education is changing very dynamically. There are so many changes from gurukul system to use of ICT for teaching. Recent trends in the field of rehabilitation are normalization, Deinstitutionalization, Anti-labeling, Mainstreaming, integration, inclusion, and Deno Cascade model of service delivery system. Resource Room is also one of the service delivery system to provide educational services to Children with Special Needs. Resource Room is a set up in normal schools to provide the remedial education for those who have problem in learning.

Children with Learning Disabilities face problems in reading, writing and mathematics. They face problems in all subjects. In Resource Room teacher only try to find out the learning problems and their solution. In this study researcher will focus on the problem faced by children with learning difficulties in Hindi, English and Mathematics and solutions of these problems. Researcher will provide some common techniques to teach any subject as well as researcher also provide specific techniques to teach Hindi, English and math.

Key words: Resource room, children with Learning Difficulties, Methods of teaching.

Introduction

Now a day Resource Room is very crucial and integral part of education system. Resource Room is a classroom set up in normal school to provide the assistance and remedial education to children who has a problem in learning. In Resource Room teachers provide need based education, give individual attention, use different types of teaching methods, material and strategies to make understand the concept to

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children with learning difficulties. Resource room helps the students with learning difficulties to meet their unusual needs and they can cope with academics because in resource room teacher address the specific learning difficulties and work on them.

“Resource Room is a class set up in normal school to provide the assistance and remedial education to a child who has problem in learning.”

Resource Room teaching is a team work. In this special educator coordinates with other professionals like class teacher, therapist, sports teacher and others. Special educator prepares IEP, instructional material, use specific methods and some adaptations according to children needs.

Learning Problems / Difficulties Faced By Children with Learning Difficulties

People often find the term ‘learning disability’ confusing because there are several different explanations about what a learning disability is. Learning disability and learning difficulties are terms that are commonly used in UK. These two terms are often interchangeable when used in the context of health and social care for adults.

In America the term ‘learning disability’ has a different meaning to the one used in the UK. In USA, learning disability is used to cover several specific learning disorders particularly in relation to reading, writing and maths such as dyslexia, dyspraxia and dyscalculia. The terms ‘intellectual disabilities’ and ‘mental retardation’ are commonly used as labels to describe what in UK would be understood as learning disabilities.

In Indian context Learning difficulties and learning disabilities are different from each other. Each one has its own characteristics and problems. **Learning disability** is first defined “ as a disorder or retardation of development affecting specific academic area such as reading, writing, spelling and arithmetic as well as delays in language in general.” (Kirk, 1963).

Learning difficulties are difficulties in acquiring knowledge and skills to the normal level expected of those of the same age, especially because of mental disability or cognitive disorder and other problems. In other problems like no exposure, pure health, malnutrition, interest, laziness and other disabilities i.e. visual impairment, hearing impairment, physically handicapped, low vision and ADHD.

Difficulties faced by children with Reading problems (Dyslexia) - Children with learning difficulties have different problems in different learning areas like Read slowly, Tracks figures, Exhibits difficulty recalling known words, Word by word reading, Incorrect phrasing, Poor pronunciation, Omission, Repetitions, Insertion or reversal, Substitutions, Basic sight words not known, Consonant sounds not known, Vowel sounds not known, Lacks structural analysis.

Difficulties faced by children with writing problems (Dysgraphia) – children with learning disabilities have different writing problems like No space between words, Substitutes letters, reverses letters, Omits letters, Adds letters, Poor punctuations, No or wrong capital letters, Poor letter formation, Slow in writing or coping, Shows inconsistencies, Has cramped or unusual grip, and Inconsistent position on page with respect to lines and margins and inconsistent spaces between words and letters.

Difficulties faced by children with mathematic problems (Dyscalculia) - children with learning disabilities have different mathematic problems like, Doesn't remember and/or retrieve math facts, Doesn't use visual imagery effectively, Has visual-spatial deficits, Shows difficulty in understanding concepts, Shows difficulty in Sequencing information, Shows difficulty in fractions, and Shows difficulty in handling and changing money.

Teaching/ Learning strategies for children with specific learning disability: friend and Bursuck (2012) defined learning strategies as principles, procedures, or rules for solving problems and independently completing tasks. Strategies can focus on big ideas, which are the concepts and principles that lead to the most efficient and broadest acquisition of knowledge from curriculum (Lodato Wilson, 2007), or smaller steps or procedures to successfully complete an outcome.

Strategies are also efficient way to learn and remember a task or skill. Further, strategies activate student's learning by organizing the learning process, incorporating opportunities. For students to practice and retrieve information and providing explicit guides, formats, or scaffolds. In other words, learning strategies are the student to do something, offer a way for students to remember steps to follow, and address a process that students find difficult (Lenz, Deshler, & Kissam 2004).

Teaching Strategies for children with Reading problems (Dyslexia) - there are so many teaching or intervention strategies. In general we use some strategies like; Use Books on Tape, Encourage students to read along with taped texts, Use interactive activities during class time, Use oral testing, Use oral as well as written directions, Let students read together aloud, Ask students to repeat directions orally, Provide quiet area, Use books with large print, Provide a copy of lecture notes, Don't count spelling on history and Use multi sensory teaching method.

Five major skills are necessary for the development of independent in word recognition:

- a. Recognizing whole words by sight
- b. Using context clues,
- c. Analyzing words phonetically
- d. Using structural analysis of words, and
- e. Using the dictionary.

Multisensory approach

A multisensory teaching approach means that the child is helped to learn through more than one of the senses. Most traditional teaching is done using sight or hearing. Many of our children may have problems learning by using one or both of these senses. A multisensory approach also will include kinesthetic. Using kinesthetic allows a child to touch and handle objects and also may include movement. This allows a child to take in information in a number of ways and through more of her senses.

“Learning happens through a combination of sense organs”.

By combining actions with seeing and hearing, students make strong connections through their muscles to sound and words. Multi sensory approach instruction involves presenting instructional content through several modalities. Such as VAKT modalities, V – visual, A – auditory, K – kinesthetic, T – tactile. The Fernald method is a multi-sensory remedial approach combining language experiences with vision (visual), hearing (Auditory), movement and touch (Kinesthetic and Tactile) VAKT is instructional techniques it is contributed by Grace Maxwell Fernald in 1943. It is also known as “whole word approach”

Stage I

- Stage one emphasis on tracing and writing from memory.
- Let the student choose a individual word.
- Teacher writes down the selected word on large board in cursive writing.
- Pronounce it while teaching.
- Cursive writing is suggested because the student will tends to see and feel the word as a single unit rather than group of letters.
- Student traces over the word with two fingers.
- Word tracing is repeated until the student can be written accurately from memory.
- If student written word accurately from memory, it is stored in a word bank.

Stage II

- In this stage learning is initiated when the teacher believes that the student no longer needs to trace word for learning.
- In this stage word are presented on smaller card.
- Tracing is eliminated.
- As in stage one word are selected from student generated stories.
- A selected word is printed on a card.
- The student looks at it and says the word then attempts to write the word from memory.

Stage III

- In this stage student begins to read from the text books any material.
- Words are selected from the text but no longer written on cards.
- The student looks at the word in the text say the word, and then write down from memory.

Stage IV

- It is characterized by the student being able to read a word in context, say it and remember without having written it. The student is taught to decode unknown word by associating them with known word.

Ex – mat- bat; cat – rat; cut – put

Orton and gillingham method - This approach was given by Dr. Samuel Torrey Orton and Mrs. Anna Gillingham, both are working at Columbia University. The Orton Gillingham approach firstly used in 1920. They both worked on the principle of remediation of language differences. Anna Gillingham has a gifted educator, who trained teacher in the remedial approach. They both worked to teach students with **Dyslexia** and compiled and published instructional materials.

“Orton gillingham is a multisensory approach to reading and writing that is helpful for children and adults with dyslexia”.

The Orton Gillingham method stresses the connection between written words and their spoken sounds. Students learn to read and spell, not just memorize words.

Stages involve in Orton Gillingham Method

Stage-I Individual letters are taught using drill cards and a carefully structured question answer format focused on the letter sound.

- Firstly taught the letters like (a,b,h,I,j,k,m,p,t) to introduce to the child, who is having language problem.
- By using flash cards each individual letter is taught and emphasizes laid on the letter and sound.
- Ex. When we introduce vowel “a” to the child with sound. Three main steps are important
- **1. Tracing:** Tracing means following the pattern of a letter taught by teacher. EX. Introducing “A’ on paper. When the child is not doing tracing so we can give PP.
- **2. Coping:** Coping means imitating the original words or duplicating the words. This way the child will learn letter and try to memorize it.
- **3. Writing from Memory:** It means when the child has learned the letters. He is now able to write it independently. It is advanced level of the stage-Ist, in which the child is made to write the letter independently. Ex. A

Stage-II

- In this stage the student is taught to blend letters in to simple consonant-vowel consonant(C.V.C.). EX. A-t, h-a-t, p-a-t, m-a-t, etc.
- Instruction then focuses on the spelling of same sample words which requires repetitive teaching their by naming, writing, reading that letter. EX. m a p

Stage-III

- In the stage includes syllabification, sentences and story writing and advanced spelling rules.

In the stage following steps are involved like:

- 1) **Syllabification:** "The term Syllable means units of the pronunciations forming whole or part of a word."
- Usually consisting of vowel sound with Consonant.
- Ex. One syllable word is "cat". Two syllable word is "mitten". Detached word "mit - ten". Three syllable word is "September", Detached word "sep tem ber".
- When the child can read and write three lettered phonetic words, sentences and story is begun.
- Story is- Sam hit Ann, Then Ann hit Sam, Sam ran and Ann ran, Ann had a tan mitten, Ann lost it, Sam got the mitten, Sam sent the mitten to Ann,
- Ex. Of sentence,
- Sam hit Ann

Stage - IV Advanced Spelling Words

- There are some important rules which have some important in language development. When we are seen "q" letter always "u" come after the "q" letter. Here the focuses on that with "q" the letter "u" is used which remains silent when spelled out. Some other examples are- Letter i, f and s, l are oftenly used when they are formed into words like, Miss, call, toss, staff stiff etc. Exception- us, bus, gas, if, plus, etc.

Reading is a complex cognitive process of decoding symbols for the intention of constructing or deriving meaning (reading comprehension). Reading development can be viewed as a series of qualitatively different stages through which learners proceed (Harris & Sipay, 1990). Development in each stage is dependent upon the concepts learned in previous stages; likewise, each stage is prerequisite for the learning that follows. The five stages of reading are essential are;

First Stage of Reading: Word Attack Skills

Word attack skills are the ability to convert graphic symbols into intelligible language. Word attack skills are skills needed to be able to make sense of an unknown word in the context of reading.

Second Stage of Reading: Comprehension

Comprehension is not simply a matter of connecting meaning to individual words and phrases. A skilled reader with strong comprehension engages in a number of cognitive processes that are developed as a result of substantial independent reading as well as training. These include, following a sequence of action or thought, anticipating outcomes, visualizing, synthesizing and recognizing main events, and distinguishing main ideas from subordinate details. There are four levels of comprehension viz literal, inferential, evaluative, and critical.

Third Stage of Reading: Evaluation

Evaluation involves a careful assessment of that which has been read and comprehended. It involves a different area within the brain than that required for decoding and comprehension. For example, the statement, Red is green, will be evaluated for accuracy and consequently discredited if the individual words have been read and understood.

Fourth Stage of Reading: Application and Retention

Once the information has been read and properly evaluated, it can be applied in a meaningful way by the reader. He or she can then decide what to accept or reject and how to apply it to his

or her individual needs. Some of the information may be deemed to be irrelevant or inappropriate, and may be discarded.

Fifth Stage of Reading: Fluency

Fluency means that the reading process is automatic, that the reader recognizes the overwhelming majority of words by sight and does very little conscious decoding. (Decoding refers to the process in which a reader consciously uses phonics and other related skills to figure out the pronunciation of a printed word.) Fluent readers read smoothly, linking words together into meaningful phrases rather than reading word by word. Because fluent readers recognize almost all words by sight, they focus on the meaning of the text, rather than lower order decoding processes.

Most reading programs are based on a specific underlying theory or approach to teaching reading. Some of the major approaches to reading are as follows:

- analytic approach
- eclectic approach
- global approach
- phonic approach
- sight word approach
- synthetic approach

Teaching Strategies for children with writing problems (Dysgraphia) - there are so many teaching or intervention strategies. In general we use some strategies like; Use oral language, Allow use of tape recorder, Provide notes, Reduce copying aspects, Have students draw a picture of a thought for each paragraph, Have students dictate their ideas into a tape recorder and then listen and write them down later, Have a computer available for them to organize information and check spelling, Remove 'neatness' or 'spelling' (or both) as grading criteria for some assignments, Have them continue practicing handwriting, and Encourage student to talk aloud as they write.

Writing involves four stages

1. Tracing
2. Dot joining
3. Copying
4. Writing from memory

To write sight words, students have to go through six steps, using Auditory, Visual, Tactile, Kinesthetic input. (Carbo, 1978)

- a. Teacher says the word and student repeats it (auditory). Eg.: Horse
- b. The meaning of the word is discussed and taught (auditory). Like; Horse is an animal, Horse has four legs, Horse riding is fun
- c. The words configuration is drawn (visual). H o r s e
- d. The actual word is traced (visual/kinesthetic). horse
- e. The student says the sound of each letter while tracing it (visual, auditory and kinesthetic).

Horse

- f. After tracing, usually the next step to follow is copying. If the child is incapable of doing it, dotted line letters can be given to join dots.

g. when the child consistently copies errorless, writing from memory can be the next step.

h. The student tries to visualize the word and write it in the air (kinesthetic), saying simultaneously.

Multi-sensory approach which is given above also used for teaching writing.

Teaching Strategies for children with mathematic problems (Dyscalculia)

There are so many teaching or intervention strategies. In general we use some strategies like; Allow use of fingers and scratch paper, Use diagrams and draw math concepts., Present activities that involve all sensory modalities – auditory, visual, tactile, and kinesthetic, Arrange peer assistance and tutoring opportunities., Have graph paper available so students can align numbers in math problems., Use colored pencils to differentiate problems., Offer manipulative throughout instruction., Teach students to draw pictures of word problems., Use mnemonic devices to teach steps of a math concept, Use rhythm and music to teach math facts and to set steps to a beat., Schedule computer time for drill and practice with math facts., Practice new strategies until students are comfortable with them., Explain why learning math strategies are important while teaching, and match strategies with the material., Encourage and monitor use of strategies to ensure correct usage and generalization., Teach students to understand the problem, develop a plan to solve the problem, carry out the plan, and look back to be sure the answer solves the problem., Use materials such as games for practice, which are interactive and motivational

Areas of intervention

The following are the areas of intervention in mathematics:

- Pre number skills,
- Numeration and place value,
- Concepts,
- Computation,
- Measurement,
- Problem solving,
- Reasoning.

Pre number skills

Early development of number concepts is critical in developing positive attitude about mathematics at an early age. Special methods and activities will assist children to develop early numeracy skills. These methods will need to include the use of motivating and engaging concrete materials that children can manipulate. Young children need to experience a lot of 'doing' and 'saying' before written numerals will make sense to them.

Pre number skills involve:

- One to one correspondence involves the matching of one object to another. This skill leads to a better understating of numeration and representation.
- Classification refers to the ability to group or sort objects based on one or more property. eg size, color, shape, texture, design..
- Seriation means being able to recognize the common attributes of objects, but it is required to determine the extent to which the object possesses the attribute. Serial order and relationships can be taught by giving objects of varying lengths, heights, sizes of rings, pegs, filling the same size jars with varied amount of water or sand and ask the students to put them in order.

Numeration and place value

This focuses on understanding numerals, number value(greater and smaller), estimation(number sense), place value, understanding re-grouping, applying mathematics concepts to everyday situations, understanding the concept of zero. This can be done use number- value associations, using color cues, spoken numerals with symbols, using abacus, play money, beans, and rulers. Use puzzles, form boards and pegs to understand shapes and spatial relations. Use sand, water from one container and put into another to understand the concept of measurements, estimate quantities, use of measuring cups. Teach about fractions using equipments like half gallons, etc.

Classification is a pre-number concept that children need lots of experimentation and communication with. We classify on a regular basis without even considering what we're actually doing. We look in indexes that are alphabetized or numerically arranged, we purchase groceries in areas of food groups, we classify to sort laundry, we sort our silverware before putting it away. Children can benefit from a variety of classification activities which will also support early numeracy concepts.

Concepts

Conceptual understanding on division and multiplication can enhance learning. Providing live situations can have a far reaching impact. Explanation like continued addition is multiplication can further prove beneficial.

Estimation

Estimation helps you focus on what is really going on. It is important for you to be able to estimate how many things you can see, or how long something is or how big something is besides maths calculations. Utilizing estimating skills can also help

students with dyscalculia. By estimating, the student is encouraged to think about the problem as a whole to obtain an answer. Specific skills can then build from this.

Computation skills

Many problems in arithmetic are due to deficiencies in basic computation skills. The student's problem should be evaluated with reference to underlying deficits in learning processes- verbal, spatial, perceptual, or memory factors. Students should be taught the basic skills of mathematics computation that they lack, including addition, subtraction, multiplication, division, fractions, decimals and percentages.

Measurement

Measurement as a concept should be concretized. Live demonstrations benefit all learners. It helps in understanding units of measurement in different states of matter. Conversion of units however would require a repeated practice. Teach till mastery and work towards maintenance in a hierarchical manner.

Conclusion

Learning disability and learning difficulties are perceived as same but are totally different. It has to be understood by the policy makers and professionals involved in implementation as well. The present paper highlighted the methods and strategies to be used for children having learning difficulties not the children with learning disabilities.

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