



Investigating the Effectiveness of Teaching Methods for People with Learning Disabilities

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Abstract:

This study aims to investigate the teaching methods and its effectiveness in teaching a child with learning disabilities. The descriptive method was used through reviewing several literatures that are connected with the study topic. The study clarified that a child with learning difficulties is a child with normal intelligence, above average and maybe high, and who have a higher level of sense of responsibility and failure fair. The main results of this study is that there are two main types of learning difficulties which are development and academic learning disabilities. The study also resulted that there are many teaching methods and strategies that can be used with students with learning disabilities, and that training is one of the main these strategies.

Keywords: teaching methods, learning disabilities, child, development.



1. Introduction

It seems that the whole world has made up its mind to reconsider the concepts of education, teaching and learning in order to be able to keep up with the global changes.

"Specific Learning Difficulties" means a defect in one or more of the common mental processes in understanding or using language, either spoken or written, which can appear as a lack of ability to listen, think, speak, read, write, spell or perform calculations.

This term includes sensory difficulties, brain injuries, limited disfunction of brain, dyslexia, developmental dysphasia, but does not include children with learning problems which resulting mainly from visual, auditory or motor disabilities, or from mental retardation, emotional disturbance or environmental, cultural or social imperfection (US Federal Government definition).

A child with learning difficulties is a child with normal intelligence, above average and maybe high, and have a higher level of sense of responsibility and failure fair.

2. Definition of a child with learning disabilities:

He is Is a child who does not suffer from mental or sensory (auditory or visual) impairment, cultural or environmental deprivation or emotional disturbance, but is a child who is suffering from a disorder in the basic mental or psychological processes that include attention, perception, formation the concept and remembering. There is a segment of children with learning difficulties who have intelligence average ranging between 70 % to 85 %, some see that proportion as between 20 % and 30 %, and they have inability to concentrate for a long-term (Holt,2016). The problem is reflected in the inability to learn reading, writing and calculate and the consequences of it,



whether in primary school or later deficiencies in the learning of different subjects, so parents and teachers note that this child does not reach the same level of education that his colleagues of the same age reach , despite the fact which he has mental abilities and a medium or high intelligence average.

3. Types of Learning Difficulties:

The basic two types of learning difficulties are (Bradley et al., 2002):

a. Developmental learning disabilities:

This kind of disabilities includes that the child's needs to learn in the study subjects, and the initial disabilities and secondary disabilities are the main two kinds of this learning disabilities types. Whereas, initial disabilities include attention, memory and cognition which are basic functions nested with each other, while, Secondary disabilities deal with the oral language, and thinking.

b. Academic learning disabilities:

This kind of disability basically focuses on academic learning disabilities as in this kind, disorder is happened to the child in the psychological processes (developmental disabilities), and he/she is unable to compensate them through other functions, where the child has difficulty learning to write, spell, read or perform calculations.

4. Diagnosis methods of the Learning Difficulties:

The basic condition for diagnosis of the learning difficulty is observed in delaying at learning abilities, such as to obtain an academic average less than of expected learner's natural average compared to those who are in his/her age ,and there is no organic or mental reason for this delaying, and because the learner has no problems in reading and writing. the reason of this phenomenon may be because the



learner needs more training courses by the teacher until his/her ability become better in math than reading or anastrophe.

Diagnosis the learning difficulties may not appear until after the child enters the school, and the child shows a low learning from the expected average of his peers – who are in the same age and social, economic and health conditions – whereas the learner shows an observed delaying in studying skills of reading, writing or calculating (shore,1998).

The delaying of the child in these skills is based onthe learning difficulties, and what appeared later of difficulties in other subjects, this is because the child does not have the ability to read or write texts of the other subjects, and not the inability of the child to understand and absorb the information of those subjects specifically. The mental abilities of children with learning disabilities are often natural or closer to natural and these children may be talented.

5. Basic symptoms of the students with learning disabilities(Roster, 1979):

A.Weakness of Focus that can be noticed as:

This can be seen as following practices:

1. Difficulty in completing a particular activity to the end.
2. The ease dispersion and absentmindedness, what we call the straying.
3. Difficulty of perseverance and endurance incessantly.
- 4.Owning a short-term memory and having a difficulty in remembering past events.
5. Losing things and forgetting them.
6. Lack of organizing ;as they often move from one activity to another without completing the first.
8. wipe off (wiping) continuously.



9. Most of these symptoms appear in more than one place, such as: home, school and for more than three months.

10. Nonexistence emergency reasons such as birth of a new baby or transition from the house; as these circumstances can cause a temporary setback for child if he did not ready for it.

B.The weakness of the capacity of remembering:

Children with learning disabilities often take longer time than others to memorize and learn the information, such as remembering the color and days of the week. They also can not provide information about themselves or their families. They also may forget their tools and books or forget to complete their assignments.

C.The weakness of the capacity for the organization:

This can be noticed as follows:

1. The difficulty of figuring out where or how to begin when having a specific task to do.
- 2.They may have a difficulty in realising how to learn and understand the right and the left, above and below, the first and the last, after and before, yesterday and today, etc.
- 3.The lack of awareness of the extent of the space. For instance, the table limits, so he put the objects on the side which causes the fall of these objects, also collision of the child with objects during the movement. May be they also recognised as an inactive (haveless movement) children when comparing them with others.
4. They also may have a violent reaction which is not compatible with the situation, for example, he screams suddenly and violently when he becomes frustrated.
- 5.They may write their duties quickly but incorrectly, or write them slowly without completed.



D. problem solving issues:

It may be difficult for him to learn the successive stages which he needs to solve mathematical problems such as multiplication, long division and algebraic equations, and may he does not only have one way to solve the problem and he is not looking for other ways.

6. Five main arbitrators to identify learning children, and can be summarised as follow (Barton, 1996):

1. Spacing Test: This means that the student's achievement level in a subject is different from the expected level according to his condition, and has two aspects:

- a) The disparity between the mental capacity of student and achievement level.
- b) **The** disparity manifestations of achievement development of the student in courses or subjects.

He may be superior to mathematics in ordinary in languages and he suffers from learning difficulties or social studies and may be the disparity in achievement between parts of a single course, for example, in the Arabic may he may be tongue-free a fluent reader in the expression, but he has difficulties in the absorption of the grammar lessons or memorising literary texts.

2. Exclusion test: When diagnosing and determining the learning disabilities category, the following cases are excluded: (Mental retardation, sensory disabilities, the blind, the visually impaired, the deaf, the hearing impaired, those with severe emotional disorders such as impulsivity, hyperactivity, lack of learning opportunities or cultural deprivation).



3.Special education test: It is related to the previous test to the effect that the ordinary teaching methods are not suitable for children with learning difficulties as well as the incompetence of the methods which used with disabled, but should provide a sort of special education in terms of (Diagnosis, classification and education) different from the previous categories.

4.Test of problems related to maturity: We note that growth rates differ from one child to another, which led to difficult preparing for learning processes, what is known is that the growth of male children progresses at a slower rate than females, which makes them at about five or six years unwilling or cognitively ready to learn distinguishing alphabets in reading and writing, which impedes their learning of the language, therefore must provide educational programs the correct the lack of growth that hinders of the learning processes, whether this deficiency attributes to genetic, composition or environmental factors, and this test reflects the individual differences between both genders in the ability to achieve the goal.

5.Feasibility test:The learning difficulties can be inferred by the simple organic damage in the brain that can be examined by the electrocardiogram, the simple disturbance in the brain functions (Minimal Dysfunction) reflected in cognitive disorders (visual, auditory, spatial, hyperactivity, mental disorders, difficulty of functioning) (Fathi Mustafa El Zayat, 2001, 2000).

It is worth mentioning that the disorders in the brain functions affect negatively the mental processes, which hinders acquisition the educational experiences and application and utilisation them, but it leads to a lack in emotional and social growth and the growth of public personality.

7. How to deal with these students:

There are several thoughts regarding the ways to deal with learning disabilities children and this can be as follow (Birch & Ladd, 1997)



First: Put these students in the regular classroom, this is the direction applied in Egyptian schools.

Second: Put these students into special classes within the regular school.

Third: The distribution with the ordinary children in some subjects and the isolation of them in other subjects

There are several directions for preparing the therapeutic programs:

1. Using books which are especially designed:

Appropriate private books are designed to take into consideration their low achievement, so the content is smaller than that of ordinary students' books.

2. Using smaller steps (Analysis the task).

3. Adapt the program to ensure the success: That includes:

- a) Develop the mind through sensory and manual experience.
- b) Make the course easy at the beginning of learning for all learners.
- c) Make homework and exercise easy to ensure the success.
- d) Provide each difficult task separately.
- e) Adopting the principle of work by the teacher according to each learner and according to the level of his growth level (Muhabbat Abu Ameerah, 2001, 28).

8. Teaching methods in dealing with people who has learning disabilities:

There are many teaching methods and strategies that can be used with students with learning disabilities such as (houinard, 1997):

a) The training which based on analysis and the simplification of the task:

Supporters of this strategy assume that there are no developmental defect or disability in children and that their suffering is limited to a lack of training and experience in the task itself. This method uses the technique of analysis the task to



allow the child to master the simple elements of the task and then install these elements or components, which helps to learn and master all of the educational tasks in a systematic sequence. This method can be applied in academic subjects such as reading, mathematics and writing, these complex tasks are simplified and that help to master their components in an acceptable way.

b) Multi-Sensory Strategy:

This strategy focuses on that the child uses his different senses in the training process. The Vernald' method which is called (VAKT) method which means using the vision (visual), hearing (auditory), movement (kinetic) and touch (tactical) .

Brown and others (Brown & Palincsar, 1989) have emphasized using the teaching strategies for students with learning difficulties such as: multisensory input, demonstration, modeling the desired behavior, short daily feedback, visual representation by the learner, presentation the information they need only, and he cleared that the traditional knowledge of slow learner indicates his need for teaching patiently, so through that they can learn more, and in small steps

c) Constructive Learning Method:

This method based on the student's effectiveness and non-his negativity and interaction with the lesson and the teacher and he did the necessary activities, and perhaps the tongue of the student when he addresses his teacher "Tell me and I will forget and show me and I will remember, and entrust the task to me and I will understand".

d) Direct Instruction:

This method introduces teaching activities aimed at academic matters with clear objectives for the student, which give the student enough time to cover the



content, also monitors student performance, and compose questions with a low intellectual level so that the correct answers are multiplied, and the teacher provides immediate feedback which directed at the academic material and he controls the teaching objectives, and selects the appropriate material for the student's abilities, and while the teaching is under the tutelage of the teacher, it is conducted in a comfortable academic environment.

This method includes defining the procedural objectives of the teaching the course which the students who suffers from difficulty in learning to be achieved, and identify the sub-skills that we need to achieve the goal, and determine the educational requirements and chart the steps to reach the goal.

e) Aboveboard Learning:

It includes reading the issue aloud, identifying the request aloud, mentioning the information gathered aloud, indentifying the issue aloud, providing the solution'assignments, reaching the solution aloud, calculating and writing the solution and verifying the solution.

f) Advanced Expertise Organizations:

Whereas, introductory materials are served for students with learning disabilities by a way of generalization, abstraction and comprehensiveness, and it is a contribution in processing the phenomenon of the difficulty of learning in some issues, and helps students with learning disabilities for the organization of their ideas.

g) Individual Learning Style:

This method requires access to the level of mastery at each lesson of the proposed remedial program before moving on to the next lesson. If the student is unable to reach the level of mastery (final grade), the lesson will be re-examined.

It is based on the following principles and steps:

- Individual learning according to the educational needs of each student.



- Unstoppable learning time for all students.
- Diversify the methods of dealing with the contents of the material.
- Writing the curriculum in the cards taught it in the classroom or at home under the supervision of the teacher and follow it.

h) Games Method:

It is a meaningful and interesting activity which the learner or group of learners do to accomplish a specific task in the light of the game rules with the availability of motivation of the student to continue the activity and that method characterized by the following:

- Increase the motive of the student to learn.
- Increase the understanding, application and retention the mathematical skills.
- Achieving cognitive goals (understanding / application) etc.
- Achieving sentimental goals (increase the tendency towards the material).
- Using determinators that help to consolidate the concepts and methods of solution.

i) Diagnostic Teaching Methods:

It provides children with a large list of behavioral goals, and tests the students to determine their level and diagnosis weaknesses, and then select educational activities that treat the weakness of a child. Therefore this goes according to the following steps:

- Determination the goals.
- Test the content.
- Put diagnostic tests.
- Put therapeutic activities.
- Put standardized tests to determinate the extent of achieving the goals.

j) Using the Computer and Calculator in Teaching:



This method has emerged because the computer is characterized by patience with the learner and individual learning and differences in abilities between learners with learning disabilities and the possibility of teaching the student according to his own speed, which is consistent with the nature of learners with learning disabilities, and has used the computer programs (CAI)to help learners and students with learning difficulties. It uses various programs such as: training, practicing and game programs and educational programs. This is also in line with the difficulties which are encountered by the student, so the training and practicing programs aim to master the learning of the skills, especially the skills of the computational processes, and it provides the training issues in a gradual way from easy to difficult, and it is easy to choose the types of issues that correspond with the abilities of students and learners with learning disabilities and game programs as well as what they ensure of fun and they help in representing issues visually, and simulations programs help to mimic natural situations across the computer screen such as sales and purchase issues and others. And because of the student did not job inside accounts which may help him to focus on steps to resolve the issue. Many studies and references used hand calculator to facilitate the implementation of the calculations and it has included references which exposed to calculator for teaching how to use the calculator.

k) Constructivism:

Structural entrance refers to treatment or run math or process math or activity based on mathematics, as well as using the illustrations. these ways are based on information transmission and direct teaching for skills, it becomes the role of the teacher to innovate and design the educational attitudes which allow the opportunity for kids to discover the sports relations and solve the true problems, and is believed that the constructivism develops the upper cognitive skills and strategies.

We should note that the entrance of the practical mathematics discovery ways look unsuccessful with student who faces difficulties with math, and that



some students do better when they study with direct show, and then the math must be provided by a balanced entrance which includes clear teaching, activities and attitudes which are treated manually and refer to the constructivism.

l) Method of Laboratory Individual Learning (Manipulatives):

This method uses equipments such as clips Dienes MAB, bars Cuisenaire Unifix and Mortensen which are recommended in the early stages, and the items which addressing manually are useful and important for pupil with learning difficulties, they help him to keep the visual formations for a number of relationships, also using the hardware and instruments is useful to make the verbal matters visible and concrete and this tool can be used effectively if the student was able to link between them and the concept or the process that they clarify, and the problems occur when the student work on hardware and tools a lot. Children can help each other through using the games and tools and hardware and using the multisensory, and are taken concepts in a concrete or visible represent, and used the concrete means like, blastic tubes, bottle stoppers and paper clips and games, such as the Tinkertoys game which used in clarify some engineering concepts such as: ray, balkline, point and parallel two-lines, and triangle, quarter shapes and instruction of the straight lines and some of commerce means such as: blastic counting pieces, fractures parts, pieces of wood, dice stone and chess panel, using the materials that are handled manually is old relatively, and what is developed is the electronic tools.

m) Working in Groups (Teamwork):

Using of the direct teaching method does not mean that the teacher can not use the teamwork or cooperative teaching, the studies have shown that the method of well-planned work groups helps students with learning difficulties increase motivation of learning. The group of activities introduces student in discussions and shares him in ideas which help the group members for



learning about governance concepts and processes, and the groups must be organized so that all students participate in activities.

n) Problem Solving Strategies:

Learners with learning disabilities are bringing out the confusion and disconcertion when confronted with solving the problem (Parmar & Cawley, 1994). They have difficulty reading the words of the issue and understanding the meaning of terms, and they do not ensure about processes that they will use to solve the problem and they fail in extracting generalizations that moves them from one issue to another, and then the researchers sought to teach the students how to enter the issue without fear and frustration.

In respect of the experienced of the students with learning disabilities and the weakness of their educational processes, the research has direct to think about the way student think about solving problems and what is known as Meta Cognitive and using the graphs and explanatory chart to solve problems and exercises to represent and expect the solution of the problem, in terms of the quality of the issues, it interduces issue solve by one step, and some solve by two steps and others by multi-steps, also it suggested using games and exercises to teach students with learning disabilities.

Conclusions:

This paper concluded that specific Learning Difficulties can be defined as a defect in one or more of the common mental processes in understanding or using language, either spoken or written, which can appear as a lack of ability to listen, think, speak, read, write, spell or perform calculations. A child with learning difficulties is a child with normal intelligence, above average and may be high, and who have a higher level of sense of responsibility and failure fair. There is a segment of children with learning difficulties who have intelligence average ranging between 70 % to 85 %, some see that proportion as between 20 % and 30 %, and they have inability to concentrate for a long term. The study clarified that the basic two types of learning



difficulties are development and academic learning disabilities. The study also resulted that there are many teaching methods and strategies that can be used with students with learning disabilities, and that training is one of these strategies.

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