

CHALLENGES AND THERAPEUTIC SOLUTIONS: PROBLEMS OF LEARNING DISABILITIES IN EARLY CHILDHOOD

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Abstract

This paper is on the subject of learning disability in early childhood as well as the challenges and therapeutic solutions. These problems are further complicated by ignorance about the condition on the part of the parents, teachers, caregivers, counselors and the society. This causes anxiety, diminishing self concept and psychological trauma. Learning disability is a genetic term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning or mathematical abilities. These disorders are intrinsic to the individual and presumed to be central nervous system dysfunction. This paper defined learning disabilities, types, some consequences, causes and some therapeutic solutions and how to use some principles of psychotherapeutic teachings, using developmental appropriate practices, to eliminate learners disability for educational sustainability in early childhood.

Education begins at the early childhood stage when career foundations are laid. This first stage of life up to the fifth year when the child gets set to enroll in the primary school. This is organized in highly attractive centres of learning, with different names like, learning centres (nursery, crèches, Montessori or kindergarten) are organized in highly attractive environment. These schools help to stimulate and promote educational readiness and sets the child on a proper footing for primary and other levels of education.

However, a lot of children suffer some developmental learning disabilities, and so fail to

benefit from the impact of early childhood education programmes. Unfortunately many caregivers, parents, teachers and even the society are ignorant of the existence of such debilitating conditions and therefore blame the affected children without knowing who the children or parents society etc. turn to for help. This paper therefore analyses the concept of learning disorders of early childhood, so that all would gain knowledge and get acquainted with ways of helping affected children.

What is Learning Disabilities?

There are many controversies about the subject learning disability. Learning disabilities have been viewed in terms of retardation or deficit in an aspect of learning such as reading, mathematics and writing. Learning disability is a general word that describes certain kinds of learning problems. Learning disability can cause a child to have trouble learning and developing certain skills. The skills most often affected are: reading, writing, listening, speaking, reasoning and doing mathematics. This may include children who have learning problems caused by child abuse, malnutrition from poverty, wars and accidents. Learning disabilities vary from poverty, wars and accidents. Learning disabilities vary from person to person. They range from mild to moderate to severe. One person with learning disability may not have the same kind of learning problems as another person with learning disability (Akindayomi, 2005).

According to Kirk and Buteman in McNamara (2007) such disorders exist in

exclusion of any disorders or condition such as mental illness or instructional procedures. The concept could also be seen in the inability of the child to perform a learning task such as reading, calculating or writing despite his advanced age and intelligence. The diagnostic and statistical manual of the American Psychiatry Association (2000) describes the various learning disorders in terms of significant discrepancy between what the individual achieves and the expected performance level for persons of the same age. Balow and Durand (2002) however note that for the condition to be termed a disorder, the sufferer's academic achievement and daily activities must be significantly interfered with. Given the myriad of definitions, this paper gives credence to two definitions proposed by the U.S Department of Education and National Joint Council for Learning Disabilities. The United States Department of Education (1992) defines learning disabilities in the following words: "specific learning disability" means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. The term, includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia and developmental aphasia. The term does not apply to children who have learning problems that are primarily the result of visual learning, motor disabilities, mental retardation, emotional disturbance, or environmental, cultural or economic disadvantages (U.S Department of Education, 1992).

Furthermore, the two definitions present areas of differences which rest basically in terms of orientation as to the possible causes of learning disabilities. It is important to know that learning disability refers to conditions in which the learner is disabled in the areas of writing, spelling, speaking, reading, reasoning or arithmetical/

mathematical abilities. Abang (1981) also shows that learning disabilities are not due to mental retardation, deafness, motor-impairment, blindness, poor teaching. It is pertinent to know that children with learning disabilities manifest an educational discrepancy between their actual and expected levels of performance. For example, a child might reverse \supset for C; 'b for d,' 'p for g' mixing up 59 and 95. The case of a three year old language delayed child who says "He is go there" instead of "He is going up the ladder" (Menyuk, 1969).

While the definition by the U.S Department of Education is older and reflects a medical orientation, the second definition reflects the earliest work done in the field by doctors helping individuals who suffered injuries to the brain (Smith, 1988). Similarly, while the terms brain injury and dyslexia, are all included in the U.S Department of Education.

Learning disability is a disability in which the learning individual possesses average intelligence but is substantially delayed in academic achievement. These individuals are normal physically, have normal intelligence but they have problem learning in the same rate and in the same style as their non disabled classmates.

Learning disability is the largest special education category with heterogeneous group all identified as having specific primary disability conditions. All share several defining characteristics such as:

1. Unexpected under achievement in mastering academic subjects.
2. Unable to understand reading material, organize thoughts
3. Uncomfortable when relating with other people (emotionally disturbed)
4. They are unable to exhibit learning mathematics, reading and writing.

5. Sometimes they are to display characteristics associated with Attention Deficit Hyperactivity Disorder (ADHD).

Attention Deficit Hyperactivity Disorder (ADHD) is a condition which describes student who display hyperactive behaviours, have difficulty attending to task at hand, and tend to be impulsive. However, this condition can be confusing to parents, caregivers, professionals and people as well as community and society because not all children diagnosed as having ADHD quality. For special education services, disabilities cannot be traced only to mental retardation, auditory or visual impairment, emotional disturbance, or lack of opportunity to learn, but when a child is unable to learn and is expose to instruction method and material appropriate and effective with majority of children in the same age learning disability may be due to difficulty in attending, perceiving, information, processing and visual coordination that is others may manifest in difficulty in learning specific school subjects.

Types of Learning Disabilities

According to Smith (1998) there is no uniform classification system for students with learning disabilities. This is explained by the fact that learning disabilities are manifested in different ways with different individuals, such that, while some individuals academic problems occur in only one area, others are more pervasive. Although classification of learning disabilities, there is equally the problem of accurate and reliable methodologies for identifying them. However, discrepancy formula/scores have been widely used. Experts have criticized the methodology for being too complicated to calculate and for concentrating more on academic achievement and less on other cognitive and social skills. Discrepancy formulas/scores measure the difference between a child's potential as measured by a standardized

intelligence test, and the child's actual ability in academic achievement as determined by a standardized achievement test (Smith, 1998).

In order to make easier and accurate identifications of children with the handicapping condition – some methodologies have been put in place. They are:

1. Classroom observation
2. Input from parents and teachers
3. Evaluation of children's academic performance on their daily school work.

From the works of Kosci, (1974); Abang, (1981); Cruickshank, (1981). The following learning disabilities have been identified.

Motor Activity Disorders

The following are the various disorders of motor activity.

- a) **In-ordination:** This condition is characterized by poor motor integration and general clumsiness. This handicapping condition makes the child to perform poorly at handwriting, running, throwing, skipping and other milestones or task.
- b) **Perseverance:** This child is rigid and inflexible and cannot easily go from one activity to another. This child has difficulty in judging appropriate time to spend on an activity or thoughts.
- c) **Hyperactivity:** This child has short attention span, also known as Attention Deficit Disorder (ADD) or Attention Deficit Hyperactive Disorder (ADHD) and shows an impaired ability to make decisions, especially from many choices. According to Keogh (1973) the importance of attention has not waned over the years, as teachers, professionals concerned with the learning disabled frequently indicate that attention problems are among the

prevalent disabilities faced by learning disabled children. Children who suffer from this condition are as aptly put “at the mercy of the environmental stimuli” (Abang, 1981).

d) **Impulsivity:** This child has poor impulse control and poor emotional control. He is reckless, uninhabited and does not weigh the consequences of his actions.

Mathematics Developmental Disorder (Discaculia)

Severely impaired, lacks ability to perform mathematical functions, presumed to be caused by central nervous system dysfunction. The problem may be lack of understanding of concepts, inability to read mathematical symbols or poor skill in handling or copying numbers. It may also be in form of difficulty in simple calculation by way of multiplying, adding, subtracting or dividing.

Perhaps, the most neglected area in learning disabilities, research has been mathematics or arithmetic. A lot of individuals have difficulties in learning arithmetic not to mention complex, mathematical problems. However, in extreme cases of arithmetical disabilities such children may be considered to be suffering from dyscalculia (Bryan and Bryan, 1986). Dyscalculia is the function in the reception, comprehension or production of quantitative and special information (Sharma, 2008).

Kose (1974) refers to the condition in which a child may add rather than subtract or divide rather than multiply as operational dyscalculia. Dyscalculia normally show inability in telling time, calculating prices and handling change, and measuring and estimating things such as temperature and speed, among others (Sharma, 2008).

Reading Development Disorder (Dyslexia)

These are children with severe reading problems, severely impaired, ability to read, presumed to be caused by a central nervous system dysfunction associated with neurological damage that impedes individual motor and learning abilities. Dyslexia is said to have derived its origin from two Greek words: ‘dys’ meaning difficult and ‘lexas’ meaning language. In defining it, therefore, dyslexia, as a condition can be defined as an impaired ability to read and write particularly in learning to spell correctly and to express thoughts on paper despite adequate intellect and teaching (Smith, 1998). Wikipedia (2009) states that a dyslexic child, could manifest symptoms of the disorder, e.g. by saying ‘wed and gween’ instead of ‘read and green’. Wikipedia (2009) identifies difficulty in learning the alphabet and sounds of letters, poor reading comprehension, lateness in left/right hand dominance among other symptoms.

Perceptual Disorder

Perception is the ability to receive information through the senses as well as the capacity to integrate and synthesize such information (Abang, 1981).

Eye-Hand Co-ordination: This disabling condition manifests itself in form of difficulties in skills like pasting, drawing, among others as well as performing poorly at games and sports.

Language Disorder (Dysgraphia)

Writing expression disorder is technically called dysgraphia. This disorder involves the ability to write adequately. Children with this disorder make many mistakes in the spelling of words, commit grammatical blunders, and cannot organize a readable script, usually have much distress due to their proclivity to examination failure. There is considerable evidence that learning-disabled

children suffer from language disorders. According to Lee (1994) normal speaking children learn to use complicated linguistic structure by age four, language - delayed children have great difficulty in the acquisition of a variety of such structures. The study further showed that children learn, for example to use pronouns very early, but, language delayed children have difficulties using them. On the basis of clinical observations, children have been described as having different types of aphasia (loss of impairment of language ability due to brain injury) expressive and retentive. A child who has disability in understanding what is said has a receptive language problem, expressive problem relates to a child's inability to produce spoken language (Bryan and Bryan, 1986).

Etiological Basis of Learning Disorders

Etiological basis of learning disorders includes genetic factors, neurological and environmental factors (Balow and Durand, 2002). Research has shown that if a child is diagnosed with learning disorders, his parent and sibling will also have the disorder. It is observed that neurological deficiency also accounts for learning problems in some children. According to them, when the component of the brain responsible for a given task becomes faulty, performance of that task is hampered. They also observed that the intensity or otherwise of a learning disorder can be influenced by the psychological and socio-economic spectrum of the suffering child. For instance, lack of environmental stimulation, inadequate maternal nutrition and poor infantile nutrition could adversely affect normal growth and development of a child especially brain development.

Some Consequences of Learning Disorders in Early Childhood Education

In society today, learning disorder remains a serious problem to educational system. It poses a serious threat to the overall

development of the entire society. Majority of the children would be left stranded because they would be unable to learn due to these disorders and their future would be left unfulfilled. Some major outcomes of learning disorders are: failure to attain career goals, poor mental health, low prospects employment for the affected persons, increase in dropping out of school.

Causes of Learning Disabilities

Many physicians, teachers, doctors, clinicians and educators have over the years attempted to identify the factors that give rise to this worrisome condition. As with other aspects, experts have remained divided on the causes, based on these, a number of factors have been identified. They are:

Central Nervous System Dysfunction

The focus is on biological explanation in the model the practical searching for the source of a difficulty focuses upon the person and his or her problem rather than upon the social milieu or environment, such as the brain damage or chemical imbalance, and the biological processes deemed important are those intrinsic to the individual (Bryan and Bryan, 1986). Experts who adopt this model have cited central nervous dysfunction as the factor that inhibits learning. Explaining further, Smith (1998) cited that proven brain damage by accidents, lack of oxygen before, during or after birth as factors capable of resulting in neurological difficulties which in turn, substantially inhibit learning.

Heredity

Quite closely related to the central nervous system dysfunction is the heredity factor. The New Mexico Learning Association (1994) reiterates that some children may have inherited their disabilities.

Environmental Factors

Engleman (1977) maintains that some of these children who have serious difficulties learning academic materials have at an early age been taught basic academic skills poorly. Diet, health, and a host of other environmental factors have been suggested as causes of learning disabilities.

Therapeutic Solution in Learning Disabilities

A] The techniques that can be used to teach the identified disabilities like Dyslexia, Disgraphic, Dyscalculia and Attention Deficit Hyperactivity Disorder (ADHD) should be geared towards offering remedial instruction in specific school subjects such as reading, language skills, spellings, writings and mathematics and to improve general activities such as attending, perceiving and co-ordinating, through appropriate instruction.

Some techniques for teaching learning disabilities stressed the use of the five senses. This is referred to as kinesthetic method and this will emphasize the physical movement and tactile sensation to supplement visual perception. This technique proceeds into four stages.

1. The child traces the form of a familiar word while saying it and then writes it from memory comparing each trial to the printed word.
2. The child looks at the word while saying it and then writes and then writes from memory.
3. The child is asked to read new words by generalizing from previously learned words (using principles of operant conditioning) programmed learning – divide learning task into series of steps and learners are reinforced for correct response as they move through the programme e.g. daily record card program procedure for helping children to concentrate using daily record card, 3 – 5 inches with space for name, date and series of grids.

B] Procedure to Help a Child Complete a Specific Learning Task

- Identify the precise behavior to be taught to be able to recognize group of letters as words.
- Establish an appropriate level of performance (be able to recognize 15 words out of a list of 20).
- Gather baseline data (determine how many out of 20 he could name)
- Determine tentative hypothesis of the children's level of performance e.g. strength and weakness.

C] For an emotionally disturbed child, the following techniques should be followed: For the fact that extreme reaction cause difficulties with parent teachers, caregivers and professionals. Negative reactions from others tend to perpetuate the problem of the disturbed child. Since the child concludes that he may be risking the unknown to change from behavior that has been adopted. Since the teacher understands the secular nature and behavior of environment perpetuates the problems he feels less helpless and guilty as well as more comfortable and confident in dealing with destructive behaviour. So the use of self control is very important. An appropriate curriculum is important, so it is intended to help a disturbed child substitute effectively and socially acceptable form of behavior for less destructive reaction.

The self control stresses eight skills summarized as follows:

1. **Selection:** Ability to perceive incoming information accurately.
2. **Storage:** Ability to retain the information received.
3. **Sequencing and Ordering:** Ability to organize actions on the basis of a planned order.
4. **Anticipated Consequences:** Ability to relate actions to expected outcomes.

5. **Appreciating Feeling:** Ability to identify and use affective experiences constructively.
6. **Managing Frustration:** Ability to cope with external obstacles that produce stress.
7. **Inhibition and Delay:** Ability to postpone or restrain action tendencies.
8. **Relaxation:** Ability to reduce internal tension (Allyn and Bacon, 1974:192-193).

Principles of Psychotherapeutic Teaching

According to Roswell and G. Natchez (1971) help in teaching children with emotional disturbance serve enough to interfere with school works.

1. **Rapport:** Try to establish a sympathetic accepting understanding relationship with the pupils.
2. **Collaboration:** Invite and encourage the pupils to work with the caregiver.
3. **Structure:** Establish clear-cut objectives and limits using instructional objectives at the beginning of teaching.
4. **Sincerely:** Give honest appraisal of achievement and help the pupils overcome them.
5. **Success:** Use programmed approaches stress objectives follow the procedures of mastery learning.
6. **Interest:** With the pupils co-operation, look for instructional material that are related to personal interest e.g. If the child is interested in car, look for books with car appropriate to the learner or the child as the subject.

These principles of psychotherapeutic teaching may be valuable if applied to the children described as having learning disabilities and unmotivated normal children.

Using Developmental Appropriate Practices to Eliminate Learners Disability for Educational Sustainability

Appropriate developmental educational practices are catalysts in the improvement of young children development because the focus is to promote: less stress, motivation, more skill development better habit, better language skills better mathematics skills.

Children exposed to appropriate developmentally educational practices are less likely to drop out of school (Lazar, 1982; Schweinhart, 1999). Developmental appropriate educational practices if utilized in the early childhood level will eliminate learner disability which many impede retention in the educational system for sustainability. It requires a lot of information on the child using learning disability battery.

Conclusion

There are certain ailment that can rock the foundation stage of life, especially the early childhood stage which requires very close monitoring by the older people such as parents, teachers, caregivers and society. Early interventions would help to ameliorate the condition of the sufferers.

Recommendations

The graphic image of learning disability presented in the discourse appears scary. There is hope because a lot of children have been helped and have become high achievers in various academic and non-academic endeavours. To achieve this, there must be concerted efforts both at personal and institutional levels. Consequently, the following recommendations are proposed:

1. Learning disorders can be resolved through deliberate educational processes. Some workable intervention strategies include grooming affected children in visual and listening skills as well as improvement of

cognitive and behavioural skills. Teachers could help by adopting some proactive instructional strategies like repetition, questioning, illustration, reinforcement and empathetic understanding. Sprintal (1994) recommend the use of older children and adults who themselves, have struggled with the problem to teach affected children. There is a need for moral support, encouragement and a multisensory approach to help dyslexic children overcome their challenge.

2. There is need for early diagnosis, in order for the problem to be given quick intervention. Delayed intervention could widen the gap between sufferers and their classmates. When the problem become too much, it diminishes the child's self-esteem and self-concept.

3. There is a need to redesign the curriculum content of teacher education by way of incorporating special education into the curriculum and place it at par with core education courses such as psychology of education, guidance and counseling, among others.

4. Government should make appropriate legislations that would protect the rights of children with learning disabilities as well as safeguard their dignity from labeling use of sarcasm and so forth by parents, teachers and other caregivers.

5. Government and non-government organizations should sensitize teachers counselors, parents and other caregivers to the reality of learning disabilities.

6. Due to the possible impact of learning disorder on the life of a victim, it is imperative for caregiver, parents and teachers to engage the child in high capacity social interactions with high level of social skill, the child would gradually overcome the impact of his disability.

7. Teachers, parents and caregivers should avoid labeling of children with learning disabilities which normally leads to stigma, rather they should strive to build self-confidence in children with the handicapping condition.

8. Teachers and parents should set only realistic and attainable goals for children.

9. Give the spectrum based nature of learning disabilities, teachers and counselors should be adequately trained to use remediation techniques suitable to unique disabilities.

10. Teachers should endeavour to use adequate and relevant instructional materials in their teaching.

Sufferers of a specific type of learning disorder can be found to be very proficient in other learning skills. For instance, while a child may be very adequate in reading and writing skills, the problem of mathematics may hold him bound. Teachers should be mindful of this fact, so as not to generalize the presence of a particular disorder for other learning disabilities.

References

- Akindayomi, Y. (2005). *Learning Disability: Disability and You*. Children's Developmental Centre. The Centre for all Disabilities. Artfield Ltd.
- American Psychiatric Association (2000). *Diagnostic and Statistical Manual of Mental Disorder* (4th Ed.) Washington D.C.
- Balow, H.D. and Durand, V.M. (2002). *Abnormal Psychology*. Australia Wadsworth.
- BBC (2008). Dyslexia, Retrieved from, <http://www.BBC-h2g2.dyslexia.mht>.
- Bryan, T.H. (1986). *Understanding Learning Disabilities* (3rd Ed.) California: Mayfield Publishing Company.
- Cruickshank, M.M. (1981). *Concepts in Special Education Syracuse*. N.Y Syracuse University Press.
- Deji-Folutile (2004). December 10. What every parent should know about learning disabilities. *The Vanguard*, p.58.
- Engleman, P. (1977). *Basic Academic Skills for the Disabled*. New York, Syracuse University Press.
- Halgin, R.P. and Whitebourne, S.K. (2000). *Abnormal Psychology: Clinical Perspective on Psychological Disorders*. Boston: McGraw-Hill.
- Harry, C.I. and Alawa, P. (2014). Historical Antecedents: Prospects and Challenges of Childhood Education (Nursery) in Nigeria. *The Educator Journal of Childhood Education* (Unpublished Work).
- Harry, C.I. and Eluke, P. (2015). *Teaching Strategies and the Challenges of the Pre-school Teacher in the 21st Century*. Education in Nigeria for Peace and Sustainable Development, Strategies and Procedures. Federal Polytechnic Oko Anambra State.
- Harry, C.I. and Mumuni, A.O. (1992). *Learning Disabilities in Early Childhood Challenges and Therapeutic Solutions*. Unpublished work presented at the workshop for children with developmental and communication disorders.
- Harry, C.I. and Osaat, D.S. (2012). Early Childhood Education: An Instrument for Enhancing Academic Performance of Primary School Pupils in Rivers State.
- Harry, C.I. and Osaat, D.S. (2012). Early Childhood in Nigeria: Challenges and Prospects. *Journal of the Association of Child Development and Communication Disorders, Nigeria*, No. 4.
- Keogh, B.K. (1974). Perceptual and Cognitive Styles: Implications for Special Education. *Review of Special Education*, Vol. 1, Philadelphia JSE.
- Kosc, L. (1994). Developmental Dyslexia. *Journal of Learning Disabilities*, (8)630-637.
- McNamara, B.E. (2007). *Learning Disabilities Bridging the Gap Between and Classroom Practice*. Upper Saddle River: Pearson.

Menyuk, P. (1969). *Sentences Children Use Research Monograph*, No. 52 Cambridge, Mass MIT Press.

National Joint Committee on Learning Disability (1988). Letter to NJCLD Member Organisation.

New Mexico Learning Association [NMLA] (1994).

Obida, J.A. (2010). Learning Disability: An Overview of the Invisible Developmental Challenge, No. 2.

Okoh, J.D. (2012). Learning Disorders in Early Childhood: Bane to Career Development of a Child. *Journal of Child Development and Communication Disorders (JCDCD)*, No. 4.

Sharma, M. (2003). Dyscalculia, Retrieved from <http://www.bbc.co.uk/skillswisetutors/expertcolumn/index.shtml>.

Smith, S.U. (1998). Learning Disabilities and Standardized Achievement Test. Upper Saddle River: Pearson.

Sprinthal, N.A. (1994). *Educational Psychology: A Developmental Approach*. New York: McGraw-Hill.

U.S Department of Education (1992). Specific

Wikipedia (2009). Characteristics of Dyslexia. Retrieved from <http://en.wikipedia.org/wiki/characteristicsofdyslexia>.

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