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The need for assessing artistic development- A case for children with specific learning disabilities

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This paper discusses the need for assessment of the creative development in children, to ascertain developmental delay for Specific Learning Disabilities (SLD). Agreeing with both, Piaget, and Howard Gardner, to talk about the necessity of looking at the development of creativity in children, Gardner (1994) opens the door to this discussion in his book, 'The arts and Human development'. Gardner (1994), attempts to describe creative development in children in a manner that closely follows the psychology of child development. In doing so, however, he almost rewrites the various stages of child development as we know it. To quote Freud '**The direct observations of children have the disadvantage of working upon data which are easily misunderstand able; psychoanalysis is made difficult by the fact that it can only reach its data, as well as its conclusions, after long detours. But by cooperation, the two methods can attain a satisfactory degree of certainty in their findings**.' This simple observation stands true even today. As a student trainee, completing my diploma course for Specific Learning Disabilities (SLD), I was told to take the assessment of ten students. The method of assessment was through academic exercise. It was a questionnaire with lexical analysis as its basis for judging discrepancies in the child's performance. This tool is widely used and is a well researched standardized tool. While the use of this tool, helped me greatly in understanding the child's problem, one has to acknowledge the niggling doubts which assailed my mind, once it was coupled with observation. Assessment, which is an extremely important part of helping an individual with SLD, seems incomplete if done simply and simplistically with tools which are a little more than standardized tests. Since the handling of Specific Learning Disabilities demands a completely individual approach, I feel that, the assessment of creative development should be a part of the process. Taking a leaf from Piaget, we know that he had been able to demonstrate that children conceptualize differently from adults. This conceptualization is certainly 'Qualitatively' different from grown-ups. However specifiable and scientific Piaget's theory may have been, he still admitted '**the creative imagination is a magnificent subject which remains to be investigated**'. This lacunae in investigation still exists and surprisingly we do not feel the need to assess the child's creative expression while dealing with developmental delays. The ten children who were assessed by me as a student trainee, fell into the age group of 7 years to 12 years. Admittedly, I am always rather disturbed at the lack of creative or artistic expression rather than the absence of lexical or grammatical expression. It seems to me to be more disturbing if a child shows a hesitance in drawing, or singing a song rather than his spellings. Following assessment, in the course of clinical teaching, I created an IEP, or Individualized Education Plan for each child. As said earlier, as I tried to handle their difficulties I was certain that more needed to be done. In this paper, I would like to highlight the need for the assessment of creativity in children with SLD as is done in the identification of gifted children.

We can define SLD according to the policy framed by the IDEA which is an acronym for 'Individuals with Disabilities Education Act'. It was brought into effect on the 1st of July, 2005. This document gives a universally acknowledged definition of Learning Disorders. Also called the Federal definition, it states '**the term Specific Learning Disabilities, means those children who have a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations**'. The term includes conditions such as

1. Perceptual handicaps.
2. Brain injury
3. Minimal brain dysfunction
4. Dyslexia
5. Developmental aphasia

The IDEA definition rules out learning problems which are primarily the result of:

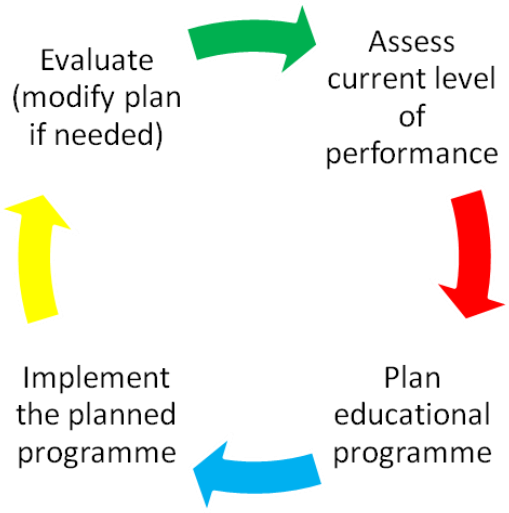
1. Visual
2. Hearing or motor handicaps
3. Mental retardation
4. Emotional disturbance

The term also does not include learning problems due to environmental, cultural or economic disadvantage. Anderson (1970), interestingly termed learning disorders as '**Hidden Handicaps**'. Thus, our work seems to explore learning disabilities which hamper the child's academic progress. However, when we see that the term also includes perceptual disorders, and is termed a breakdown of certain psychological processes due to neuro-biological problems.

Identification precedes assessment, for we must ascertain that there is a discrepancy between expected performance and real performance in school. The next stage is assessment. This helps us to pinpoint the Specific Learning Disability (SLD). Since the whole purpose of the exercise is to provide Individualized Clinical Teaching, each child has to be looked at in an unique way. If this were to happen then, a tool which is purely based on standardized tests. There is also a scoring which is a percentile based on the errors. The error analysis as popularly used in assessment prior to clinical teaching, is

based on these scores, i.e- the child may be diagnosed with mild to severe LD according to the errors.

Thus the assessment follows a purely quantitative path. Instead of reaching a conclusion based on individual differences and the unique responses of the child, it seems to veer into the wilderness of data analysis and statistics. The next step is to formulate an IEP or Individualized Education Plan to address the specific disability of the child. We must now launch into the clinical teaching which is a cyclical process.



Journal, NIMHANS

The above chart clearly shows the cyclical nature of clinical teaching. Assessment is an integral part of this cycle. For, only on the basis of the assessment should we begin the process of formulating an IEP. Here, I would like to reassert my point of view that the method of assessment based on mere data derived from standardised tests fails to address the concerns propagated by the approach, which is, an individual plan. We will be failing in our attempts of remediation if such an approach is not individualized and does not take into consideration something more than mere grammatical ability, hand-writing and numerical skills. This is certainly important but is not enough. Some popularly used diagnostic tools used in India:

1. Diagnostic test of Learning Disabilities. (S. Swarup and D.Mehta).
2. Behavioural checklist for screening the learning disabled (Swarup and Mehta).
3. Grade Level Assessment Device for children with Learning problems in primary schools. (J. Narayan).
4. Arithmetic and Diagnostic test for primary school children (Ramaa, S)

(Journal, NIMHANS)

Two major types of testing are undertaken:

1. Norm referenced testing(NRT)
2. Criterion reference Testing (CRT)

Criterion referenced testing is the norm for the assessment of the current level of functioning. They are generally informal and administered by the teacher. A criteria is set for the child and the assessment is done to see whether it is achieved. For example, the ability to do two digit, three line addition with carry over can be a criterion. The teacher can set a number of sums involving this operation and assess the ability level, error pattern. Remediation will depend on the diagnosis achieved based on these tests.

To understand the importance of assessment in the life of a child with LD, I would like to give a quotation from one such child:

"**I was placed in classes with people who were very disabled, even mentally retarded yet I associated with students who were the brightest and most academically successful…..**

Finally, I had a document to confirm all my suspicions that the grades I was receiving in high school were not a reflection of my ability. (Handbook for faculty on learning disability issues, University of Guelph, 2014)

This quotation points out with poignancy the incredible trust which a child has on adults. This trust should not be broken, especially if it is the trust between the teacher and the child. It also points out to self esteem issues. Children with LD have complex issues to deal with. Apart from self-esteem, language learning and other academic goals, mostly remain unrealized.

Remediation usually follows assessment. So, if one is not confident about assessment, it becomes very difficult to put in a viable programme of remediation. This is of course, true for any classroom where individual differences are recognized. The fact is, there is another group similar to the children with SLD. This group comprise gifted children, or, the able and talented children. Some of them are not academically gifted. Their giftedness maybe in another area, such as sports or music and there may be a possibility that their below-average academic performance may be due to Learning Disability.

The good news is that "**creativity, as a factor in the identification of gifted children**" is accepted in recent research. Heller (2000) et al proposes to define children with high performance. The new ideas are a little different from conventional notions of standardized tests for giftedness. The definition goes beyond intelligence to other areas of higher ability. Heller(2000) et al also argue that the Terman study has influenced latter research and the insistence on innate abilities has diverted the research towards Genetic influences. This Genetic –oriented research is responsible for putting forward the ideas of intelligence testing and other psychometric approaches to the identification process, thus making intelligence a general static trait that determined gifted capacity. In support of this argument, Heller (2000) et al cite the research by Macmann, Plasket, Barnet and Siler(1991).However, as Heller(2000)et al concedes, other analyses have challenged the assumption that high IQ scores and general intelligence are : a. Genetically determined and b. a necessity for gifted performance. Heller (2000) et al cites O'connor and Hermelin (1988) Silver and Clampit,(1990).However, the genetic oriented view prevails in research and Heller (2000) et al cites a few studies which have investigated a wide range of traits in gifted populations in addition to performance and achievement. To cite examples pointed out by Heller et al (2000) , the Shigaki and Wolf (1980) investigations of children's syllogistic reasoning, Carters (1985) and Piagetian studies of task performance. Research by Derevensky and Coleman (1989) and Henderson, Gold and Clark(1984) whose studies were on fears and daydreaming , and various studies of personality and socialisation. Examples of these as cited by Heller et al

(2000) Altman(1983); Olszewsky , Kulicke and Krasney(1988), Luftig and Nichols(1991), Keller(1992).But in recent years the validity of using IQ test scores for identification is being questioned. Interest in groups such as the ethnic minority, underprivileged and other disadvantaged groups has been increasing. This will naturally lead to broadening of areas concerning identification.

As Run co(1993) points out " creativity is an important facet of giftedness." It is, however, difficult to measure creativity. Defining creativity is also a difficult task. Reviewing recent research on divergent thinking, Run co (1993), Sternberg and Lubart (1991) found that there is value in conducting research on divergent thinking. Creativity is an important part of giftedness.(Albert and Runco, 1986, 1989, Feldhusen and Treffinger ,1990; Renzulli , 1978 ; Runco and Okuda ,in press).The strands of this research throw light on creative potential which is multidimensional. The field is not stagnant and new ideas emerge as more research is conducted. Another significant observation is that comparative study between the gifted and the non gifted are beneficial. These studies help us to understand giftedness and creativity far better.

The connection between creativity and giftedness is a strong one and this idea has been well researched. As Runco (1986) Points out creativity is an important "Facet" in giftedness. Many have found creativity difficult to measure or, even to define .Runco (1986) argues that evaluative and valuative skills are both involved in divergent and creative thinking. He cites Albert and Runco (1986) , Feldhusen and Treffinger(1990) ,Milgram (1990) and Renzulli (1978). Some ideas are especially isolated by Runco. He feels that educators should consider the following:

a. The qualitative aspect of ideation, including the affective contexts'. b. children's capabilities for finding and defining problems and their valuative and evaluative skills.

In another essay, Robert Sternberg (2000) writes about wisdom as a form of giftedness. The idea is really exciting but since this involves mostly adult thinking it does not fall within the scope of our study. Francoys Gagne (1985) writes about the relationship of giftedness and talent. He agrees that there is ambiguity in the distinctions between talent and the concept of giftedness. Four major trends of opinion are presented in the literature. These opinions are worth investigating. These are the following:

1. There is no distinction between giftedness and talent 2. There can be a conceptual separation between intelligence and other abilities .3.However, if there are distinctions between giftedness and talent, and then the distinctions are marginal.

Gagne (1985) discusses the distinctions that we can make between giftedness and talent. He says that in colloquial terms there is no clear distinction between the two. For example, the two terms are confused even in dictionary usage. Gagne (1985) points out to the Webster's dictionary which defines the term "gifted" as "possessing natural talent". Even the scientific literature on this, Gagne argues, supports this ambiguity. This ambiguity in terminology reflects the conceptual ambiguity of giftedness and talent. These concepts are not synonymous but encompass separate ideas. Gagne (1985) cites Gallagher (1979) who takes cognizance of several pressing issues the most important being a lack of definition of this concept. E.Paul Torrance takes the idea a little further when he observes that creative teaching is the most important part of encouraging creativity in gifted children. He says in this regard,

"Being a truly good teacher is indeed the most creative occupation in the world." Taylor and Sacks (1981) argue that "self discovery" of one's own inner world and "self knowledge" is essential to the educative process. Indeed, it is essential in fostering the creative process as well. Toynbee (1964, 1968, 1974) says that "**To give a fair chance to potential creativity is a matter of life and Death**." This brings us to the discussion of conventional excellence versus creative excellence and encouraging both simultaneously, as discussed by Taylor (1984).

Torrance (1984) while discussing the problem of identification says that creativity should always be one of the criteria, though not the sole criteria.

We cannot close our discussion without talking about Treffinger's (1986) review of various literatures which shows us the relationship of creativity to gifted behavior. He begins by mentioning Guildford's study (1950, 1959, 1977) on the structure of intellect. Treffinger (1986) agrees that there is no single unifying theory of creativity. There is very little chance of there being one. However, there is scope for research to provide a synthesis of many practical and technical issues, including test administration and test scoring. There have also been studies of creative development across the lifespan. In this regard, Sternberg and Lumbart (1993) point out to the idea of the path less trodden and puts forward a theory that in order to navigate the creative path ,one needs a combination of six resources. These are: a. Intelligence b. knowledge c. styles of thinking d. personality e. motivation and the environment. There should be interplay of the six factors for creativity to be fostered. To sum up one agrees with Treffinger (1980) who says that creativity can be integrated with giftedness in at least two ways. It can be viewed as a dimension of IQ for the identification and education of giftedness. As according to Renzulli 1986, Siegler and kotensky, 1986 creative giftedness always contrasts, for example, with academic giftedness. Renzulli lends himself to criticism here for creativity is an important part of the model of giftedness which he devised. Creativity is an important part of that model. This point is also made by Jarell and Borland(1990). They criticized the research base of the three ringed model. Their argument was that their research did not support the three-ringed model.

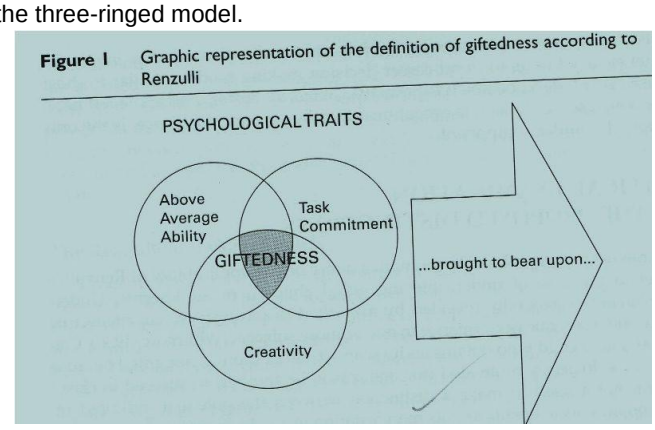


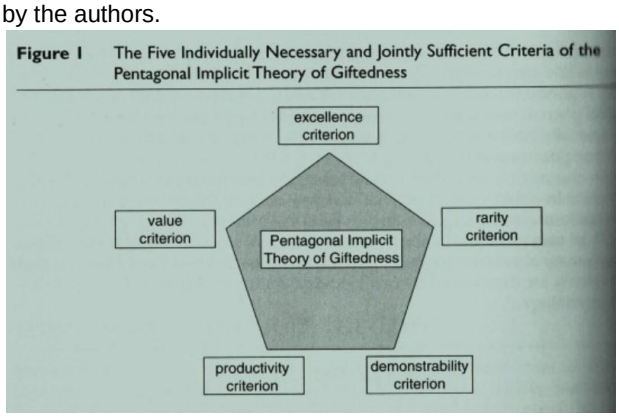
Figure 1 Graphic representation of the definition of giftedness according to Renzulli

Their contention is that the research behind this conception is superfluous and contradictory to the triad. One can agree to the charge of the model being contradictory, as

Renzulli fails to define what he means by creativity contrasting with academic giftedness. However, Heller et al(2000), defend Renzulli and assert that Jarell and Borland(1990) had ignored the latest research on the three ring theory. Some of the highlights are:

A. To highlight the interplay of behavior that encourages giftedness to manifest itself.
B. To provide flexibility in selection procedures.
C. To call attention to creativity and task commitment.(Renzulli,1990,p325)

So, we are to take creativity as very important for Renzulli's model, for it can be defended on the grounds of inclusion of creativity. Then, our doubts as to why there is a differentiation drawn between creativity and academic giftedness can only be answered by looking closely at the recent literature on creativity which defines it in a different way than the traditional idea of it. Only then will be Renzulli's idea be made clear. It is more accurate to move on to Monk's model which Heller et al(2000) points out as closer to one that is developmental as well as solves the issue of creativity. This is the Triadic Interdependence model of giftedness (Monks 1992,pg 191).This model consists of personality as well as environmental aspects. Task commitment was replaced by the idea of motivation which includes various factors. As pointed out by Goldman (1995), some of these are task commitment, risk taking, future time perspective, anticipation, planning and emotional factors and aspects of ability. Thus, as pointed out by Heller et al (2000) Monks' model seems to be taking a broader point of view. However, the premise is the same, only an attempt has been made to broaden the concepts and it is a purposeful task and helps to clear the issues effectively. A seminal essay on the meaning of giftedness by Sternberg and Li-fang zhang (1995) ,who put forward the pentagonal implicit theory of giftedness will come in useful. The pentagonal implicit theory suggests five values which may constitute giftedness. The authors' term this as "criterion ". The criterions suggested here are defined in detail by the authors.



This makes a very interesting theory which can help define and also clarify our own doubts about giftedness. The criterions are: Excellence criterion, Rarity criterion, Productivity criterion, Demonstrability criterion, Value criterion.

This discussion is to throw light on our problem, the problem of assessment for SLD. To take my argument about superior assessment methods, I too suggest bringing in the criteria of creativity or, artistic development. The need for this arises, as I have mentioned before, due to the doubts I faced as a student trainee. Some case studies in brief:

Introduction

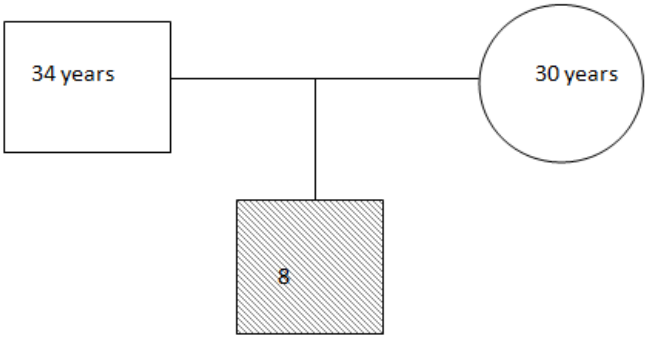
Master I.D is an eight-year-old, right handed boy studying in class 4.He was referred to the student trainee for specific problems in mathematics and English.

Developmental History

The marriage of his parents was non-consanguineous. The child's conception was normal. The mother had no problems during child birth. She had o complications during pregnancy. He was delivered C-section, and his birth cry was immediate. He reached all of his milestones on time, and was not hospitalized for any reason. He has no history of any sicknesses.

Family History

The child's parents are doctors. They do not report any difficulties in academics. Master I.D is the only child of his parents.

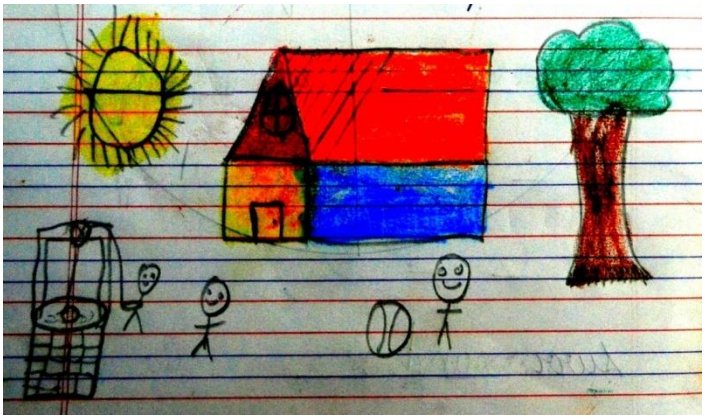


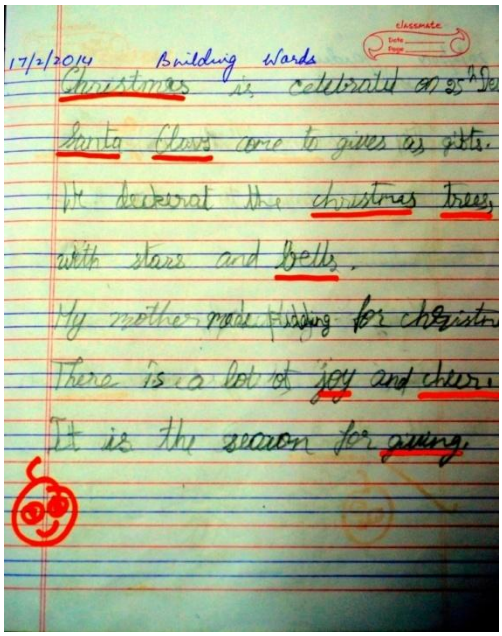
Summary

The child has moderate LD in English, and mild LD in mathematics. There are many errors in Language, especially in spellings, and this is probably caused due to a lack of concentration. In mathematics, he made very few errors, and these were mostly in basic operational skills.

Comments

While the assessment **moderate** problems in English, in both pronunciations, and spellings. In mathematics, his problems were **mild**, yet, evidence and interactions suggested that this may not be a very accurate diagnosis. The child seemed to be deficient in basic operational skills and the level of achievement in English was poor. In fact, his teachers agreed that he would need a programme far more enriched than those suggested for children with **Mild** LD.





Introduction

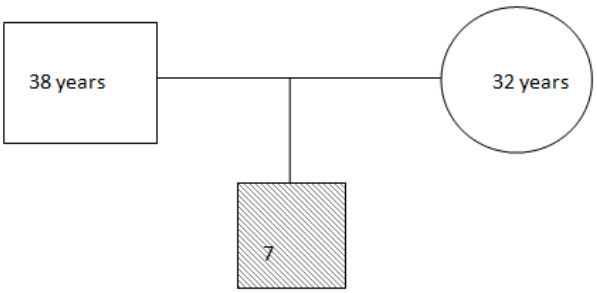
Master K.T.H is a seven-year-old, right handed boy studying in class 3. He was referred to the student trainee for attention deficiency, hyperactivity in class and academic difficulty.

Developmental History

The marriage of his parents was non-consanguineous. The child's conception was normal. The mother had no problems during child birth. She suffered from hypertension during pregnancy. He was delivered C-section, and his birth cry was immediate. He most of his milestones on time, and was not hospitalized for any reason. He has no history of any sicknesses.

Family History

The child's father is a General Manager with an M.B.A degree. His mother is a Chartered Accountant. They do not report any difficulties in academics. Master K.T.H is the only child of his parents.

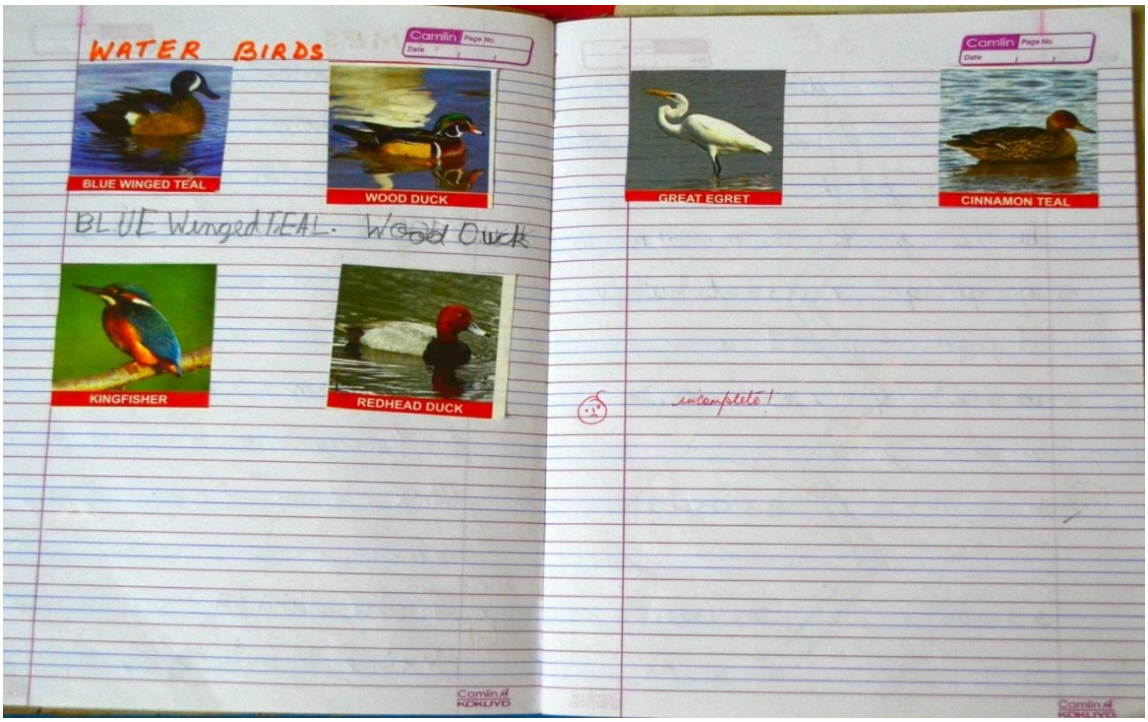


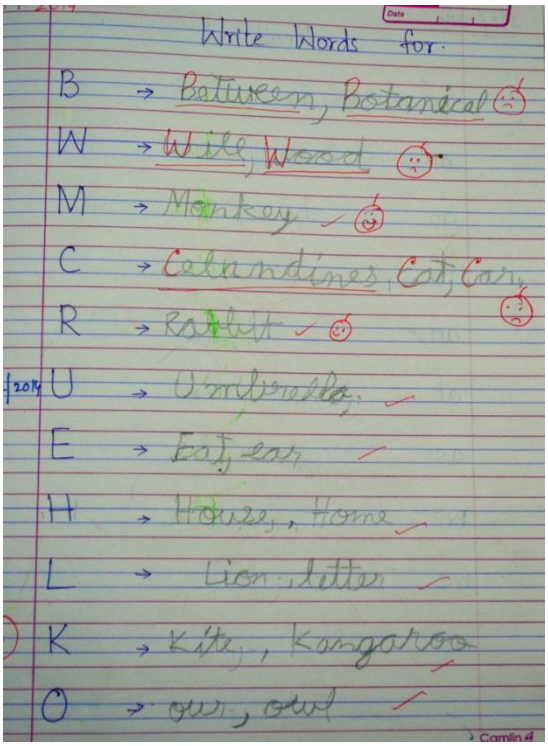
Summary

The child has moderate LD in English, and mild LD in mathematics. There are many errors in Language, especially in spellings, and this is probably caused due to a lack of concentration. In mathematics, he made very few errors, and these were mostly in basic operational skills.

Comments

This seven-year-old had a bright, sunny personality. He had a genuine interest in everything around him. His assessment score shows a **moderate** level of difficulty in English. However, taking a look at his written work, one would be surprised to see the lack of written skills. He was also never enthusiastic about writing. His assessment sheet may not be revealing, but his work reveals more. He was also not very enthusiastic about drawing, a fact I did not find encouraging in a seven-year-old.





Introduction

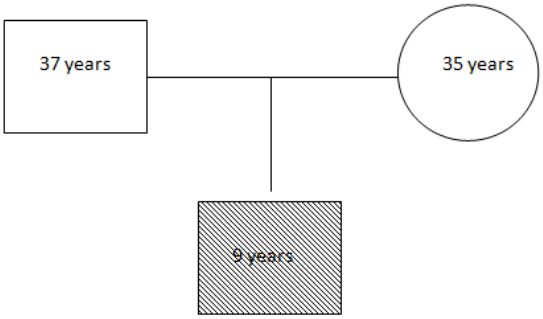
Master M.V.H is a, nine-year-old, right handed boy, studying in class 3. He was referred to the student trainee for attention deficit and maladaptive behaviour. He is exceptionally quiet and exhibits passive aggressive behaviour. He is known for using abusive language in class, and also suffers from severe bouts of coughing, and sneezing, indicative of learning difficulty. He is right-handed.

Developmental History

The marriage of his parents was non-consanguineous. The child's conception was normal. The mother had no problems during pregnancy, and also did not face any complications during childbirth. He was born full-term, and his delivery was normal. His birth cry was immediate. Most of his developmental milestones were delayed, such as sitting without support, which was achieved at 12 months, standing with support (24 months), and walking at 34 months. He has no history of any sickness, or hospitalization.

Family History

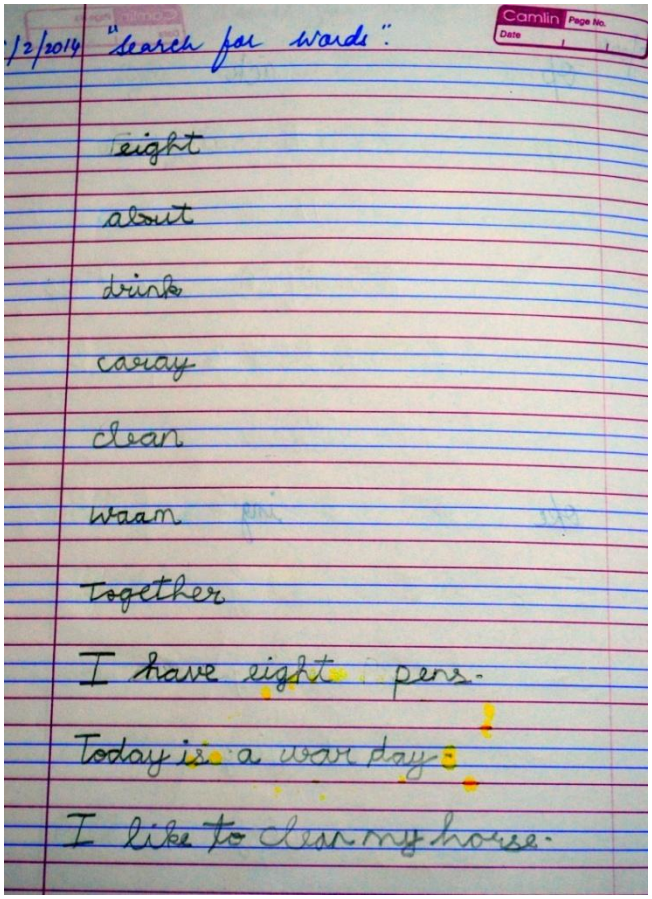
The child's father is a businessman while his mother is a housewife. The mother was a primary school teacher prior to the birth of her child. Neither parent reports any difficulties with academics. He is the only child of his parents.

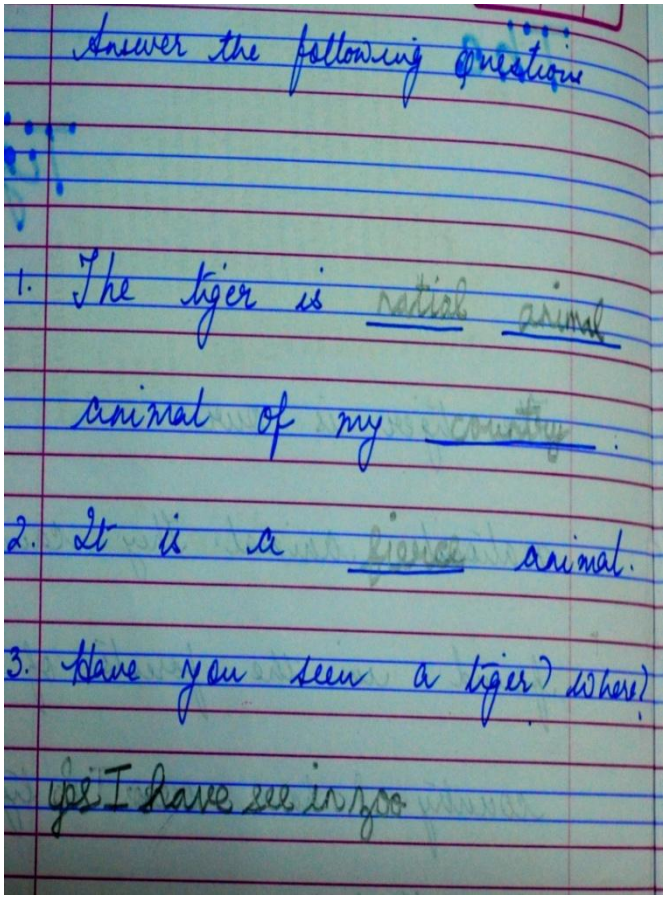


Summary

The child has mild LD in English, and moderate LD in mathematics. There are many errors in Language, especially in spellings, and this is probably caused due to a lack of concentration, or due to severe anxiety. In mathematics, the child has difficulty with basic operational skills, with problems in the number concept, and with spellings.

Comments





This child was extremely quiet, surprisingly for a seven-year-old, who did not have much interest in either colours, or drawing. He wouldn't talk much, and his inability to draw anything, worried me. His score, surprisingly, indicated a **mild** level of difficulty in English.

Introduction

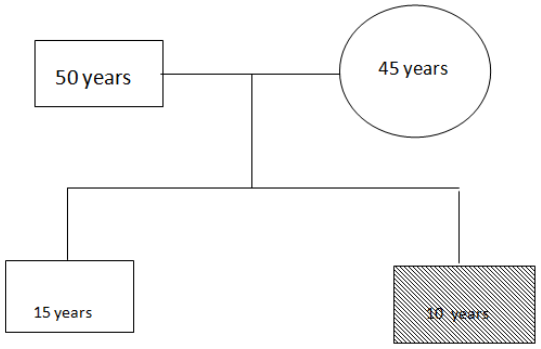
Master S.W is an eight-year-old, right-handed boy studying in class 4. The child is quiet, and is co-operative. He has difficulty in interacting with his peer group, and has severe academic difficulties.

Developmental History

The marriage of his parents is non-consanguineous His conception was natural, and he was born normally, full-term but his birth cry was delayed. His mother suffered from Diabetes, emotional tension and hypertension during pregnancy. His developmental milestones were mostly reached on time, with the exception of smiling (at 3 1/2 months), sitting without support (7 months), and standing without support (10 months). He suffered from Chicken pox, and this required hospitalization.

Family History

His father is 50 years old, and is a teacher, with a B.Sc,. His mother is 45 years old and is also a teacher.. They have another child, a boy, who is older than SW. Neither parent reports any academic difficulty, nor does the older child.



Summary

The child has mild LD in English, and mathematics. There are many errors in Language, especially in spellings, and this is probably caused due to a lack of concentration, or due to severe anxiety. In mathematics, the child needs help with basic operational skills, and has problems in the number concept, and with spellings. The student trainee recommends specialist intervention.

Comments

This child was assessed to have **severe** difficulties; he had severe difficulties, including an inability to process the combination of 'be', to make a word. He can barely calculate. Surprisingly, he showed an interest in colours, and his drawings show maturity. At least they are not simple figure drawings.

Introduction

Master Y.K is a ten-year-old boy, studying in class 5 , who was introduced to the student trainee by his schoolteachers for his poor academic performance. He is right-handed, and has proper tripod pencil holding. The child is a cheerful and obedient boy. He studies in class 5, and is known for his energetic nature in class.

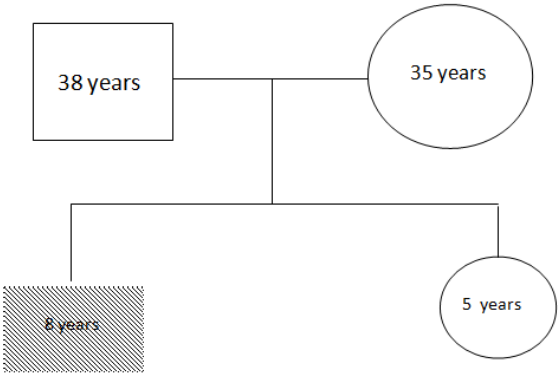
Developmental History

The marriage between his parents is non-consanguineous. His conception was induced, and he was

delivered C-section, full-term and his birth cry was immediate. His mother suffered from Diabetes during pregnancy. His developmental milestones were mostly reached on time, with the exception of smiling (at 6months0, sitting without support (5 months), and standing without support (10 months). He suffered from Measles, but this did not require hospitalization.

Family History

His father is 38 years old, and is at a managerial post, with a B.Tech, and an MBA. His mother is 35 years old and is a housewife. They have another child, a girl, who is younger than DP. Neither parent report any academic difficulty, nor does the other child.

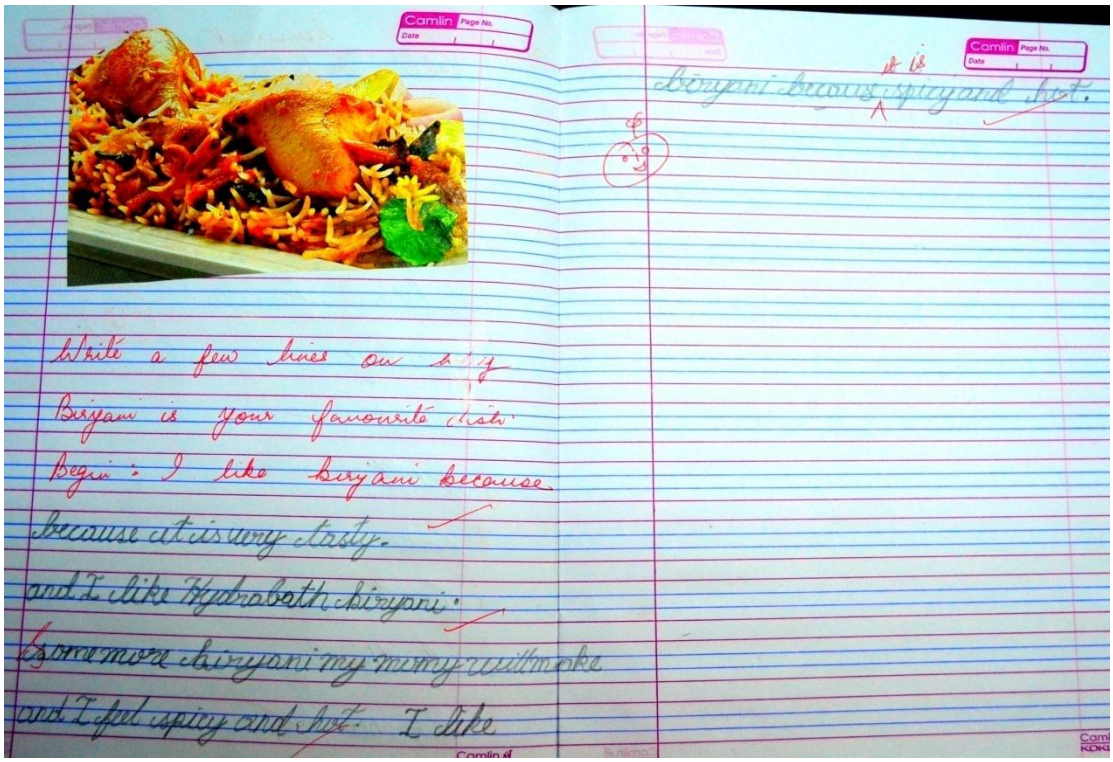


Summary

The child has mild LD in English, and mild LD in mathematics. There are many errors in Language, especially in spellings, and this is probably caused due to a lack of concentration, or due to severe anxiety. In mathematics, the child knows basic operational skills, but has problems in the number concept, and with spellings.

Comments

An extremely social and gregarious child. Most of the time he showed a reluctance in writing, but he did like to speak on topics like 'My Birthday'. He could be encouraged to write with help from pictures on his favourite food, an example is given below. He also had a problem with mathematical symbols and signs, and showed reluctance in drawing.



All these children showed eagerness to remediation. They were actively seeking help and it was easy to bond with them. In the process of interaction, I felt the need for a more sensitive probe into their problems. This was rather hampered by my assessment methods. The discrepancy model or the "severe discrepancy" formula needs elaboration. By this I mean that the criterion of creativity or artistic development should be included with the severe discrepancy model.

The website of the NICHCY (National Dissemination Centre) also agrees to this. According to this centre, IDEA now requires that states should adopt criteria that :

- must not require the use of a severe discrepancy between intellectual ability and achievement in determining whether a child has a Specific Learning Disability.

- must permit local educational agencies to use a process based on the child's response to Scientific, research based intervention.
- may permit the use of other alternative research based procedures for determining whether a child has a Specific Learning Disability.

The implications of the above are apparent. It means that, maybe the assessment procedure may be abandoned all together. The school system can provide the student with a "Research Based Intervention". And on the basis of that, an identification process can be set up. Observing the child on his or her learning environment is also encouraged.

Howard Gardner(1994) sketches the stages of artistic development , starting from the age of 5. He points to "universal artistic tendencies" which can be discerned at this age. He calls the period from 7 to 8 as the "latency "Period. The stages of artistic development till adolescence are worth a consideration when we bring in the criterion of creativity for the assessment of children with SLD. As he reminds us, "**Art is so closely tied to the developmental process that any impairment in development due to psychosis, regression or senility , has immediate ramifications in one's aesthetic activities**."

References

1. Newby, P, 2005, Research methods for education, Pearson Education and Longman.
2. Smith, C,P, 1992Motivation and Personality—A handbook of thematic content analysis, Cambridge university Press
3. Bryman, A, 2004, Social Research Methods in Education, oxford university Press
4. Silverman, D,1998, Qualitative Research Methods-theory, method and practice, Sage publications
5. Meabh Ritchie pg12,2011,4 March,The Times Educational supplement,
6. Hewstone,M ,Stroebe,w, Jonas,K,2008,Introduction to social Psychology-a European perspective, BPS Blackwell
7. Veronica et al,2006,winter, vol.76no.4, Harvard educational review
8. Richards,C,2011,Young people, Popular culture and Education ,continuum
9. Sattler, J,M, 2011, Cognitive Foundations, INC San Diego
10. Bogdan et al,1982, Qualitative research for education :An Introduction to theory and methods, Allyn and Bacon (boston)
11. Griorgi,A,1970, Psychology as a human science: A phenomenological based approach ,Harperand Row,New York
12. Rothbert, M,K,Derrryberry,D,2011, Becoming who we are: Temperament and Personality in Development, Guildford Press
13. Precke, F, Gotz,T, and Frenzel,A,2010,Btitish journal of Educational Psychology.
14. Chessman, A., 2007, Senior Curriculum Adviser, Gifted and Talented Students Program, NSW Department of Education and Training
15. Renzulli, J S. (1977). *The enrichment triad model: A guide for defensible programming for the gifted.* Mansfielf Center, CT: Creative Learning Press.
16. Renzulli, J. S. (1978). What makes giftedness? Reexaminging a definition. Phi Delta Kappan, 63, 619-620.
17. Renzull, J. S. and Hoge, R.D. (1993), Exploring the link b/w giftedness and self-concept, review of educational research sage publications.
18. Freeman, J., (2010). Gifted Lives: What Happens When Gifted Children Grow Up 1st ed., Routledge.
19. Koshy, V. & Casey, R., 1997. Effective Povision for Able and Able and exceptionally Able Children, Hodder Arnold H&S.
20. Bailey R, Pearce G, Winstanley C, 2008. A systematic review of interventions aimed at improving the educational achievement of pupils identified as gifted and talented.
21. Bates. J. & Munday, S. 2005. Able Gifted and Talented, Continuum International Publishing Group Ltd.
22. Gray-little, B., Valwrie S. L. et al, 1997, An item response theory analysis of the Rosenbberg Sef-esteem scale, Personality and social psychology bulletin, Sage publications.
23. Litstin, K. Roberts, J., (2011) The self-concepts and perceived competencies of gifted and non-gifted students: A meta-analysis, Jorsen: Journal of research in special educational needs
24. Learning Disabilities at the CPIR: http://www.parentcenterhub.org/repository/ld
25. LD online | For educators
26. http://www.ldonline.org/educators
27. LD online| teaching and Instruction:
28. http://www.ldonline.org/indepth/teaching
29. Howard Gardner: *The arts and human development 2014*

