Question 2: Twice Exceptionality

# ESP701 - Education And Development Of Exceptional Learners

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#### **Twice Exceptionality**

Twice-exceptional students fall through the cracks in the education system. Many perform at an average or norm, not attracting any attention. Others show short bursts of giftedness, only when the topic or field suits them. Some students are identified correctly but only supported for the learning difficultly, ignoring the gifted strengths.

Incorrect or insufficient support for the twice-exceptional student is frustrating. Knowing that you are able to discuss clearly and with conviction a particular area of interest but not able to perform to expectation on an assignment or test can have devastating consequences for self-belief and morale for the student. Support for twice-exceptional students needs to look at the long term goals of the student. Primary and high school skills are not necessarily the tools that the twice-exceptional student needs for later in life. Focus needs to be how we can support students through high school and university to be able to achieve greatness in the future.

## **Gifted Definition**

There is no universally accepted definition of giftedness. The USA National Association for Gifted Children identifies gifted students who have demonstrated a high performance or a potential for high performance (What is Giftedness?). The areas of giftedness include a range of areas that need to have structured activity with its own "symbol system" such as mathematics, music, language, and sensorimotor skills such as painting, dance, and sports.

Renzulli (2000) acknowledged that the way in which we look at giftedness will determine how it is assessed. If one looks at giftedness as an academic skill then assessment will be based on assessment tools that focus on superior ability in this area. While there are differences of opinion of what constitutes giftedness, there will not be one single definition and according to Renzulli, "this is probably the way it should be" (2000). Giftedness will incorporate above average ability, creativity, and task commitment, referred to as Renzulli's Three-Ring Conception of Giftedness.

Cultural heritage should also been included when looking at the definition of giftedness. An "understanding of one's cultural heritage is considered important when looking for students with significantly different cultural backgrounds" (Coleman & Galagher, 1995).

In addition to understanding a personal view of giftedness for the identification of such students, we must also look to those with potential giftedness for inclusion in assessment. Even if students are not exhibiting gifted skills, we must look to the potential in their skills (Coleman & Galagher, 1995).

# **Learning Disability Definition**

The definition of a learning disability has been reasonably consistent over time and refers to a disorder in an area of the basic psychological process (Crepeau-Hobson & Bianco, 2011, p. 103). It can involve using or understanding language, spoken or written, such as difficulty to "think, speak, read, write, spell, or mathematical calculations" (Fetzer, 2000). The most common learning disability diagnoses include: Attention Deficit Hyperactivity Disorder (ADHD), Emotional/Behavioural Disorders (EBD), Autism Spectrum Disorders (ASD), or Specific Learning Disabilities (SLD) (Rogers, 2010).

# **Twice-Exceptional Definition**

Many educators assume that there needs to be a below-grade achievement before diagnosing a twice-exceptional student. This may not be the case with many students where the grades will be average, though still performing well below potential achievement. The twiceexceptional student is one possessing a gift or talent but with a learning disability making academic achievement difficult (Crepeau-Hobson & Bianco, 2011). There are three classifications of such students: (1) subtle gifted/learning disabled; (2) hidden gifted/disabled; and (3) recognised gifted/disabled (Fetzer, 2000).

## **Difficulties in Identifying Twice-Exceptional Students**

Diagnosis of twice-exceptional students continues to be difficult. Many of the characteristics of a gifted student can also be seen in a learning disabled student. For example, a gifted student may show signs of disruptive classroom behaviour, fail to complete assignments, lack organisational skills, and find it difficult to master simple academic skills. Several of these characteristics would be assessed as learning disabled rather than features of a gifted student (Ruben & Reis, 2005).

Researchers also disagree on which traits constitute a gifted student as opposed to a twiceexceptional student. Harnett, Nelson & Rinn (2004)researched school-counselling graduate students and found that the counsellors had a tendency to interpret gifted or ADHD characteristics as predominantly a learning disability (as cited in Rinn & Nelson, 2009). Further education and ongoing professional development for newly qualified teachers and educational professionals is essential to ensure correct diagnosis of twice-exceptional students. Misinterpretation by professionals makes it difficult for identification of twice-exceptional students. Many educators assume that giftedness is recognized as high IQ scores or academic achievement.

Renzulli (1978) identified an issue using national norms when looking at cognitive ability or achievement test scores is that it excludes low income and minority students. He suggests instead data collected on gifted students be compared to local level scores, such as an individual school assessment norm. Discrepancies between policy and practice can also cause problems for identification of twice-exceptional students. Policy may not be able to support the practical applications of identification due to funding constraints and adequate resources (Morrison & Rizza, 2007).

## **Traditional Methods of Assessment**

Traditional methods of identification of gifted students relied on standardized testing. Students were assessed typically using an IQ test. The Chinese emperors and today the Chinese government have been using standardized testing since 2200BC to select civil servants.

In the early 1900s, Frenchman Alfred Binet developed the first IQ test. The test was developed in response to the goal of identifying children needing specialised assistance. Questions were based on skills not taught in school such as memory, attention, and problem solving skills, adapted to different age groups. The Binet-Simon Scale is still being used today, modified and revised since 1905.

American psychologist David Wechsler believed other factors were involved when assessing for giftedness and intelligence. The Wechsler Adult Intelligence Scale (WAIS) was developed in 1955 based on "the global capacity of a person to act purposefully, to think rationally, and to deal effectively with his environment" (as cited in 'David Wechsler', 2013). Wechsler identified four major areas of intelligence: a Verbal Comprehension Index, a Perceptual Reasoning Index, a Working Memory Index, and a Processing Speed Index. This is the most commonly used assessment as it allows evaluation of the student's response with no right or wrong answers (Fetzer, 2000).

Assessments based on a single IQ test allows for identification and prediction of scholastic achievement. Application of these tests is controlled and standardized, including the wording of questions, administration, and the test environment. The tests are based on a norm group,

administered to thousands of students of the same age, giving a degree of confidence in the comparison and results. It is an assessment that cannot be studied for as the questions do not follow taught curriculums and are usually a pleasant experience.

Relying on a single score from an IQ test can often hide the gifted student, returning average scores in assessment. A student being assessed using traditional assessment could either be assessed as gifted, hiding learning difficulties or assessed as a student with learning difficulties, or masking the giftedness (Leroux & Levitt-Perlman, 2000). A lack of additional tools would result in the student being mis-diagnosed. Traditionally, either a gift or a learning disability was diagnosed, not both.

Reliance on a single test score became one and the same with giftedness. The score upheld the idea that giftedness meant success in later life, also promoting the idea of a single view of giftedness. If a child was not assessed in the top 1% of the IQ score, they were not deamed gifted (Brown, Renzulli, Gubbins, Siegle, Zhang, & Chen, 2005). Gifts in othera areas such as the arts, sports, and creativity were ignored.

Identification of a student with twice-exceptional skills can be hidden in traditional tools of assessment when students have low sequential scores and high spatial meausres (Morrison & Rizza, 2007, p. 59). Errors happen when average achievement scores are ignored as it indicates that the student has the inborn ability to be successful. This may not be a problem for many students, but for a student who can achieve higher, it presents serious problems of underachievement.

The application of the Wichsler Intelligence Scale for Children (WISC) may not be accurate for those who have ADHD. Students who have ADHD may lack the attention skills to complete the tasks set, which may affect their scores (Leroux & Levitt-Perlman, 2000). Silverman noted that bonus points for speed disadvantages those students with poor processing skills (Silverman, 2003).

Students who have been diagnosed with a disability rather than being gifted often feel insufficent and abnormal (Cline & Hegeman, 2001). Focus is placed on the disability rather than the strengths or both as a single assessment is unable to focus on two exceptions. This is an issue using traditional methods as a student could not both gifted and learning disabled.

Traditional assessment methods also viewed giftedness with a narrow definintion. Giftedness has been traditionally assessed on a single IQ score and referred to as schoolhouse giftedenss by Renzulli (2000). Discussions and developments over the last 50 years have expanded the definition of giftedness to include creative-productive giftedness that cannot be identified using IQ assessments. Renzulli states that "there is much more to the making of a gifted person that the abilitieis revealed on traditional tests of intelligence, aptitude, and achievement" (Renzulli, 2000, p. 98).

#### **Modern Methods of Assessment**

Assessments made using more than one source of information was first raised in the mid 20<sup>th</sup> century by Leta Hollingworth and Greenberg and Bruner. Hollingworth (Leta Setter Hollingworth, 2013) began detailed documentation of gifted children whose IQ was above 180 on the Standford-Binet scale. Research by Paul Torrance, Robert Sternberg, Howard Gardner, David Lohman and Benjamin Bloom changed the idea of giftedness and thus how to assess students (Renzulli J. , 1978). Modern assessment techniques to identify twice exceptional students rely on multifaceted, authentic tools of assessment over time (Brown, Renzulli, Gubbins, Siegle, Zhang, & Chen, 2005).

Gifted and learning disabled students have significant discrepancies in their strengths and weakness as noted by Silverman (2003). Silverman notes that to identify a twice exceptional student it is necessary to look at a different approach to assessment by looking at what strengths or weaknesses cause frustration and prevent full development of the student's potential. Rather than provide support for all weakness, a student needs only to have support for those areas that hinder development. This might look at supporting organisational skills in writing a paper rather than the writing itself, even though both are weaknesses. The disadvantage of this approach is that as a student grows and develops, new challenges arise at different stages. A weakness that causes frustration now may not be an issue in a year. Other areas of weakness were neglected, making for further frustrations later. For this approach to supporting twice-exceptional students to be successful, the student needs to be constantly assessed for frustrating weaknesses.

Silverman's (2003) method of identification is to look at two diagnostic indicators. The first is a significant discrepancy between strengths and weaknesses with some subtest scores in the superior range and above, and a student who succeeds in difficult and challenging areas but is unsuccessful in the easier areas of assessment. Assumptions are also made on gifted/dyslexic and gifted/ADHD, looking at certain indicators. This may be useful for a quick assessment for twice-exceptional students, but as Silverman continues "gifted individuals may not demonstrate typical manifestations" of the learning difficulty (Silverman, 2003, p. 540).

Project 2Excel, funded by the United States of America's government, aimed to: (1) identify gifted learners with Attention Deficit Disorders or Emotional/Behavioural Disorders or Autism Spectrum Disorders; (2) provide teacher training; (3) develop a toolkit of strategies for teachers and schools; (4) offer parent training support for parents of twice exceptional students; and (5) educational of the broader community. The project had eleven strategies to identify twice-gifted students. Rogers' (2010) research included the following strategies for identifying gifted students across four public schools: identification using traditional IQ testing and teacher checklists; a specialist education team to refine lists of students identified; training of the education team using specific protocols; a discrepancy of 23 index points on the WISC-4 scale; a review of family tree to look for other twice-exceptional members; and a school nurse with an intimate knowledge of family history. While this method may better identify twice exceptional students, it requires significant resources, usually not available to communities of learners.

Response to Intervention (RtI) has been another tool used to identify and support twiceexceptional learners. RtI is based around the three-tier model of identification. Tier 1 occurs in the classroom and uses grade level and above grade level curriculum-based measurement (Crepeau-Hobson & Bianco, 2011, p. 105). Many twice-exceptional students perform at grade level which makes identification by a teacher difficult. It also relies on the teacher being able to recognize a student's strengths and weaknesses.

Tier 2 of the RtI model looks at a student's classroom behaviour and performance. Tools for assessment include the Behaviour Ratings Inventory of Executive Function, looking at the processing skills of students that might affect academic performance. Examination of past performance would also aid identification of twice-exceptional students as typically performance falls as they get older (Crepeau-Hobson & Bianco, 2011). Tier 3 of the RtI model looks at those students who are not able to perform based on support from Tier 1 and 2 interventions. Crepeau-Hobson & Bianco (2011, p. 104) though note that "use of an RtI model with gifted learners, in its present form, RtI may not be especially useful for identifying gifted students at Tiers 1 and 2, including those with concomitant learning disorders." (Crepeau-Hobson & Bianco, 2011, p. 104)

Identification of twice-exceptional students has made huge strides over the last 30 years; however, there are still problems in the identification process. According to Coleman (2003) the identification process must accurately find all students, an almost impossible feat. Identification of using only IQ scores does not reflect the understanding of what intelligence is. Coleman (2003) suggests using "student portfolios, showing work over time; performance-based assessments; and projects that involve collaboration with peers" (Coleman, The Identification of Students Who are Gifted, 2003) could be used to replace traditional testing. A range of types of information that will indicate cognitive ability, academic achievement, interests, creativity, effort at school and home, and learning style are the first category of information suggested. In addition, a multiple source of information is required for a complete assessment: school test scores, teacher comments, counsellor observations, parent/caretaker opinions, and of course from the student.

The vast number of documents for supporting evidence required by Coleman (2003) puts a strain on already stretched resources in schools and independent assessment centres. The priority at many institutions at the moment is to identify and support students with only learning difficulties that are failing at school, not those students who make average scores but are performing below ability.

Collection of portfolios over time may not be possible for all students as it requires a longstanding and steady learning environment. Students who move from school to school, location to location, may not be able to provide a portfolio of work over a time period that reflects their strengths and weaknesses.

According to Coleman (2003), assessments must serve a purpose. Data collected must be used to select a program or support service that is available for the student. The services provided must be available to the student; otherwise the assessment tool is useless. Assessment tools to identify the twice-exceptional are still being developed and many assessment centres follow a set of protocols, regardless of whether the services can be provided for the student. Also, only using an assessment tool where a service can be provided may be appropriate today, but availability of services to twice-exceptional students is growing quickly and the facility may be available tomorrow.

## Conclusion

"Developing high levels of creative talent and high motivation among all our young people is essential" to continue economic and cultural development (Renzulli J., 1978). Identification of twice-exceptional students poses many issues concerning correct identification and support. Beginning with a generally accepted definition of both gifted and learning difficulty and then a definition that represents a combination of both students is problematic. Twice-exceptional students have very different characteristics and to find two students with identical strengths and weaknesses is almost impossible.

Current knowledge of many education professionals and psychologists lack an understanding of how to correctly identify twice-exceptional students. Average students who are twice-exceptional are ignored in the current setting as they are not falling behind their peers while the learning disability masks the giftedness. Those students who have been identified as twice-exceptional often have support services focus on the learning disability rather than also supporting their gifted talent.

Modern assessment procedures are able to identify better students who are both gifted and have a disability. Ongoing assessment and collection of data, information from numerous sources, and analysis of gaps in data allows for a more complete assessment of the student, providing for better plans and support to be put in place for the student. However, as students develop, so do their strengths and weaknesses and modern support for twice-exceptional students needs to be constantly developed and rectified.

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