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Melissa Smetts

University of Mary Washington

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Twice-Exceptional: What is it and how can teacher help these students

Melissa Smetts

University of Mary Washington

Dr. Epps

EDCI 589

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I, Melissa Smetts, hereby pledged that I neither gave nor received any unauthorized help on this assignment.

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Introduction

Problem Statement

Many students in today's society have either a superior cognitive ability or a cognitive disability. However, not many people understand that superior cognitive abilities and cognitive disabilities can exist in the same student. Having both abilities and disabilities is known as being twice-exceptional. Students who are identified as twice-exceptional can begin to receive appropriate accommodations and the differentiation that is needed for both their abilities and disabilities. However, there are currently no available best practices for identifying these students. If these students are not identified as being twice-exceptional, then they cannot make proper progress in their academic careers. These students will continue to struggle with their self-esteem, their self-concept and fulfilling their academic potential.

Rationale

Some people believe that twice-exceptional students do exist, however, there is no true understanding of how both the abilities and disabilities manifest in students. There are many misconceptions and ideas about twice-exceptional diagnosis especially with the gifted identification. Recently research has been done to try to help understand the struggles and difficulties these students face. However, there has been no development of a precise way of identifying these students.

Research Questions

1. What is twice-exceptional?
2. What are the characteristics and struggles of twice-exceptional students?
3. Why do twice-exceptional students go undiagnosed?

Literature Review

What is Twice-Exceptional?

Definition and Criteria

Twice-exceptional is a dual diagnosis (Barber & Mueller, 2011; McKenzie, 2010). Twice-exceptional individuals have a cognitive disability, which impairs the students' learning, and have an area of superior cognitive ability. James J. Gallagher first used the term twice-exceptional in 2004 (Buica-Belciu & Popvici, 2014; Reis & Renzull, 2004). To be identified twice-exceptional students, they must have superior abilities in a specific area such as math, creativity, or even leadership but have an impairment, such as learning disability that prevents the students from performing to their fullest potential (Hannah & Chore, 2008; Lovett & Lewandowski, 2006). The high ability occasionally allows the students to "shine" (Coleman, 2014, p. 28). These students are able to display how intelligent they are through communication or in a specific academic area such as math. However, when given a reading or writing exam the students' performance are average or below average.

Twice-exceptional students can be defined by three different categories. The first category consists of students who are identified as being gifted but their weakness or disability is left unidentified (Crepeau-Hobson & Bianco, 2011; McCallum, Bell, Coles, Miller, Hopkins, & Hilton-Prillhart, 2013). These students appear to be bright, but their achievement is not displaying their intelligence leading teacher to believe they are underachievers (Berninger & Abbott, 2013). Twice-exceptional students have the ability to perform on a higher level but their disability is causing them to struggle. The second category is gifted students with a severe disability where the students are receiving

support only for their disability (King, 2005; Lovett & Lewandowski, 2006; National Education Association (NEA), 2006). These students could become frustrated when the only service they are receiving is for their disability and not supporting their giftedness. In the last category, the gifted ability and disability balance each other out and the students' abilities appear average. The students do not display either a high ability or a severe disability. (Lovett & Lewandowski, 2006; King, 2005; NEA, 2006). Students can be identified as twice-exceptional when they meet these three criteria.

There are three types of criteria that need to be met before students can be labeled as twice-exceptional. The first is evidence of an outstanding talent or ability. The outstanding ability must be demonstrated by the students in one academic area (Berninger & Abbott, 2013; King, 2005; Morrison & Rizzo, 2007). The second criterion is students who have a large enough discrepancy between the actual work produced and what is expected (Berninger & Abbott, 2013; King, 2005; Morrison & Rizzo, 2007). The students could possibly communicate ideas beautifully, however, when it comes to written work the students could be producing very poor quality. The last criterion is students who show signs of a processing deficiency, which means they have a difficult time understanding directions (Berninger & Abbott, 2013; King, 2005; Morrison & Rizzo, 2007). In order to understand these categories and criteria it is important to understand giftedness and learning disabilities in the context of the twice-exceptional diagnosis.

Gifted Definition

For students to be identified as gifted, they must have above average intelligence in one area, when compared to other students of their grade (Buica-Belciu & Popvici, 2014; Crepeau-Hobson & Bianco, 2011; Morrison & Rizzo, 2007). Each school system

uses a specific test to identify gifted students. Usually it is a norm-reference test. In order to clearly identify gifted students, many school systems refer to the federal definition created in 1978. The definition states in order to identify students as gifted and/or talented, they have to demonstrate the abilities or potential abilities of high performance intelligence (Crepeau-Hobson, & Bianco, 2011; Foley-Nicpon, Assculine, Rickels, & Richards, 2012; McCallum et al. 2013; Rubon & Reis, 2005). The federal government has recently updated the definition in order to include leadership ability, specific academic areas, creativity, or a visual or performing arts ability (Crepeau-Hobson & Bianco, 2011; Foley-Nicpon et al., 2012; McCallum et al., 2013; Ruban & Reis, 2005).

This amendment is to help identify those students who have superior abilities in leadership, creativity, or visual or performing arts because they were underrepresented in the gifted population (Foley-Nicpon et al., 2012; McCallum et al., 2013). Even though there is a federal definition for identifying gifted and/or talented students, many school systems still seem to struggle with this definition. They rely on the previous version of identification, which uses IQ score (Morrison & Rizza, 2007).

How Giftedness can Manifest Itself in Twice-Exceptional Students

When the federal government expanded the definition of giftedness, more students were identified as gifted, which helps to identify students as twice-exceptional. According to Ruban and Reis “three interlocking clusters of above average, creativity, and task commitment” must be identified before students can be considered under the twice-exceptional diagnosis (Ruban & Reis, 2005, p. 116). According to this definition, students with a disability can be identified as being gifted if they fit within these three interlocking categories. Students must have above average intelligence that can be in a

specific academic area such as math (Ruban & Reis, 2005). These students also must have creativity, which can be in any form such as painting or singing (Ruban & Reis, 2005). Lastly students must also be task committed, which means they have to want to finish a task whether they are able to or not (Ruban & Reis, 2005).

Disability Definition

Having a cognitive disability means that a person has impairments, which hinder their learning ability and achievement or performance (Assouline, Nicpon, & Huber, 2006; Lovett & Lewandowski, 2006; Volker, Lapata, & Cook-Cotton, 2006). According to Morrison and Rizza (2007) there has to be “evidence of a processing defect” (p. 58). This processing deficiency can be a wide variety of things. Students can have an emotional disability that causes the students to lose control over their own emotions resulting in lower academics. Students can have ADHD or ADD, which causes them to have a short attention span and they are unable to stay on task. These disabilities can manifest themselves in many different ways but the end result is that students have problems producing the work that is expected (McKenzie, 2010; Nelson & Higgins, 2005).

How a Disability Manifests Itself in Twice-Exceptional Students

In order to be considered under the twice-exceptional label students’ disability must hinder their learning process (Barber & Mueller, 2011; Berninger & Abbott, 2013; Crepenu-Hobson & Bianco, 2011; King, 2005; McKenzie, 2010; Ruban & Reis, 2005). The most common disability associated with twice-exceptional students are specific learning disability (LD) (Lovett & Lewandowski, 2006; McKenzie, 2010). This disability usually manifests itself in students by causing problems with reading, writing,

and spelling (McKenzie, 2010). However, students can still struggle with other disabilities as well. According to McKenzie (2010) twice-exceptional students can struggle with: “sensory, communicative (particularly speech related), emotional/behavioral, health and “other-health” related (including attention-deficit hyperactivity-disorder), disorders at the mild end of the autism spectrum (e.g., Asperger syndrome), and SLD” (p. 164). These issues cause problems because it is an impairment, which hinders students’ achievement.

Characteristics and Struggles Twice-Exceptional Students Face

Twice-exceptional students have many characteristics, which manifest in different ways. The students have outstanding abilities and know that they can produce higher-quality achievement. However, their weaknesses hinder their ability to produce higher-quality achievement. Because of their abilities and disabilities certain characteristics are developed. Many of these students can have attention problems, different learning style needs, anxiety, depression, or even impulse control issues (King, 2005; Lovett & Lewandowski, 2006; McCallum et al., 2013; Milligan & Nichols, 2005). All of these signs indicate that these students have become frustrated in class, which often leads to disruptive or even aggressive behavior (King, 2005; Milligan & Nichols, 2005). These behaviors can become more serious problems as students continue through their academic careers. This behavior becomes learned helplessness where students feel that they cannot complete a specific assignment (McCallum et al., 2013). This learned helplessness creates problems because these students are fulfilling the prophecy of being underachievers. These negative feelings teachers have towards these students are often

shown, which creates more feelings of anxiety, depression, or low self-concept and low self-esteem for the students.

Struggles

Along with specific characteristics, which were mentioned above, many twice-exceptional students deal with different struggles daily. Problems encountered by twice-exceptional students range from academia to social interactions to emotional struggles. If these problems are not understood, many of these twice-exceptional students will struggle to find their own path.

Academic Struggles

Twice-exceptional students often struggle in academia. The first few years in school, many teachers initially appreciate these students' creativity, problem-solving, and curiosity (NEA, 2006; Nielson & Higgins, 2005). These attributes also lead to problems in school because teachers become frustrated when students only want to be creative or explore their curiosity (Nielson & Higgins, 2005). These struggles range from being labeled as underachievers to being known for their average abilities (Berninger & Abbott, 2013; NEA, 2006;). These problems cause students to reinforce the underachiever label. The labeling is a result of their failure to produce high quality work (King, 2005). Twice-exceptional students begin to fear failing again. These students give up on their academic work (King, 2005). They end up fulfilling the belief about them by becoming lazy with schoolwork, if not properly assisted. These students struggle because they know they can produce higher-quality work, but because of their disability they are unable to produce high-quality work.

More often than not, twice-exceptional students are thought of as average or even below average achievers (Assouline, Micpon, & Huber, 2006; King, 2005; Morrison & Rizza, 2007; Weinfeld, Barnes-Robinson, Jewelers, & Shevitz, 2005;). According to Lovett and Lewandowski (2006) twice-exceptional students may “appear ordinary and average in the general education classrooms, because their giftedness and disabilities cancel each other out” (p. 516). These students are passing each grade level with an average performance, which creates a problem for twice-exceptional students because they are not fulfilling their potential (McCallum et al., 2013). Performing at this level causes frustration. This frustration can lead to destructive behaviors (King, 2005; Milligan & Nichols, 2005; NEA, 2006). Twice-exceptional students may not be receiving the proper support for their disabilities and their high abilities.

Being identified as only gifted another concern with twice-exceptional students face. The students have shown superior ability in a specific area or areas in academia (Buica-Beliciu & Popvici, 2014; Coleman, Harradine, & King, 2005; Rise & Renzulli, 2004; Volker, Lapata, & Cook-Cotton, 2006;). Being identified as only gifted leads to frustration with these students because they are getting support for their giftedness but are not getting support for their disability (Reis & Ruban, 2005). This support only for their gifted abilities causes negative spillover effect because these students are not receiving the proper support (Reis & Ruban, 2005). These spillover effects from this support leads to more misconceptions with teachers, which will be discussed later on in this essay.

The last way twice-exceptional students appear in academia is by being identified as having only a disability (Berninger & Abbott, 2013; King, 2005; Morrison & Rizza, 2007; Yssel, Adams, Clark & Jones, 2014;). Only being identified as having a disability

also causes problems because students are only receiving support for their disability (NEA, 2006; Reis & Ruban, 2005;). Again, having only support for their disability can also cause a negative spillover effect because students are not receiving the proper support (Reis & Ruban, 2005).

Being identified as average or just having either a disability or superior gifted ability can cause twice-exceptional students to struggle as they continue through their academic careers. Students need to have support in both their areas of weakness and areas of strength in order to have successful academic careers.

Social Struggles

Along with academic struggles, twice-exceptional face struggles in social interactions from communicating with peers to communicating with adults. Students having a superior cognitive ability along with a cognitive impairment cause them to be unsure of where they fit (Barber & Mueller, 2011; King, 2005;). According to King (2005) twice-exceptional students feel that they are "part of two worlds," because of their disability and superior ability (p. 16.). This shows that twice-exceptional students know they have these outstanding abilities but know that there is something that is holding them back.

Having both outstanding abilities and disabilities causes confusion on the part of the teachers, parents, the students, and peers (Foley-Nicpon et al., 2012). This confusion often leads to a lack of understanding, which can create more social problems for these students. It creates problems because again these students are not sure where they physically fit in and feel nobody understands them or even likes them (King, 2005). Because twice-exceptional students cannot identify with any group and have a difficult

time fitting in with their peer groups, they become socially awkward and feel as though they have no place where they belong (Barber & Mueller, 2011.). According to NEA (2006) “twice-exceptional students can have social issues that interfere with their ability to make friends and sustain social relationships” (p. 13).

Having these social issues can lead to problems with mood, anxiety, or even depression, which impairs their social interactions (Foley-Nicpon et al. 2012.). They can also face anger, isolation, and worthlessness, which only hinder their interests (NEA, 2006). These feeling can lead to social awkwardness because students think everybody have an expectation of a certain achievement level (Barber & Mueller, 2011). Because twice-exceptional students know they have superior cognitive abilities and are sometimes able to demonstrate these abilities, the students believe adults expect them to perform at the highest level in all academic areas (Barber & Mueller, 2011). This pressure of high level performance from belief of the adult expectation causes mood problems and can create social awkwardness.

Emotional Struggles

Stemming from academic and social problems many twice-exceptional students also struggle with emotional problems as well. These students know they have the capability but are unable to show it. These emotions can be depression, anxiety, or even feelings of frustration (Barber & Mueller, 2011; King, 2005; Milligan & Nichols, 2005). There are two main areas, which cause twice-exceptional students to struggle with their emotions.

One area twice-exceptional students struggle emotionally is with self-concept, which is also known as self-perception. Self-concept is an idea about oneself that is

developed from the belief that others hold about them. An example of how self-concept is developed is when students know somebody does not like them and they develop an idea of worthlessness based on the other person's belief. Self-concept is significantly lower in many twice-exceptional students as the general population. Placing high expectations on twice-exceptional students often leads to a lower self-concept (King, 2005). Also having teachers, parents, and peers being confused and not understanding twice-exceptional students, causes these students to develop negative self-perceptions (Foley-Nicpon et al. 2012.). This negative self-concept leads to negative self-esteem.

The second area that twice-exceptional students' struggle with is their self-esteem. Self-esteem is students' confidence in their ability or worth. Self-esteem is how students' feels about themselves based on their own thoughts concerning their work. If students knowing they can excel in math but are unable to because of their disability. Twice-exceptional students have lower self-esteem than those who are identified as just having a disability or who just are identified as gifted (Foley-Nicpon et al., 2012). When twice-exceptional students are unable to produce their best quality of work, they have a hard time feeling good about themselves. These students have overwhelming feelings of frustrations, anxiety, tension, and disappointment, which lead to lower self-esteem (Milligan & Nichols, 2005). This causes more feelings of depression, anger, mood, and more confusion (Milligan & Nichols, 2005).

Twice-exceptional students have a hard time fitting into peer group. Not fitting in plays into their low self-esteem and self-concepts (Foley-Nicpon et al., 2012). Because of their low self-esteem and self-confidence twice-exceptional students also developed emotional and frustration levels that are easily triggered (Barber & Mueller, 2011.).

Studies have shown twice-exceptional students have more self-esteem and self-concept problems than those who are identified as having a disability (Milligan & Nichols, 2005). Teachers, friends and parents often become frustrated with these students for their underachievement leading to lower self-confidence and self-esteem (Barber & Mueller, 2011). Their low self-concept and self-esteem leads to hypersensitivity, emotional issues, frustration, self-criticizing, anxiety and even depression (Barber & Mueller, 2011). These students struggle to develop good self-esteem and self-concept to help them have a successful academic careers.

Why do Twice-Exceptional Students go Under Diagnosed?

Twice-exceptional students are going under diagnosed for a several reasons. The first reason is that there are many misconceptions, confusions, and teacher bias concerning the diagnosis of twice-exceptional students. The next reason is that many of these students' abilities and disabilities are masked. These students go under diagnosed because the gifted label is already associated with being twice-exceptional. The last reason twice-exceptional students go under diagnosed is many school systems rely on test scores to diagnose.

Misconceptions, Confusion, and Teacher Bias

The misconceptions, confusions, and teacher bias concerning the diagnosis of twice-exceptional causes many students to only be identified as having either a gifted ability or a disability. Being identified as one is a problem for these students because they are not receiving help for the other exceptionality.

One of the first reasons for these misconceptions, confusions and teacher bias there is no precise way to identify twice-exceptional students (Gilman, Lovecky,

Kearney, Peters, Wasserman, Silverman, Postma, Robinson, Amend, Ryder-Schoeck, Curry, Lyon, Rogers, Collins, Charlebois, Harsin, & Rimm, 2013; Lovett & Lewandsowski, 2006; Morrison & Rizza, 2007). There is a lack of understanding of twice-exceptional characteristics (Foley-Nicpon, M. et al., 2011; Morrison & Rizza, 2007; NEA, 2006; Ruban & Reis, 2005). Even though there is a definition for twice-exceptional students many teachers and parents do not understand this definition. Most people understand what a specific disability can be, but combining that disability with the potential of being gifted causes many people to not understand how these two separate cognitive functions can coexist (Foley-Nicpon et al., 2011; Morrison & Rizza, 2007; Nielsen & Higgins, 2005). According to Ruban and Reis (2005) "the past 15 years has found that the lack of cohesive definitions, policy, and practice in identifying the students are a major problem with the identification process"(p. 118). This means that there is no consistent practice, policy, or even definition for people to use when trying to understand or identify twice-exceptional students.

Another major misconception is that many people believe the giftedness and a disability are often mutually exclusive, unique, and cannot be present in students at the same time (Foley-Nicpon. M. et al. 2012; McKenzie, R. 2010). Many people see that being gifted is having superior cognitive ability, which is usually represented by the use of full IQ scores (King, 2005; McCallum et al., 2013; Reis & Renzulli, 2004).

Another confusion when helping twice-exceptional students are most educators have a bias (Morrison & Rizza, 2007). According to Banco and Leech (2010) this can be "because of separation among disciplines in prep programs, not many teachers know the qualities" of both exceptionalities (p. 320). Because of the separation of disciplines, many

educators have different expectations for each group of students. They have a tendency to expect more from gifted students and lower expectations for students who have been diagnosed with a disability (Banco & Leech, 2010). Educators need to tear down these biases in order to help twice-exceptional students. Teachers, parents, and students often have “differing beliefs and opinions,” which lead to little to no accommodations, or too many accommodations (Weinfeld, Barnes-Robinson, Jewelers, & Shevitz, 2005. p.48).

These misconceptions, confusions, and teacher biases cause twice-exceptional students not to be referred for testing (Morrison & Rizza, 2007). The main practice of identifying gifted students using in achievement test, which produce an over all IQ score.

Gifted Identification

Knowing the definition of giftedness does not necessarily help with identifying students as being gifted. The gifted identification is a complicated diagnosis. Many school systems know giftedness exists, but there is no true universal concept for identifying giftedness (Foley-Nicpon et al., 2011; McCallum et al., 2013). Giftedness is associated with superior cognitive ability; however, there is no concise concept or cut off for IQ scores. In order to identify giftedness many schools rely on using the federal definition stated in the gifted section of the paper.

The federal definition basically states that a person must have or the potential to have high performance abilities. Many school systems rely on measuring giftedness by performing norm-referenced tests, which produces an over all IQ score (King, 2005; McCallum et al., 2013; McKenzie, 2010; Morrison & Rizza, 2007). These tests measure everything from reading, writing, math, and non-verbal. After these areas are scored

individually, an over all IQ score is developed to compare with age peers in order to determine if that students are gifted (King, 2005.).

Students over all IQ scores are compared to other peers using a bell curve. The bell curve informs educators where the students fall academically. The middle of the bell curve is average, the right extreme side represents upper intelligence and the left extreme side represents lower intelligence. Many school systems rely on IQ scores to be about 130-140 in order to be considered gifted (Crepeau-Hobson & Bianco, 2011). This causes problems with twice-exceptional students because their disabilities lower their IQ scores, usually scoring them in the average range (Buica-Belciu & Popvici, 2014; McKenzie, 2011; Morrison & Rizza, 2007). This under diagnosis causes many of these students' problems later in school because they do not have the proper support for their abilities.

Testing

Another factor that causes twice-exceptional students to be under diagnosed is relying on test scores. As stated before many students appear average in their classrooms. If a teacher notices discrepancies in the students, the teacher could refer these students for testing (Bianco & Leech, 2010; Morrison & Rizza, 2007). The discrepancy could be the difference between their oral communication and their written communication.

If these students are referred for testing to see if they have a disability or giftedness, the test that is normally used is a norm-reference achievement test. This compares students to their age peers groups. Normally norm-referenced achievement tests are used to look at the over all IQ score rather than to see if there is any discrepancy between certain subgroups, which can be oral communication and written language.

When these subgroups are compared using the bell curve, educators notice these students are falling in the average or slightly below average on the bell curve (Morrison & Rizza, 2007; Nielsen & Higgins, 2005). These subgroups display that there is not a big discrepancy or cause for alarm (Morrison & Rizza, 2007; Nielsen & Higgins, 2005). By not comparing the subgroups compared to each other can lead to students not being identified, which could later derail students' academic goals (Milligan & Nichols, 2005).

Many of the students appear average on the testing, leading teachers and parents to not believe the students need further diagnostic assessment (McKenzie, 2010; Morrison & Rizza, 2007). Displaying average abilities is a problem because students can appear average in the beginning of their academic careers; but as they continue in school their struggles begin to surface. If diagnosed too late it is hard for students to receive the proper help they so desperately need (McKenzie, 2010; Milligan & Nichols, 2005; Morrison & Rizza, 2007).

Masking effect

Another reason students go undiagnosed is due to the masking effect. This masking effect is caused by a superior cognitive ability, which overpowers students' disability, or the students' disability overpowers the students' cognitive ability from being observed (King, 2005; Morrison & Rizza, 2007; Yssel, et al., 2014; McCallum et al., 2013). This causes problems because twice-exceptional students display an average ability in completing assignments on grade level, which does not cause any alarm in teachers' minds (McCallum et al., 2014; Morrison & Rizza, 2007). The masking effect is a result of a combination of factors, such as compensating strategies, which result in average scores (Yssel et al., 2014).

The ability to utilize compensating strategies demonstrates that twice-exceptional students have a higher metacognitive ability (Hannah & Chore, 2008). These students developed metacognitive strategies to assist them to overcome their academic weaknesses (Hannah & Chore, 2008). For example, discovering a way to read a passage without reading every word. These strategies help students overcome their weaknesses, however, they are also masking their weaknesses, which is preventing them from receiving help. These strategies are displayed by the student appearing average.

Being considered average does not cause any alarm in a teacher's mind because the students are completing everything on grade level. This will be a problem as these students progress through their academic careers because they are not receiving any assistance with a disability or any support for their ability. This often leads to frustration or even underachievement in school (Reis & Ruban, 2005). According to Crepeau-Hobson and Bianco (2011) students who are showing average abilities, because of the masking effect, means they are less likely to be identified or even referred for more testing. However, because these students' superior cognitive abilities they were able to create strategies to help them overcome their weaknesses (Assouline, Niepon, & Dockery, 2012; King, 2005; McCallum et al., 2013).

Conclusion

The idea of students having both a cognitive disability and a superior ability has been around for approximately 20 years, but it has only recently been that this information has come into the spotlight (Morrison & Rizza, 2007). The lack of diagnosis causes many problems for these students who struggle in academics, social interactions, and with their emotions. These struggles caused by the under diagnosis of twice-

exceptional students lead them to have problems in their academic careers. It is necessary that teachers understand the characteristics of twice-exceptional students and provide support for them early in their academic careers.

Teachers need information to understand twice-exceptional and the many characteristics of this diagnosis. They also need strategies, which they can rely on to help these students succeed in their academic careers. A manual will be created to help to identify students as twice-exceptional and to properly support both their giftedness and their disability.

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Appendix A

**Twice-Exceptional:
Teacher Guide to
Identifying and help these students**

Manual for Identifying Twice-Exceptional Students

Why is it Important to Identify Students as Twice-Exceptional?

It is important to identify students as twice-exceptional because they deserve to get the support they need. These students often fall through the cracks. They are not given the educational support for their disabilities or support for their giftedness, which causes them to become frustrated and not fulfill their potential. Twice-exceptional students often have a masking ability. This masking ability allows these students to compensate for their disability through their giftedness. This causes a lot of confusion for teachers, parents, peers, and even individual students who have this condition.

Helping students as soon as possible is very important. Many school systems use the response to intervention (RtI) method to help identify students in need of assistance. The RtI process is a good method to use; however, the Rti process must be freely used compared with the RtI process today. Teachers need to make sure they are using the three tiers of RtI method. However, they must also going beyond the basic steps of the RtI method. There needs to be more data collection and examination of the discrepancies that these students exhibit.

In tier I of the RtI process, a teacher needs to first understand and accept the definition, get to know the students, observe the students in variety of situations, and review students work. These first steps of the RtI process are for the teacher to identify and pass the students to the next level in the RtI process. The second tier of the RtI process would involve interviewing the students and adults who interact with them on a daily basis. Next, the teacher will have to look for discrepancies in the students' work

and/or assessments. If the teacher still believes that there is a concern for these students, they should proceed to the third and final phase of the RtI process.

The last stage of the RtI process is where students are given a norm-referenced achievement test to see if there are any disabilities or gifted abilities. In this stage most of these students get lost in the identification process because these students will typically score average on the achievement test. If the tests are analyzed more closely most of these students will display some type of discrepancy between the test subgroups.

Understanding the Definition of Twice-Exceptional

Understanding the twice-exceptional definition is an essential step towards helping students achieve academic success. Teachers need to learn this definition, the different characteristics, and struggles of twice-exceptional students.

Twice-Exceptional Definition:

Being identified as twice-exceptional means students have both a superior cognitive ability along with a cognitive disability. The disability can be anything from a specific learning disability to autism. Specific learning disability is most commonly associated with students who are twice-exceptional.

List of Disabilities that can co-exist with Giftedness:

- ADHD/ ADD with giftedness: Students' attention span is hindering them from learning all the information possible. Also their attention span is hinders them not to be able to show their giftedness.
- Specific learning disability (LD) with giftedness: Students have reading, writing and also spelling difficulties, which hinder their ability to display their giftedness. Most of the time the specific learning disability hinders the child's ability to communicate through written language.
- Autism syndrome with giftedness: Students' social and communication skills are impaired to the point that they are unable to display their intelligence.
- Emotional and behavioral disorders with giftedness: Students are unable to control their behavior, which usually results in the students not being able to function properly and stay in a regular classroom.

Three Common Types of Twice-Exceptional Students:

There are three common types of twice-exceptional students. These types usually are hindering the identification process, not allowing students to receive the help that they need. Teachers need to closely examine these types of students to see if they fit under the twice-exceptional category.

1. Students are identified as gifted: Students have a disability that is hidden by their giftedness. Students are usually identified only being gifted because the disability is a slight hindrance, meaning that their disability is not significant enough to present itself on a norm-referenced test.
2. Students who are identified as having a disability: These students are just identified as having a disability and are only receiving help for that disability. Their disability is so severe that it is covering up their giftedness.
3. Students' gifted abilities and disabilities are masking each other: Students' disability and gifted abilities are evenly matched. The students score average on achievement and grade level exams. Having this masking effect means the students are not receiving support for either their abilities or disabilities.

Step 1: Knowing Your Students

After the teachers understand the definition of twice-exceptional, they need to get to know their students. The teachers need to determine if there are discrepancies between the students' potential and their actual product.

It is important for teachers and students to understand students' likes and dislikes. If the dislikes coincide with any academic problems they might be having it could be due to a learning disability. For example, students may act out in math class because they are struggling with math. Knowing that these students like certain subjects and dislike other subjects will help the teacher successfully accommodate these students.

Examples of ways to get to know your students:

- Have conversations with students
- Have the students fill out a survey
- Examine the students' reaction to different subjects
- Discuss the students with the previous year's teacher
- Discuss the students with the art teacher, physical education teacher, and music teacher to see how they behave in their classes

Step 2: Observing the Students in Different Situations

After teachers get to know their students, teachers are then able to observe the students in different situations. It is very important to observe the students in different situations because students are going to act differently in each situation. For example observing these students behavior pleasantly in music class but observe then students throw temper tantrums in math class. Observing students in different situations will help the teacher identify potentially areas that are causing these students problems.

Teachers need to observe the students interacting with peers. Observations is important because students can be displaying social awkwardness that needs to be addressed. Also teachers can observe to see if these students are retreating inward or if these students are in the middle of everything that is happening. The teacher might also observe students starting fights with other children. These are all good indicators of problems some twice-exceptional students face.

Teachers also need to observe how the students interact with adults. If these students act out with adults there could be an issues that is causing these outburst. Interacting with adults is a necessity for students. They must interact with a variety of adults, their teachers, their parents, and caregivers daily. Twice-exceptional students often have social awkwardness when it comes to interacting with adults because they believe that the adults expect more from them.

Teachers also need to observe students' actions in class. Observing students actions in class is a great indicator that something is happening with the students. Students may be causing disruptions. These disruptions could be impacting the entire class to the point that these students are kicked out of class. Students could also be

retreating inward so they do not have to interact and do class activities because they know they cannot do the work.

The last observation that a teacher needs to look for is what time of day the behavior occurs. If these students are showing off and causing a distraction during math class but not in other classes. Teachers need to watch for specific triggers with these students. Students can be fine with a simple task but then act out when the task becomes more difficult. If these students cannot read the directions, this might cause them to become frustrated and have behavior problems.

Observing these students in everyday activities during school can assist teachers deciding whether or not these students should be referred for more testing. These observations are a necessity for the RtI process. The RtI process can help these students achieve academic success if teachers are able to notice different aspects of these students behavior.

Step 3: Looking for Characteristic of Twice-Exceptional Students

Twice-exceptional students display several different characteristics. These characteristics let teachers know that there is something wrong. These characteristics may be social awkwardness, depression, or even anxiety. If a teacher notices any of these warning signs in students, teachers need to identify what is causing the trouble. For example the students have awkward social interactions the teacher might need to look into seeing if these students need some help with their peer interactions.

Not all characteristics are going to appear in every single twice-exceptional student. There are several characteristics that are more common than others; however, they may appear differently in each student. For example frustration, this is a very common characteristic of twice-exceptional students but it may appear differently in each students. It may appear in one student as a form of a behavior problem whereas in another student it could be just refusing to do work. Therefore, the checklist that will be provided is going to be an excellent resource for teachers to use when looking for different characteristics of twice-exceptional students.

Examples of different characteristics teachers might notice:

- Depression
- Anxiety
- Moodiness
- Social Awkwardness
- Helplessness

Step 4: Examining Work of a Possible Twice-Exceptional Students

Teachers need to closely examine student work. Teachers can gain information from student's work, such as if the student understands the information being presented or if they might need extra help in a specific area. Closely examining students' work will inform the teacher of the students' progress in class. This progress is important because the teacher can compare it to other areas of students' academic careers.

Examining the work of twice-exceptional students are extremely important because the teachers are able to notice if there are any discrepancies in students' work. By discrepancies, the teacher is looking for students' ability to perform higher than the work that they are actually producing.

Examples of what to look for in students' work:

- Look for on grade level or below grade level work
- If the students have conversation with the teacher and knows what they're talking about but then have average work
- If the students are displaying below average work in certain areas, such as writing format

The Next Steps if students are Suspected of Being Twice-Exceptional

If teachers notice students who are having problems and believe these students need assistance, teachers should pass students to the next RtI level. This level is more intense and has more focus on specific students.

This level of the RtI process is Tier II. Tier II has two sections. The first section would be the interview stage. The second section is looking for discrepancies for those specific students.

Step 1: Interviews

The RTI process involves interviewing several different people. One of the very first interviews the teacher should conduct is an interview with specific students. This will give the teacher a better understanding of the students progress, opinions, and feelings about academia and peers. This process can take half an hour or up to two days to officially complete. While the students' are interviewed the teacher will be making notes and comments on different aspects of the interview.

Example questions that a teacher might ask students:

1. How do you feel about school?
2. How do you feel about the other students in your class?
3. Do you feel as though you have any problems in different areas of class?
4. Please explain what problems you are having in those areas.
5. Do you feel that you fit into different groups in the class?

After the teacher interviews the students they would then interview the adults who interact with the students. This interview helps give the teacher more in-depth idea of the students and their progress. When interviewing the parents, the teacher can get their personal feelings about the students' academic careers and success. Also, while interviewing other adults that interact with the students, the teacher is able to see where these adults believe the students are having difficulty.

Example questions that you might ask to adults:

1. How do you feel this child is getting along with other students?
2. Have you noticed any problems the students are having with their peer interactions?
3. Do you have any concerns about this child with academics?
4. If so what are those concerns.
5. Have you noticed any problem academic areas for this child?

Step 2: Looking for Discrepancies

One of the best ways to identify a problem with the students are to look for any discrepancies that students might have. These discrepancies can be in social interactions and/or academia. It is very important for a teacher to look for these discrepancies and examine them to see if the students need to be passed on to the next stage in the RtI process.

Discrepancies with social interactions can be extremely informative to a teacher. If a teacher is able to communicate easily with students, but if the students are placed in a social interaction dealing with their peers they struggle. Social interactions is a great indicator that there is a problem because these students are unable to associate with their peers.

Next, the teacher needs to look for this discrepancy in academia. These discrepancies are very informative because a teacher is able to see if the students are producing the work quality expected. A teacher needs to examine the students' individual work, assessments, and even conversations that the students have with the teacher to see if there are any discrepancies.

Examples of some discrepancies:

- Students are communicating ideas but not able to express themselves through writing
- Score high in math but low score in writing
- Showing average abilities but is able to express more information through communication

Final Step in RtI Process

The final step in the RtI process is where students are identified and referred for final testing. This testing is usually a norm-referenced test, which means the students are tested and then compared to other students in their age group. Normally, students' over all IQ score would be used but this is where the liberal use of the RtI process comes in. Once students are given a norm-reference test, the teacher needs to look at the individual subtests rather than the over all IQ score. The subtests will tell if students are having problems in specific areas such as math or oral communication. If students have major discrepancies between these different subtests, they should then be identified as being twice-exceptional.

Solutions to Assist Twice-Exceptional Students

Once students are identified as twice-exceptional, it is the teacher's job to help support the disabilities and abilities. The teacher needs to make sure the students are receiving support for both their giftedness and their disability of the twice-exceptional diagnosis in order for the students to achieve academic success. The teacher also needs to coordinate with counselors and parents to help provide the best possible support for the students. Also, teachers need more training to identify and assist twice-exceptional learners. If teachers do not recognize the diagnosis, they can not meet all the students' academic needs.

The Teacher's Role in Providing Support for the Students

Teachers need to provide as much support for these students as possible. The teachers are providing academic information to students, therefore it is the teachers' job to make sure the students are getting the proper support for their disability and the enrichment the students need for their abilities. Teachers need to make sure these students are receiving proper support because if these students do not receive the support they may have problems later in their academic careers.

Examples of ways a teacher can provide success to the students:

- Develop strategies for these students
- Encourage their superior abilities
- Support their disabilities
- Use different assistive technologies to help these students succeed

The Role Counselors Play in Helping Twice-Exceptional Students

School counselors play a very important role in helping twice-exceptional students. They are able to offer emotional support that twice-exceptional students need. These students oftentimes have moodiness, anxiety, depression, low self-esteem and low self-concept. Counselors can assist these students with these emotional issues. Counselors are able to offer an outlet for students to talk about their problems. Counselors are there to offer suggestions and support for twice-exceptional students. They can offer social support for the students who are socially awkward.

Examples of ways counselors can help twice-exceptional students:

- Provide a safe environment
- Talk with the students to understand their feelings
- Make sure the students are not feeling judged
- Provide emotional support if needed
- Look for activities the students might enjoy
- Communicate openly with teacher and parents

The Role Parents Play in Helping Twice-Exceptional Students

Parents also play a very important role in helping twice-exceptional students. Sometimes the parents are not willing to become involved in the students' academic careers. However, when parents are willing to get involved they need to understand how to provide the support twice-exceptional students need at home. They can also get the students involved in extra-curricular activities that would support these students' giftedness. If the students are good at sports the parent could possibly enroll the students in sports they enjoy. Parents need to play a critical role in helping twice-exceptional students achieve academic success.

Examples teachers can help parents support their twice-exceptional students:

- Open communication with parent
- Discusses parents' feelings
- Discuss extracurricular activities
- If needed, discuss after school tutoring time
- Keep parents informed

Examples of ways parents can help students:

- Support the students' needs
- Get them involved in extra-curricular activities
- Do not put pressure on the students to achieve perfections
- Open communication with child

Characteristic Checklist for Twice-Exceptional Students

Check all that apply

- Poor Organization
- Negative Self-concept and self-esteem
- High impairments with social interactions
- High Impairments with academics (something is holding them back)
- Perfectionist
- Creativity
- Excel with other tasks
- Difficulty with certain tasks
- Withdrawn
- Anxiety (many notice this by a student's biting their nails)
- Depression (students acting down a lot of the time)
- Frustration (during different activities)
- Underachievement (students flying through different subject so they do not have to spend a lot of time on the assignment)
- Moodiness (students become out rages quickly)
- Behavior Problems
- Discrepancy between out of school behavior and in school behavior

Name Specific Examples of the student's behavior:

Where does the student Excel:

When is the Behavior occurring (be specific):

Identifying these concerns may not necessarily lead to a twice-exceptional diagnosis

Characteristic Chart

How the Characteristics might Manifest in Twice-Exceptional Students

The lists below are some examples of characteristics that might manifest in twice-exceptional students. This will not always be how individual students act but a teacher can get a good idea of how these different characteristics might look like.

- Frustration: can have students slamming books on their desk, crying, screaming, or even rocking back and forth
- Moodiness: crying, one minute the students are happy the next they are screaming or throwing books
- Poor Organization: desk is messy, or their book bag is full of paper, also students might have a hard time finding something
- Negative Self-Esteem or Self-Concept: by making comments like “ I am not worth anything, ” “Why are you wasting your time with me”
- Impairments with Social Interaction: have a hard time making friends, appear to be on the sidelines when every other kid is enjoying themselves
- Impairments with Academic: struggling with different subjects or even appearing as average in a classroom
- Withdrawn: not engaging in any activities, such as classroom discussion, or peer interactions
- Depression: crying, seeming down or upset a lot of the time

- Underachievement: not putting forth effort into an assignment, only doing what is expected and not what they can do
- Behavior Problems: throwing books, chairs, screaming, yelling, kicking, and many more
- Perfectionist: not turning in assignments until they are perfect, making oneself sick over a simple task because they cannot complete it perfectly
- Anxiety: stressing over little things, such as a rip in a paper, feeling scared or worried all the time

A List of Strategies for Teachers to Use in Order to Help Twice-Exceptional Students

- Teachers need to make sure their classroom has structure
 - Have a schedule of different events
 - List times of specific activities
- Teachers need to monitor twice-exceptional students' progress
 - Need to use different types of assessments
 - Check to see if the students are progressing at their rate
- Provide support for their disabilities and abilities
 - Provide enrichment for their abilities
 - Special education teacher should be providing support for their disability
 - Gifted teacher should be providing support for their giftedness
- Encourage participation in enrichment programs
 - This can be a gifted program
 - Independent projects
 - Extra-curricular activities- e.g. sports, students government, band, drama, and many more
- Develop a dual curriculum
 - Differentiation in the different lessons
 - If students are excelling in math have that students do high math activities, however, if the students needs more support with writing focus more closing on specific items in writing
- Implement real world scenarios

- This would allow twice-exceptional students to connect something they are struggling with
 - Learning percent by shopping and finding percent off the original item
- Help students develop personal strategies
 - This would allow the students to find what works best for them
 - Students could come up with reading every other word to get the idea of the passage
- Stress importance of education
- Develop stress management skills
 - Relaxation techniques
- Use multi-sensory instructions
 - Interactive Power Point
 - Hands on activities
 - Lecture
- Allow for creative production
- Create a calm and soothing environment
- Promote the students talents
 - Have harder books to read if students excel at reading
 - Have students write a newspaper, if her or she is an excellent writer
- Develop and use behavior modification techniques