

Beyond Stereotypes

Understanding, Recognizing, and Working With Twice-Exceptional Learners

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The term twice exceptional was coined to describe students who have a disability and who also have characteristics and traits associated with giftedness. These students may appear to be capable and bright but do not demonstrate that ability when asked to produce work in the classroom. Recognizing these students may be challenging, as the disability may overshadow the gift, the gift may mask the effect of the disability, or both remedial and advanced learning needs may go completely unnoticed. Strategies for serving twice-exceptional students include addressing the student's strengths and interests; providing appropriate social and emotional support; offering adaptations for academic strengths and accommodations for learning needs; and creating a supportive, safe, problem-solving culture that values the success of every student. What do twice-exceptional learners "look like"? The students profiled in this article provide a glimpse into the variety of ways twice exceptionality can present in the classroom environment.

Student Profiles

Lance

Lance is a second-grade student with autism spectrum disorder. He spends half of his day in the special education

classroom, where he receives reading and math instruction as well as social skills training. The other half of his day is spent in a second-grade general education classroom with support from a paraprofessional for social studies and science. He is progressing at an average pace in reading decoding but is still struggling with complex comprehension questions that require character analysis and evaluation. Lance likes school and the teachers say that he works hard, but he finds it to be confusing and unpredictable, particularly when instruction or directions are presented orally with few or no visuals. When he is stressed or confused, he will twirl his hair, flap his hands, or begin to cry. His classmates usually don't pay attention to these behaviors. Although he sits with other students at lunch, he does not have any friends. He spends most of his recess time wandering the periphery of the playground, talking to himself.

Lance says that he likes science class and demonstrates advanced knowledge and vocabulary in the area of botany and some aspects of biology. After having students read about places where plants and animals live, his teacher asked the students what that was called. Several students answered that it was their "environment." Lance, however, answered that it was a "habitat" because, as he explained, the

word *environment* means a larger area. He said it was like the difference between *house* and *neighborhood*. He was insistent that everyone use the right word. At home, Lance has developed his own "scientific lab" in his bedroom with different types of plants growing on his windowsill and bedside stand. He is keeping a journal in which he draws diagrams and pictures of the growth and parts of each plant. His mother is surprised by the sophistication and accuracy of the drawings and his vocabulary. Not only does he know the scientific name for many of the plants; he insists on using them both in his journal and when he's speaking about his favorite topic. Lance likes to read nonfiction books and to watch science programs on television about botany.

Hadley

Hadley, an active, verbally precocious, and social fifth grader, was identified for the gifted program when she was in second grade. In both her general education class and the gifted pull-out program, Hadley demonstrates creativity, curiosity, and advanced humor. She also has an excellent memory as demonstrated by her ability to remember facts and details that she learns in lessons, particularly social studies. She has a strong sense



of social justice and will come to the aid of students who are being teased on the playground or at lunch. She also becomes emotional when the television news describes children who are being abused or hurt by war or other similar circumstances. She was so upset about the fact that girls in Afghanistan were not being allowed to go to school that she persuaded her gifted resource teacher to support a fund-raising activity for those students. Hadley developed a plan, organized the student activities, and demonstrated leadership abilities. She is popular with all of the students in both her classroom and the gifted resource room and is well liked by the teachers.

Students who demonstrate gifts and talents but also have a disability are known as *twice exceptional* and do not fit the stereotypical characteristics of students with a disability or giftedness.

Given that she is in the gifted program, her classroom teacher was surprised to see that her fall universal screening scores in reading placed her in the 40th percentile. Although this scoring does not put her in the “at-risk” category, she is not demonstrating reading achievement commensurate with her intellectual ability. Her math universal screening scores are in the 95th percentile, and her progress in class would indicate that the assessment is accurate. The teacher is concerned because she has noticed that although Hadley uses advanced and descriptive vocabulary when she is speaking, her writing does not demonstrate any of this verbal richness. Her writing is limited to

short sentences, few descriptions, and basic vocabulary. Hadley’s mother has complained to the teacher that Hadley is overwhelmed by the amount of homework, particularly in social studies, even though it is a subject she loves. Her mother often finds Hadley playing games on her laptop rather than reading the textbook or doing the worksheet or homework questions. She frequently says she finished her homework in school or makes up excuses. An assignment that should take her a half hour may take her at least twice that amount of time. Her teacher has also noticed that her pace is slow and labored.

Pedro

Pedro is a ninth grader at a large urban high school. He likes his physical education and music classes, but he really enjoys his pre-engineering computer-aided design (CAD) class and shows great aptitude. He participates on the school’s football and track teams. Although he consistently earns average grades in all content areas, his teachers are frustrated because he often appears to be daydreaming or doodling, not following instructions on how to do particular assignments, and always looking for but rarely finding his homework papers. His notebook is a “disaster,” with scattered papers and no discernable system of organization. This has caused him to get in trouble numerous times due to missed deadlines on papers and projects. His English and history teachers have noted that he will contribute interesting insights or make connections between literature and historical events that other students miss or do not understand. But they also indicate that they are concerned because he disrupts the flow of the lesson by calling out the information or the answers. He is late

for his first-period math class two or three times a week because he has stayed up late and has overslept.

At home he likes to take apart old computers and small appliances and combine parts from them to make new devices. He often works past midnight if he is working on a new project. One of his creations was the basis for his science fair project last year, winning him a first-place award. His content-area teachers and other students were very impressed, as they had not seen evidence of that kind of performance from him before. Several teachers questioned if he really had done the work because it was so well done and more sophisticated than what he produces on a regular basis in his content classes. Although his father sees Pedro’s greater potential, as a single father who works two jobs, he has little time to meet with school personnel to discuss his son’s mediocre performance and tardiness.

Definition of *Twice Exceptionality*

Are these students’ profiles familiar? Do their profiles demonstrate the confusion that occurs when a student who appears to be capable and bright does not demonstrate that ability when asked to produce work in the classroom, particularly on written assignments? Is the lack of work often accompanied by inappropriate behaviors, such as calling out, disorganization, disinterest, or acting out? Teachers find such students to be confusing enigmas. Students who demonstrate gifts and talents but also have a disability are known as *twice exceptional* and do not fit the stereotypical characteristics of students with a disability or giftedness (Baum & Owen, 2004).

Through a better understanding about the nature of disabilities and a broadened

conception of giftedness, the term *twice exceptional* has entered the mainstream literature. Much of the literature on twice exceptionality addresses students who are gifted and have learning disabilities, though the term can be applied to other disabilities, such as behavioral and emotional disabilities, sensory and physical disabilities, attention deficit hyperactivity disorder (ADHD), and autism spectrum disorder. Professional organizations, like the Council for Exceptional Children, have developed definitions of twice exceptionality. Recently a group of professional organizations, including the Council for Exceptional Children, collaborated through a Community of Practice approach to create an agreed upon definition that could be used nationally (see box).

Passed by Congress in 1989 and continuing for over 20 years, the Jacob K. Javits Gifted and Talented Students Education Act was the impetus for multiple projects and research activities to further educators' understanding of the complex needs of twice-exceptional students. In 2004, with the reauthorization of the Individuals with Disabilities Education Act (IDEA), for the first time there was federal acknowledgement that students with disabilities could also be gifted. At the current time, there is an increased interest in this special population as indicated by the number of research studies and projects (e.g., Iowa's Belin-Blank Center for Gifted Education, Colorado Department of Education Twice-Exceptional Project), publications (e.g., the *Twice-Exceptional Newsletter*), and symposia (e.g., NAGC Twice-Exceptional Symposium). A common thrust of these projects focuses on the recognition and potential strategies for meeting the needs of twice-exceptional students.

Recognizing Characteristics of Twice-Exceptional Students

In the case of twice-exceptional students, their educational needs—whether advanced or remedial—may not be observed for a variety of reasons. Baum and Owen (2004) identified three

types of conditions that make it difficult for educators to recognize these special students. In the first condition, the disability is recognized but not the strengths. The second condition is the reverse: giftedness is recognized but not the disability. For the last condition, neither strengths nor disabilities are recognized.

Definition of Twice Exceptionality, National Twice-Exceptional Community of Practice

The following definition was created by the National Twice-Exceptional Community of Practice in 2014:

Twice exceptional (2e) individuals evidence exceptional ability and disability, which results in a unique set of circumstances. Their exceptional ability may dominate, hiding their disability; their disability may dominate, hiding their exceptional ability; each may mask the other so that neither is recognized or addressed.

2e students, who may perform below, at, or above grade level, require the following:

- Specialized methods of identification that consider the possible interaction of the exceptionalities
- Enriched/advanced educational opportunities that develop the child's interests, gifts and talents while also meeting the child's learning needs
- Simultaneous supports that ensure the child's academic success and social-emotional well-being, such as accommodations, therapeutic interventions, and specialized instruction.

Working successfully with this unique population requires specialized academic training and ongoing professional development. (personal correspondence, May 1, 2014)

Lance, Hadley, and Pedro each represent one of these three conditions. Lance's disability is recognized early and special education services are begun. Because the focus is on remediation, however, educators are unaware of or are not looking for his gifts or talents. This is a common situation for some twice-exceptional students. For example, for students with a reading disability, the focus may be on the decoding or fluency issue even though they may be capable of understanding and analyzing complex literature and participating in analytical discussions. The disability focus creates a barrier to advanced educational opportunities. In Lance's case, the school team acknowledges his disability and supports him academically and socially in those areas of need. However, the team has not recognized nor addressed his exceptional ability and advanced needs in science.

Twice-exceptional students must have a comprehensive, individualized, flexible plan that addresses the whole child.

Hadley's experience exemplifies when giftedness is noted at a young age and nurtured. Twice-exceptional students like Hadley may be identified for gifted education programming or may demonstrate their abilities of advanced thinking and conceptualization in classroom activities. However, it is not unusual for these students to "hit a wall" beginning in middle school or later when they are no longer able to compensate with their ability to memorize material or to verbalize responses (McEachern & Bornot, 2001). In Hadley's case, she memorized words and passages until she could no longer "fake" her ability to read and write on grade level. It is not unusual to hear adults mistakenly say that a student is "lazy" or "not trying hard enough" when an apparent mismatch between skills and performance occurs.

Pedro's remedial and advanced needs of twice exceptionality are completely unrecognized. Researchers refer to this phenomenon as students whose talents are "masked" by the disability or the disability is "masked" by the advanced ability, making the students appear average (Baum & Owen, 2004). These students often struggle or fail in school. The students are frequently confused and frustrated by their ability to conceptualize and think at a faster rate than most of their peers but at the same time are unable to keep up with the course requirements because of their disability. Educators may see glimmers of the gift or talent, like Pedro's CAD teacher or the science fair coordinator, but for the most part, the educational experience is rarely at a level commensurate with the student's intellectual or talent ability. Likewise, educators may see behavioral issues, such as Pedro's tardiness or calling out, but those issues likely would not, in themselves, demonstrate a need for further investigation.

Research indicates that twice-exceptional students require a dual-emphasis approach—one that focuses on the strengths and talents while supporting and addressing the disability.

It is not easy to recognize twice-exceptional students. As Reis, Baum, and Burke (2014) noted, "successful identification and programming depend on both the depth of educators' understanding about giftedness and disabilities and their intersection or comorbidity" (p. 218). Therefore, educators must become familiar with characteristics of giftedness and disabilities that may point to a potential twice-exceptional condition. Because educators, including special education teachers, interact with these students on a daily basis, it is important for teachers to recognize and understand the characteristics of twice-exceptional

learners. Table 1 is a compilation of characteristics and behaviors that are associated with giftedness. In addition, it includes a column about how a disability may influence that behavior. Please note that not all behaviors apply to all gifted students, nor do all of the behaviors of twice-exceptional students in the second column apply to all twice-exceptional students. These are merely indicators to determine further investigation of student need.

Strategies for Serving Twice-Exceptional Students

The purpose of recognizing the strengths and needs of twice-exceptional students is to employ appropriate strategies and accommodations to meet the dual individual educational needs. A problem-solving process is effective for bringing multiple sources of information in order to make decisions that will have the best outcomes for these students. The problem-solving process involves (a) defining area of need, (b) collecting and analyzing data, (c) implementing a plan and (d) evaluating the progress. Effective problem-solving teams include family members; teachers from general, special, and gifted education; administrators; and other school personnel involved with the student and who can contribute to the process. As the team reviews data from multiple sources that address the different facets of the student, it will become evident that a variety of strategies will be necessary to support the unique needs of the twice-exceptional student.

Research indicates that twice-exceptional students require a dual-emphasis approach—one that focuses on strengths and talents while supporting and addressing the disability (Assouline & Whiteman, 2011; Baum, Cooper, & Neu, 2001; Berninger & Abbott, 2013; McCoach, Kehle, Bray, & Siegle 2001; Nicpon, Allmon, Sieck, & Stinson, 2011; Willard-Holt & Morrison, 2013). Whereas it is possible to think of

strategies that work for students with high ability or potential and other strategies that have been successful for addressing the needs of specific disabilities, the fact that the twice-exceptional student requires both types of support necessitates an integrated, whole-child approach (Pereles, Omdal, & Baldwin, 2009). Addressing only the area of remediation or only the area of strengths and interests is inadequate.

In reviewing the literature on twice exceptionality, one will encounter many lists under the heading of "Strategies for Twice-Exceptional Students" (Baum et al., 2001; Baum & Owens, 2004; Coleman, 2005). It is tempting for teachers to look at the lists and come to the conclusion that the strategies listed are of a universal nature and any one of them would work equally well with any twice-exceptional student. It must be noted that though some common characteristics may exist, each twice-exceptional student should be regarded as having a unique profile requiring a tailored set of evidence-based strategies reflecting his or her personal strengths and challenges.

Strengths and Interests

When planning for instruction of twice-exceptional students, the first critical consideration is identification of the student's academic and intellectual strengths, talents, and interests in and outside of school and other personal factors, such as creativity, intrinsic motivation, and sustained attention. Focusing on the student's strengths before addressing the challenges is well supported in the literature (King, 2005; Olenchak, 2009; Reis et al., 2014). There are a number of important questions that the problem-solving team can ask in order to begin the process of determining how to address the student's strengths and interests. Figure 1 provides some questions teams can use to identify strengths and areas of need.

Questions targeting the student's learning strengths and interests guide the problem-solving team's development of a

Table 1. Comparisons of Characteristics of Gifted Students and Twice-Exceptional Students

Indicator	Recurrent behaviors and characteristics of gifted students	Possible behaviors and characteristics of twice-exceptional students
Learning	Possesses ability to learn basic skills quickly and easily and retain information with less repetition	Often struggles to learn basic skills; may demonstrate need for strategies in order to acquire basic skills and information
Verbal skills	Exhibits high verbal ability	May demonstrate high verbal ability but may also show extreme difficulty in written language area; may use language in inappropriate ways and at inappropriate times
Reading skills	Acquires reading skills early	Reading problems can be evident early; may demonstrate need for strategies in phonics, phonemic awareness, and fluency; may mask reading deficits through compensation until shifting from “learning to read” to “reading to learn”
Organizational skills	Organizational skills can vary; some gifted students can be very organized whereas others struggle	Usually struggles with organization of things, ideas, and time
Observational skills	Has keen powers of observation	Has strong observation skills but may demonstrate deficits in memory
Critical thinking/ problem-solving skills	Adept at critical thinking, problem solving, and decision-making skills	May excel in solving “real-world” problems; can demonstrate outstanding critical thinking and decision-making skills; often independently develops compensatory skills
Attention	Has long attention span; may demonstrate persistent, intense concentration	Attention is frequently affected; may be able to concentrate for long periods of time in areas of interest
Curiosity	Demonstrates questioning attitude	May demonstrate a strong questioning attitude, may appear disrespectful when questioning information and facts presented by the teacher
Creativity	Generates creative thoughts, ideas, actions; may be innovative	Imagination may be unusual; may frequently generate original and at times rather “bizarre” ideas; is extremely divergent in thought; may appear to daydream when generating ideas
Risk taking	Takes risks	Is often unwilling to take risks with regard to academics or areas of deficit; takes risks in nonschool areas without consideration of consequences
Sense of humor	Possesses unusual, often highly developed sense of humor	Humor may be used to divert attention from school failure; may use humor to make fun of peers or to avoid trouble
Maturity	May mature at different rates than age peers	Sometimes appears immature by using anger, crying, and withdrawal to express feelings and to deal with difficulties
Independence	Has a strong sense of independence and self-efficacy	Requires frequent teacher support and feedback in deficit areas; is highly independent in other areas; often appears to be extremely stubborn and inflexible

(continued)

Table 1. (continued)

Indicator	Recurrent behaviors and characteristics of gifted students	Possible behaviors and characteristics of twice-exceptional students
Social skills	May not be accepted by other children and may feel isolated	May be perceived as a loner; sometimes has difficulty being accepted by peers due to poor social skills
Leadership	Exhibits leadership ability	May be a leader among the more nontraditional students; can demonstrate strong “streetwise” behavior; the disability may interfere with ability to exercise leadership skills
Broad interests	Is interested in a wide range of topics	Is interested in many topics, but often, learning problems impede pursuit of them
Focused interests	Shows very focused interest, that is, a passion about a certain topic to the exclusion of others	Often demonstrates a very focused interest, that is, a passion about a certain topic to the exclusion of others—often not school-related subjects

Note: Adapted from *Comparisons of Characteristics of Gifted Students With or Without Disabilities*, by E. Nielsen, D. Higgins, L. Baldwin, D. Pereles, 2000, unpublished manuscript. Adapted with permission.

Figure 1. Questions to Help Determine Need in the Area of Strengths and Interests

- In what subjects does the student excel?
- Does the student show evidence of higher level thinking in this subject?
- What is the student’s favored mode of learning information and skills?
- What is the student’s favored mode of expressing him/herself?
- Does the student qualitatively extend assignments and projects beyond the requirements? (Not just writing more pages for a report, but adding insights reflecting a deeper and more complex understanding.)
- In what topics does the student have interest and knowledge that is far above the level of a typical student of the same age? Does the student have an intense focus on a single topic that may be considered unusual?
- In what school-based or out-of-school activities does the student participate, and/or perform at a higher level than his/her age-mates and/or has received recognition?
- To what degree does the challenge/disability impact the ability of the student to pursue this area of interest?
- How has the student utilized his/her strengths to compensate or mediate the areas of challenge?

comprehensive plan for the student. Determining a student’s strengths and interests can be ascertained through a variety of assessments, such as student, parent, and teacher interviews and checklists. Observation and anecdotal information, often collected via student interest forms, is also helpful in developing a profile of the student’s strengths and interests. For example, *Scales for Rating the Behavioral Characteristics of Superior Students* by Renzulli et al. (2010) addresses areas of learning, creativity, motivation, and leadership as well as the option to gather information on content areas, the arts, communication, and planning. A student

interest form (see Yssel, Adams, Clarke, & Jones, 2014) for parents to fill out requests information regarding the student’s favorite books, after-school activities, a passionate interest, vocabulary, and so on. The *Interest-A-Lyzer Family of Instruments* (Renzulli, 1997) is a survey for students that requests information about areas of interest in which the student has already been involved in order to create opportunities for further investigation or creative productivity. This type of instrument is easy for parents to complete and garners helpful information from a very important source: the student. Sitting

down with the student one-on-one is also extremely important, especially for younger students who might not be able to fill out a form on their own. This kind of information can help fill in the gaps not addressed by more formalized assessments.

Once the problem-solving team has this important information as part of a comprehensive data set, they can begin to determine a plan for the student to develop identified strengths and interests. Plans will be tailored to the student’s particular strengths, learning needs, and personality. A sample of some of the strategies that have frequently been suggested are

Figure 2. Questions to Help Determine Need in the Area of Challenge or Disability

- In what subject(s) does the student have difficulty?
- What is the nature of the learning difficulty?
- What is the student’s favored mode of learning information and skills?
- What tasks or learning activities does the student avoid?
- Does the student demonstrate negative or unexpected behaviors during certain learning tasks or activities?
- What is the student’s favored mode of expressing him/herself? Does the student prefer oral versus written responses?
- What learning/academic incongruities are present (e.g. advanced comprehension of material presented visually and/or aurally, but low comprehension if read)?
- To what degree does the challenge/disability impact the ability of the student to pursue strengths and interests?

Figure 3. Questions to Help Determine the Need in the Area of Social-Emotional Concerns

- What triggers, if any, set the student off?
- What behaviors does the student exhibit that interfere with learning?
- To what degree does the student exhibit heightened empathy and sensitivity?
- Does the student make derogatory comments such as “I’m dumb” about him/herself?
- What, if any, uneven development exists physically, emotionally and/or socially?
- What evidence exists that would indicate extreme perfectionistic tendencies that would prevent the student from taking risks?
- How does the student hide their strengths and/or their disabilities to fit in with peers?
- Does the student avoid peers or do they avoid the student?
- Describe the circumstances of when the student appears anxious or agitated.
- Describe when the student becomes angry and/or refuses to participate or follow class rules?

acceleration; content extension to include greater depth, complexity, and novelty; and higher-level thinking activities, such as analysis, evaluation, and synthesis (Baum et al., 2001; Baum & Owens, 2004; Bianco, Carothers, & Smiley, 2009; Coleman, 2005; McEachern & Bornot, 2001). Examples for addressing strengths and interests are given in the section “Twice-Exceptional Student Plans.”

Learning Needs

The second critical consideration involves the student’s learning needs. Like the strengths-and-interests area, there are questions for the problem-solving team to ask to help them determine a plan. In Figure 2, questions that can inform the process of developing plans to address the particular learning needs of a twice-exceptional student are presented.

Some of the same information from the strengths-and-interests area will be useful here as well. It is beneficial to review the student’s cumulative records to determine if changes in student performance or observations from teachers has recently occurred (Assouline, Nicpon, & Huber, 2006). As noted earlier, a perceptive teacher may notice that a student’s scores on the universal screener are discrepant. If a student’s score is very high on a math assessment, for example, but in the low-average range in reading, that can be a trigger for further investigation. The teacher could review classwide reading assessments, writing samples, and reports from the student’s previous teacher. Informal observations of the ways the student approaches or struggles during specific academic tasks can also be very helpful. If the data support the teacher’s initial impressions that the student needs

academic or behavioral help, then a plan for classroom intervention should be implemented. If progress monitoring indicates that the student is not making adequate progress, a problem-solving team meeting should be convened. The problem-solving team might recommend that the support be increased in duration or intensity. In some cases, the problem-solving team may request a further assessment because of the severity of the student’s needs.

Pedro, for example, might require further evaluation. His overall average grades and test scores may not raise any “red flags” about his potential ADHD. However, signs, such as his extreme disorganization and inattention, as well as the need for the teacher to redirect his off-task behavior, indicate that there might be a disability. The problem-solving team could make the recommendation for a more

thorough assessment and evaluation. The section “Twice-Exceptional Student Plans” provides examples of how a problem-solving team might address students’ specific needs due to disability.

Social and Emotional Needs

The third area concerns the social-emotional dimension. In the effort to address the needs of the whole child, the student’s social and emotional needs must be addressed. It is common for the academic self-concept of twice-exceptional students to be very low as they often see themselves as imposters or as inadequate. Researchers have noted that twice-exceptional students experience high levels of anxiety, poor self-concept, and anger because of the discrepancies between what they can and cannot do (Baldwin, 1995; Baum & Owen, 2004; Reis et al., 2014; Schiff, Kaufman, & Kaufman, 1981). Because these students often experience feelings more intensely, it is crucial that they feel supported. Figure 3 provides questions members of the problem-solving team might ask in regard to the social and emotional needs of twice-exceptional students.

As the questions indicate, the social-emotional dimension related to students with twice-exceptionality is varied and complex. Students may be confused because of high abilities in some academic subjects and the dichotomy of learning difficulties in other subjects or within the same subject. Teachers and other school personnel can help these students by ensuring that the school environment is designed to be accepting and safe. A variety of people can support twice-exceptional students’ social and emotional needs. Teachers, psychologists, family members, administrators, coaches, mentors, community members, and peers who share the same strengths, talents, or passions can be called upon for support. In addition, Neumeister, Yssel, and Burney (2013) stressed that family members are instrumental in nurturing and supporting their child’s social and

emotional needs. Because the concept of twice exceptionality is still new for many educators, acceptance, willingness, and an interest in meeting the needs of twice-exceptional students needs to be present and part of the culture of the school. A nurturing, safe environment is crucial for a twice-exceptional student to be willing to take risks necessary to address the challenges.

Twice-Exceptional Student Plans

The three critical considerations discussed—strengths, academic needs, and social and emotional needs—demonstrate how each can be addressed to support the success of twice-exceptional students. Lance’s, Hadley’s, and Pedro’s plans show how their schools’ problem-solving teams developed integrated plans. The plans address the students’ strengths and interests as well as learning needs with research-based strategies and accommodations in both areas (National Association for Gifted Children, n.d.). In addition, the plans describe the social-emotional dimension and how that area will be addressed. The intent is that the progress of the students will be monitored and plans will be reviewed regularly in a flexible, continuous improvement cycle. In school systems where the environment and culture are conducive for recognizing and meeting the varied and individual needs of twice-exceptional learners, educators and families can develop integrated individualized plans that address the needs of the whole child.

Lance

Strengths and Interests, Accommodations

- Gifted education teacher will work with the classroom teacher to facilitate curriculum compacting for possible subject acceleration or enrichment.
- The classroom teacher had pretested Lance to determine which content standards were met and which he

still needed to learn. He tested out of four of the nine science units for the year. It was determined that it would be more appropriate to develop enrichment activities for him during weeks when the teacher is teaching those four science units.

- Gifted education teacher will facilitate the development of an independent investigation based on a specific science topic of his choice and create a contract that breaks down tasks that includes the following: (a) problem finding, (b) research tools, (c) a rubric, (d) specific time lines for completion, (e) key concepts to be addressed, (f) check-in dates, and (g) method of presentation.

Learning Needs, Accommodations and Modifications

- Teachers will collaborate to locate video and audio resources and teach him how to acquire information from these resources. The special education teacher will teach him how to use data charts and graphic organizers to record and summarize his information. She will also assist him with the writing associated with the final product. His other teachers will reinforce the strategies.
- The family will read and discuss some of the more difficult resource reference books with him.
- The gifted teacher will help Lance determine the type of product (e.g., PowerPoint, oral presentation, cartoon strip, and different types of charts) that will best represent and communicate his knowledge.

Social-Emotional Needs, Support

- The school psychologist will meet with Lance once a week as part of a social group of second-grade peers during lunch.
- The family will take him to the Nature Center after school once a week to be part of their organized plant and animal classes with the hope of finding other children who share the same intense interests.
- The science coordinator will invite Lance to join the Junior Scientist Club.

Hadley

Strengths and Interests, Accommodations

- Hadley will continue in the gifted program. The gifted education teacher will integrate learning accommodations into her activities to make them accessible to Hadley, such as audio books, videos, and graphic organizers.
- The gifted education teacher will meet with Hadley to determine an independent project based on her social justice interests, such as poverty or Afghanistan.

Learning Needs, Accommodations and Modifications

- As per the problem-solving team, the reading teacher gave Hadley reading and writing assessments and determined that she was a candidate for more intense reading support from a reading specialist. Hadley will receive a specific and systematic reading and writing approach three times a week for 30 minutes plus specific, coordinated instruction in the general education class during reading instruction.
- The teachers, including the new reading interventionist, will collaborate to create a reading plan that can be applied across all of her educational settings. She will have access to the highest-level reading and discussion groups.
- The family will have her practice keyboarding 20 minutes a day using any of the high-interest keyboarding programs available for home use.
- The gifted teacher will teach her to utilize voice-activated recognition software to capture her creative ideas and advanced thinking.

Social-Emotional Needs, Support

- The gifted teacher will recommend audio books, articles, and videos to Hadley on the lives of adults (e.g., Henry Winkler, Whoopi Goldberg, and Jewel, the singer) who have had similar learning issues but who learned how to compensate for them.

- The principal will invite Hadley to join the School Superintendent's Youth Task Force on Mediation and Bullying Prevention.

Pedro

Strengths and Interests, Accommodations and Modifications

- The pre-engineering CAD teacher knows that Pedro demonstrates more skill and knowledge than other students in his classes. He will provide Pedro subject acceleration or a supervised project of his choice.
- The pre-engineering CAD teacher will add Pedro to the high school Engineering Olympiad Team. The team is building a robot for sorting recycled materials.

Learning Needs, Accommodations and Modifications

- The English teacher volunteered to teach Pedro how to color-code his notebooks and to access his homework online.
- Pedro will check in with the English teacher once a week after school to organize his materials and review homework and project timelines.
- The family agreed to provide a dedicated study space for him and an area in the basement where he can organize his supplies for his academics and his projects.

Social-Emotional Needs, Support

- Pedro's participation on the high school Engineering Olympiad Team will provide him with the opportunity to positively interact with other students who have a shared interest and skill level.
- The pre-engineering CAD teacher also teaches at the nearby middle school. The teacher has several students whom he asked Pedro to tutor in 3-D printing application.

As demonstrated in the case examples of Lance, Hadley, and Pedro, comprehensive, individualized, flexible plans that address the whole child work best for twice-exceptional students. The composite profiles of these three twice-exceptional students provide

insight into the multidimensional nature of this phenomenon, including characteristics and challenges associated with recognition of either gifts and talents or disability in order to facilitate the delivery of appropriate services, and specific strategies to support students' needs across the spectrum. For the twice-exceptional student to be successful, educators need to set aside preconceived notions of disability and giftedness. The focus should be on the unique needs of twice-exceptional students to create an integrated, individualized approach rather than trying to fit them into an existing system.

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