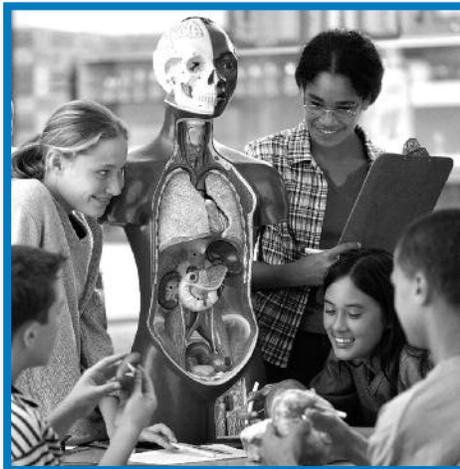


TWICE EXCEPTIONAL

GUIDE

2007



*Preparing Ohio Schools to Close the Achievement Gap
for Gifted Students with Disabilities*



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Twice Exceptional Guide

Preparing Ohio Schools to Close the Achievement Gap for Gifted Students with Disabilities

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Table of Contents

<u>Introduction:</u>	3
<u>Overview:</u>	5
<u>Chapter One: Characteristics of Students Who Are Twice Exceptional</u>	9
<u>Chapter Two: Social and Emotional Needs of Students Who Are Twice Exceptional</u>	18
<u>Chapter Three: Strength-based Instructional Planning</u>	27
<u>Chapter Four: Instructional Strategies and Interventions</u>	38
<u>Chapter Five: Differentiated Lessons</u>	62
<u>Chapter Six: The Building Principal: Supporting Teachers in Recognizing and Serving Students Who Are Twice Exceptional</u>	73
Appendices:	87
Appendix A: Glossary	88
Appendix B: Assembling a Professional Library for Differentiation	91
Appendix C: Scenarios	92
Appendix D: Steps to Strength-based Instructional Planning	102
Appendix E: Bibliography	104

Introduction

In 2002, the Ohio Department of Education, Office for Exceptional Children, commissioned the Ohio Gifted Task Force to make recommendations for better serving Ohio's gifted students. The document, entitled *Gifted in the 21st Century: A Report of Findings and Recommendations*, identified a critical need to better recognize and serve the needs of traditionally underserved special populations, including children who are twice exceptional. Twice-exceptional children are students who are identified as gifted and who also have a disability such as attention deficit hyperactivity disorder (ADHD), learning disability or Asperger's Syndrome.

“Children who are gifted can also have a disability that hinders their success unless proper interventions are provided. These twice-exceptional children may receive special-education services, but gifted services are often not even considered” (Ohio Gifted Task Force, 2002).

The School Study Council of Ohio was also commissioned to conduct a study to provide information about identifying and serving children who are twice exceptional. The report, entitled *Ohio's Twice-Exceptional Students: A Status Study (2005)*, revealed that children who are twice exceptional are not adequately recognized at the district level, and that a common understanding of the meaning of “twice exceptional” is lacking in our schools.

The earliest literature on meeting the needs of students who are twice exceptional addressed children with learning disabilities, physical impairments and sensory disabilities (Whitmore and Maker, 1985; Baum, 1990; Brody & Mills, 1997). More recent twice-exceptional literature addresses persons with Asperger's Syndrome, ADHD and emotional disorders (Neihart, 2000; Lovecky, 2004; Webb et al., 2005). It is important to understand and accept that a disability can coexist with giftedness.

“Many more students may be learning disabled and gifted than anyone realizes. In spite of their high intellectual ability, such students remain unchallenged, suffer silently and do not achieve their potential because their educational needs are not recognized and addressed. To improve services for this population, we must move away from using rigid

definitions and cut off scores to specify who receives special programming. Broader definitions of giftedness and learning disabilities are needed to allow for students with both exceptionalities. Programming options should be flexible” (Brody & Mills, 1997).

Baum, Cooper and Neu (2001) found that, “even under the most conservative definitions of giftedness, gifted students are seriously underrepresented among the population of students with disabilities. Gifted learners frequently neglected in our schools are those with concomitant learning and attention disabilities. Because they exhibit problems due to physical, cognitive or behavioral deficits, these students seldom achieve at a level of which they are capable.”

Research projects funded by the Office for Exceptional Children and conducted in 2005 offered insights, recommendations, tools and additions to the development of this product. Strength-based individual planning emerged as a theme from the literature and the twice-exceptional study. The research conducted on written education plans recommended that opportunities for personalized, independent, self-directed learning be incorporated into instructional planning.

This publication serves as a tool to assist educators as they help students who are twice exceptional work toward their maximum potential. It offers information to help educators understand, recognize and meet the needs of these unique students by providing examples of instructional strategies and interventions that are challenging and appropriate.

Overview

Throughout this document, scenarios profiling students who are twice exceptional are presented to assist educational teams in understanding how to integrate services to meet the dual needs of these students.

Russ hurries to his first-grade classroom. He arrives early. His teacher has the day's work listed on the board. He and a friend compete to see who will finish first. They both complete the work before lunch and spend the afternoon drawing pictures and "hanging out," waiting for the remainder of the class to finish.

Fran is intrigued with science, especially DNA. She has researched the topic and has interviewed a local university professor to deepen her understanding. Her classmates and teacher are surprised that she knows so much about so many topics. She often knows things before the class studies them. Fran's teachers expect everyone to be on the same page each day. This doesn't make sense to Fran. She knows from her own experience that everyone doesn't learn the same way. It is difficult for Fran to fit in. Socially, she doesn't have many friends. When others approach her, she lashes out.

Spencer loves music, movement and hands-on projects. His third-grade teacher taught science through creative movement and hands-on research projects. Spencer enjoyed learning this way and was easily engaged in science projects. He often produced high-quality work but rarely turned it in because he couldn't find it. Spencer blamed the teacher for his low grade because "she knew he did the project well."

Michel is a 4-year-old with spina bifida whose condition is complicated by brittle bone syndrome, making it necessary for him to be strapped into a special device to simulate standing. A desktop can be extended to allow him to write, eat, play games and do puzzles. Michel received occupational therapy for part of the day and free play with other preschool youngsters with disabilities for the remainder of the day.

Kimberly is a 10-year-old fourth-grader who was identified in the first grade with Asperger's Syndrome and as being gifted in the superior cognitive category. Academically, Kimberly is making adequate yearly progress. Her fourth-grade Ohio Proficiency Test results indicate that she is in the proficient range for math and citizenship and advanced proficient in the area of science. She is in the accelerated range for reading, according to Ohio Achievement Tests taken in third grade.

Ethan is a fifth-grade student who was first identified as gifted in the areas of math and science. He was evaluated for special education services in fourth grade and was identified with a specific learning disability in the areas of reading, spelling and written expression.

Matthew is ten years old in the fourth grade. He was identified with an emotional disability because of a consistent pattern of oppositional defiant behaviors. His art teacher recommended Matthew for gifted evaluation. He was identified as gifted in the visual arts.

Today's classrooms are diverse. Teachers must meet the advanced needs of students as well as provide support for struggling learners. Russ, Fran, Spencer, Michel, Kimberly, Ethan and Matthew, as students who are gifted and also have a disability, add another perspective to instructional planning.

- *Although Russ excelled in early elementary, he struggled later in his school years because he lacked the organizational and planning skills that more challenging curricula demanded.*
- *Fran's disability remained unrecognized until her senior year in high school. Her elementary experiences were masked with anxiety and social isolation, while her gifts were not developed.*
- *Spencer struggled socially and lacked planning skills. As he entered college, he did well at the beginning of each term but fell off and lost interest at the end of the semester. Overwhelmed with paper work and deadlines, Spencer was always anxious for a new term to begin.*

- *Once identified as twice exceptional, Michel attended first and second-grade classes for reading and social studies and the kindergarten class for the remainder of the day. Working at his ability level, he began to blossom. His medical prognosis is that he will live less than two years; however, the quality of his mental and emotional life is easing the struggle and pain of his physical life.*
- *Kimberly has shown growth, specifically in the area of behavior in the classroom. She works best in small groups and one-on-one situations. She is very sensitive to loud noises and often wears headphones when in large groups or noisy situations. Her individualized education program (IEP) indicates that she should have an aide with her in the classroom. She is included in all regular education classes and receives pullout services for occupational and speech therapies.*
- *Ethan is an intelligent young man who has a keen sense of how to be successful. He understands his own unique learning style and is able to incorporate accommodation suggestions. He is proactive in finding new ways to accomplish tasks and understands that he learns differently. It was noted that he still finds the concept of being twice exceptional confusing at times, particularly when he is unable to produce work of a certain caliber. He is particularly frustrated when he has trouble in science and math.*
- *Matthew receives services in the regular classroom with consultation and pullout conducted by a behavior specialist. Among the annual goals on his IEP are that he will increase his ability to make appropriate choices when faced with frustrating or anger-causing events and that he will demonstrate measurable progress toward the mastery of coping skills needed to reduce his problem behaviors.*

Potential is defined as possible, latent, capable of being. Coaching, mentoring and supporting students are crucial as schools help twice exceptional students reach their potential. Successful teachers are those who can facilitate learning by creating environments that provide a positive structure with highly visible expectations, avenues for student investigation, opportunities to connect to strengths and interests, and choices that empower students. It is also helpful if the teacher expresses patience, a good sense of humor and the ability to move quickly through learning material.

This document is designed to assist teachers and administrators with recognizing and serving students who are twice exceptional. Chapter 1 addresses the characteristics of students who are twice exceptional. Chapter 2 discusses the social and emotional needs of these students and strategies for understanding and intervening behaviorally. Chapter 3 outlines the steps to strength-based instructional planning. Chapter 4 presents intervention strategies focusing on teaching students how to learn. Both academic and behavioral strategies are discussed. Chapter 5 provides an example of a differentiated lesson. A lesson from Ohio's Information Management System (IMS) is used as a springboard to illustrate differentiation strategies. Chapter 6 suggests the steps a building principal can take to better recognize and serve students who are twice exceptional.

Chapter One

Characteristics of Students Who Are Twice Exceptional

Once a person has a solid understanding of the characteristics of children who are twice exceptional, some will easily stand apart from typical peers. **The inconsistencies of their abilities, or “asynchrony,” are the first telling signs.** A learner who is gifted with a learning disability may be able to perform orally to high levels of performance but often performs miserably in written expression. They are great problem solvers when working with hands-on materials but have difficulty solving math problems in the textbook. They may be the class clown but receive average grades. Some students who are twice exceptional, especially those with autism or ADHD, lack the social skills or social reciprocity necessary to sustain appropriate relationships with others. They may be “the last one picked and the first one picked on.”

Other students who are twice exceptional may not stand out because their gifts mask their disability. They may perform to average ability, therefore not raising the alarm of parents and teachers. Unrecognized children who are twice exceptional may never perform to their true potential. Often these children make their way through elementary school and high school but “hit the wall” when they reach post-secondary learning environments. Not having had the opportunity to recognize and understand the challenges imposed by their unidentified disabilities or their gifts, these children have not learned the strategies and skills to compensate for these challenges.

To assist in better understanding the needs of students who are gifted with disabilities, citations from the literature are provided. They denote the characteristics of students who are gifted and those who are gifted with disabilities such as learning disability, attention deficit disorder, Asperger’s Syndrome, physical disability, visual disability and hearing impairment. Additionally, references such as *Ohio’s Operating Standards for Schools Serving Children with Disabilities*, *The Gifted Identification Rule* and the *Diagnostic and Statistical Manual of Mental Disorders (DSM IV)* provide further information.

Baum, Cooper and Neu (2001) identified the following common characteristics of gifted students. Each characteristic is illustrated by an example.

A propensity for advanced content: As a 4-year-old, the student is obsessed with learning everything there is to learn about a topic such as insects or the solar system. By the first grade he knows more than the teacher and at a high level of complexity.

A desire to create original products: The class assignment is to write a book report about the Civil War. The student desires to create an accurate replica representing ALL of the battles of the Civil War.

A facility with and enjoyment of abstract concepts or playing around with the abstract: A group engages in conversation on the concept of time, which leads to the discussion of whether people can exist in simultaneous realities.

Nonlinear learning styles: She can solve complex math equations without visually or consciously going through the steps and may fight writing the steps used in solving the problem. This happens often when writing is a problem but calculations come easily.

Task commitment in areas of talent and interest: He is talented in music, exhibiting advanced levels of commitment and performance in the band, quartet and combo, but doesn't complete work in academic settings.

Identification with others of similar talent and interest: Students with similar passions band together and meet to pursue like interests such as metaphysics.

A heightened sense of failure and injustice: As an adolescent she reacts emotionally to the tragedy experienced by the victims of hurricane Katrina and, through the guidance of a teacher, organizes local relief efforts making a contribution for the greater good. Her emotions are directed toward positive actions, leaving her feeling empowered rather than powerless.

Willard Holt (1999) identifies common characteristics of students who are gifted and who also have a learning disability.

High abstract reasoning ability: He can clearly articulate his thoughts when engaging in conversation, but cannot communicate the same information at a later time.

Good mathematical reasoning ability: She can innately estimate and use mathematical skills instead of trying to solve problems with paper and pencil.

Keen visual memory and spatial skills: When the teacher is talking in social studies class, he will process the information visually using mental pictures to recall details.

Advanced vocabulary: She can talk about anything but struggles to produce in writing. She may have an advanced vocabulary but has difficulty with word recall or oral reading. Although

she may not be able to read out loud fluently and stream together six sentences, she can comprehend the information.

Sophisticated sense of humor: He may burst out laughing during a teacher's discussion because he came up with a double entendre.

Imaginative and creative: She has a disability in written expression and may be able to dictate a long, involved, detailed story extemporaneously, but she cannot sit down and write it out with ease. Over time the stories stop. Seeing that she can't produce, she stops creating stories at all.

Insightful: He has the ability to walk into a room, take an accurate emotional temperature of the people and gravitate to the friendliest group.

Exceptional ability in geometry, science, arts, music: She enjoys unique, hands-on learning experiences and the orderliness of science and math.

Good problem-finding and problem-solving skills: He may have good problem-finding and problem-solving skills but lacks processing skills. He may "sit on" a problem for a few days and later arrive at a phenomenal solution without knowing how he got there.

Difficulty with memorization, computation, phonics and/or spelling: She is resistant to repetition and drill but learns easily when picture mnemonics or song and rhythm are used to enhance memory.

Distractibility and/or disorganization: He can build an advanced Lego structure in his bedroom but often forgets to brush his teeth or where he put his shoes.

She may be able to participate in a hands-on research project at advanced levels but sometimes fails because she misplaces her work and doesn't turn it in.

He may have difficulty transitioning from one activity to another. He may still be working on seatwork while everyone else is leaving for lunch. He has to be torn away from the work and leaves a paper trail in the classroom as he exits to the lunchroom. When he returns to class, he is unable to find, organize and complete his work.

Super sensitivity: As a teenager she sees the world as it really is and grieves.

He may have a physical sensitivity to clothing and refuses to wear jeans. The seams in his socks are so annoying that he wears them inside out.

Perfectionism: He has an advanced understanding of science, but is afraid to begin a major science project because he fears it will not be good enough and waits until the night before the due date to begin.

As a middle school student, she falls completely to pieces when her autobiography receives criticism. Her unreasonable self-expectations require everything she does to be perfect.

Grasp of metaphors, analogies, satire: He excels in English. His visual skills, sense of humor and ability to put unlike things together result in very creative and original compositions.

Comprehension of complex systems: She understands economics and opens a cappuccino counter, adjusting prices to beat all of the competition in the neighborhood.

Often fails to complete assignments: He always aces his math tests but doesn't complete homework because he doesn't think he needs to do something that he already understands. He tells his teacher, "When you start teaching me, I'll start doing the work."

Difficulties with sequential tasks: When given short sequential tasks, she will work in bursts through them, "goofing off" in between.

When given lengthy sequential tasks he may begin the first step but not be able to perform additional steps because he can attend to only one step at a time.

Wide variety of interests: She began an extracurricular project according to her interest at the time and leaves a trail of unfinished work because her interests have changed.

The research of Cline (1999) and Whitmore and Maker (1985), cited in Willard Holt (1999), revealed characteristics of students who are twice exceptional. A list of common characteristics of gifted students with physical disabilities includes:

- Development of compensatory skills;
- Creativity in finding alternate ways of communicating and accomplishing tasks;
- Impressive store of knowledge;
- Advanced academic skills;
- Superior memory;
- Exceptional problem-solving skills;
- Rapid grasp of ideas;
- Ability to set and strive for long-term goals;
- Greater maturity than age mates;
- Good sense of humor;
- Persistence, patience;
- Motivation to achieve;
- Curiosity, insight;
- Self-criticism and perfectionism;
- Cognitive development that may not be based on direct experience;
- Possible difficulty with abstractions;
- Possible limited achievement due to pace of work.

Common characteristics of gifted students with visual impairments include:

- Fast rate of learning;

- Superior memory;
- Superior verbal communication skills and vocabulary;
- Advanced problem-solving skills;
- Creative production or thought that may progress more slowly than sighted students in some academic areas;
- Ease in learning Braille;
- Great persistence;
- Motivation to know;
- Sometimes slower rate of cognitive development than sighted students;
- Excellent ability to concentrate.

Common characteristics of gifted students with hearing impairments include:

- Development of speech-reading skills without instruction;
- Early reading ability;
- Excellent memory;
- Ability to function in the regular school setting;
- Rapid grasp of ideas;
- High reasoning ability;
- Superior performance in school;
- Wide range of interests;
- Nontraditional ways of getting information;
- Use of problem-solving skills in everyday situations;
- Possibly on grade level;
- Delays in concept attainment;
- Self-starters;
- Good sense of humor;
- Enjoyment of manipulating environment;
- Intuition;
- Ingenuity in solving problems.

(Cline, 1999; Whitmore & Maker, 1985, in Willard-Holt ERIC Digest #547, 1999)

Some students who are twice exceptional may not be recognized because their gifts mask their disability or their disability masks their gifts. There are many intersections between giftedness and disability. The intersections create confusion for teachers and families. Intersections also create confusion for the child. James and Shelag Gallagher (2002) describe this confusion as it relates to gifted students with Asperger's Syndrome, "Gifted children possess a set of characteristics that separates them from typically developing children. So do children with Asperger's Syndrome. Put the two together and the characteristics combine and collide in complex ways."

Some characteristics of giftedness are easy to recognize. For instance, a student who has a large knowledge base, is quick to attain new information and is highly imaginative may catch the attention of his teachers. However a student who demonstrates poor attention, a lack of social judgment and nonconformance may not be considered gifted. These are often the children who remain unrecognized, their talents left untapped. One must understand that both disability and giftedness offer strengths and challenges to instructional planning and student achievement.

Table 1.1 shows behaviors manifested by gifted students. Being highly individualistic may indicate leadership abilities and taking risks in expressing self and attempting new ideas. However this trait may also describe a person who is argumentative, stubborn, demanding or moody. A student who is curious about many things may be perceived as inquisitive and interested in learning. However this same student may be perceived as rude and obnoxious, because he interrupts class with many questions often not related to the subject at hand. It is important to guide and nurture students to use and perceive these characteristics as strengths while maintaining a positive perspective of a student’s abilities.

Table 1.1: Behaviors Manifested by Intellectually Gifted/Talented Students

Characteristics	Positive Behaviors Manifested	Negative Behaviors manifested
Learns rapidly and easily	Memorizes easily, masters basic facts quickly, needs minimum drill	May be bored, resist drill, disturb others
Reads intensively	Reads many books on his own. Uses library extensively	May neglect other responsibilities
Advanced vocabulary	Communicates ideas orally or in writing	May show off and/or invoke peer resentment
Retains quantity of information	Ready recall and responses	May monopolize discussions
Long attention span	Sticks with a task or project	May resist class routine or interruptions
Curious, varied interests	Asks questions, excited about ideas	May go off on tangents, may not follow through
Works independently	Creates and invents beyond assigned tasks	May refuse to work with teacher or others
Alert and observant	Recognizes problems	May impolitely correct adults

Characteristics	Positive Behaviors Manifested	Negative Behaviors manifested
Sense of humor	May be able to laugh at himself	May play cruel jokes or tricks on others
Comprehends, recognizes relationships	May be able to solve social problems without help, may bring different perspective	May interfere in others' affairs
High academic achievement	Does school work well	May become egotistical, brag; may be impatient with others
Fluent, verbal ability	Forceful with words, numbers, may lead others in positive ways	May lead others into negative behaviors
Individualistic, challenges ideas	Asserts self and ideas, has sense of own uniqueness	May be lonely, have few friends, non-conforming, stubborn in beliefs, may daydream rather than attend
Self-motivating, self-sufficient	Requires minimum teacher direction or help	May challenge authority, may be over-aggressive

“How do I recognize a student’s strengths and talents as well as the disability, and use the strengths to help the student reach his/her maximum potential?”

Students who are gifted and have a disability are complex. Some students who are gifted, particularly those who are highly gifted, display uneven growth or development, referred to as *asynchrony*. Children might have deficits in areas such as reasoning, organization, motor development or judgment that hide their giftedness. School personnel must know the characteristics of giftedness and disability to be able to recognize a student who is gifted with special needs.

During a visit to Michel’s special school for children with disabilities, the school psychologist was greeted by a cheery, “Hi,” and asked a quick series of questions. “Why are you here? What is in your briefcase? Are you a medical doctor?”

After completing his rounds, the psychologist found the boy, who quickly invited him to dinner. Surprised, the psychologist took Michel’s home telephone number and promised to call. When he questioned the school about Michel’s educational program, he found that Michel received

occupational therapy for part of the day and free play with other preschool youngsters with disabilities for the remainder of the day.

What the psychologist noted was an alert, curious, outgoing, eager mind. He called the mother and asked if he could test the youngster at his office. She began to cry, saying that he was the first person who believed Michel had a mind. She told him about the school officials who wanted to talk about her son's disability but not about his gifts.

Fran, age 19

In elementary school I was like a whipped dog. When kids approached me I lashed out. I blocked out the social through drawing and music. I could listen to music with headphones and block out the white noise. Teachers expected me to fit into a box. I don't fit into a box. Kids were puzzled that I knew things before we studied them. I've always been interested in genetics. In early elementary classes people didn't understand how I knew about DNA.

In high school I started going to clubs. I was more socially adept. I excelled in classical Latin but was failing rudimentary algebra. Some teachers did not see my strengths. In high school I evolved from an isolated child to a social child. In senior year I participated in Quiz Bowl. I was the fastest to hit the button. I wrote beautiful poems. In high school the teachers loved me. They loved my being an "Earth Goddess," so full of life and vitality.

I'm a fun child and a difficult child. I can be rude, obnoxious, crude, coy and a braggart, but I can also be vivacious, loving, compassionate and generous. It all started to balance out when teachers started to know me as a person. The rages, the running and the panic attacks subsided when teachers got to know me.

I'm currently writing two novels. My advice to teachers: Channel my creative force early instead of waiting until high school.

Fran is gifted and has a disability. She was diagnosed with Asperger's Syndrome, an autism spectrum disorder, in her senior year of high school. Fran was also identified as gifted that same

year. Although misdiagnosed with attention deficit hyperactivity tendencies earlier in her school career, her behaviors of limited attention and persistence, high levels of activity, nonconformance and organizational difficulties were not recognized as characteristics of giftedness. A teacher familiar with Asperger's Syndrome brought Fran to the attention of school personnel. Fran was subsequently identified as gifted and received the instruction and accommodations she needed to successfully complete high school. The first key to Fran completing high school was an informed teacher. The second key was understanding that a child with a disability could be gifted.

Chapter Two

Social and Emotional Needs of Students who are Twice Exceptional

Recognizing and understanding the complexity of a dual exceptionality requires collaboration between regular education teachers and the intervention specialists in gifted and special education. Professionals working together are better able to understand and assist each student in realizing his strengths and challenges and the social-emotional issues related to being gifted and having a disability.

Sometimes the confusion of being twice exceptional becomes overwhelming and students may withdraw or develop behavioral challenges. Both are problematic, because talents and strengths are buried. Children who are taught to understand their strengths and talents as well as their disabilities through student-centered planning will become self-advocates and use appropriate strategies to reach their potential.

“Gifted children often have problems with perfectionism, have intense feelings around moral and ethical issues and deep concerns about social problems at an early age when they may not be emotionally equipped to cope with their own feelings” (Ohio Gifted Task Force, 2002). Children who are twice exceptional may exhibit these characteristics as well as social-emotional issues stemming from their disabilities.

For example, a child who has autism but who is also gifted may have underdeveloped social skills and not be able to understand the social cues of a given situation. A child who is gifted with a learning disability may not understand why she is strong in math but struggles with reading. A gifted child who exhibits intensity, sensitivity to stimuli, overexcitability, curiosity or sensual oversensitivity may be misdiagnosed with a conduct disorder (Webb et al., 2005).

Children who are gifted and children with disabilities are uniquely different from their same-age peers. Children who are gifted and who have a disability have both exceptionalities from which to view their sense of self and how they fit with the rest of the world. Many times these children

are not recognized for their exceptional abilities and fail to understand or achieve their true potential. A positive self-esteem and knowledge that success is possible can create a sense of hope for the future.

Spencer's story illustrates the importance of the social-emotional component of being gifted with a disability.

Spencer

I've tried to forget elementary school. I was in trouble a lot. I loved middle school because I had more freedom. I hated high school because there was no flexibility. I've been good at adjusting to college. I enjoy the variety. I do better at the beginning of each semester but get tired at the end. I get tired of the same thing. I have a 3.45 grade point average though. As an adult, my ADD has started kicking in more.

I will graduate this summer (after five years) with a major in music composition. I tried a double major in vocal performance and music composition, but they kept giving me a new teacher for voice. Every teacher wanted to start over and teach me a different way. I couldn't stand that and focused on music composition. I am leaving my options open, but my dream job would be writing music for video games.

Spencer's Mom

My son played the piano by ear when he was 2½. I sent him to two piano teachers who told me they could not do much for him. He could play a song after hearing it once. They suggested he audition with a renowned pianist in town. Spencer took lessons from her for years.

At the beginning of each year in elementary school I cried. There was no consistency for Spencer and adjustment was a problem. Teachers always loved him at the end of the year, but behavior was always checked as a problem on his report card. Some teachers yelled at me and told me they needed to focus on the kids in their room who could not read. They did not have time for Spencer's needs.

Social skills were always a problem. He is more accepted in college and has friends who are more like him. I have studied Asperger's Syndrome and think Spencer probably fits in there somewhere. Spencer is still Spencer. I still worry about him.

Spencer's Teacher

I have never forgotten Spencer. I tried in third grade to make school more interesting for him. Speaking to him years later, I think I failed. He does remember some of the fun hands-on projects we did and mentioned a few. He is extremely bright and a gifted musician. I had high expectations for Spencer, and he would do assignments well but could never find them. He got angry often and twirled down the halls when we left the classroom. He had a tough time socializing with the other kids. Giving him more independent projects helped in reading. He enjoyed studying the ocean (until his project was due and he could not find it) and participating in visual kinesthetic math activities.

When I spoke with Spencer, he was friendly and willing to talk. Isn't this amazing when he remembers my room with discomfort and unhappiness? I hope this experience for both of us will result in better opportunities for other children.

Spencer's advice to teachers: Make sure you present education in many different forms — visual, auditory, etc. Everyone learns differently.

Spencer is a creative and imaginative thinker who learns through the arts. When teaching integrates the arts, he performs successfully. In paper and pencil tasks of drill and practice allowing for no creativity, he becomes frustrated and does not finish or cannot find his work. When working in small groups, the work of others usually does not meet his expectations. Therefore, he does not accept others' ideas or what he considers to be imperfect work.

In third grade Spencer had the opportunity to share his thoughts and feelings with a group of children in his classroom through a weekly sharing circle. The teacher presented students with a prompt, such as, "How do I feel when no one will play with me on the playground? How do I feel when I can't finish my work on time? How do I feel when I complete a task other students cannot do?" Rules of sharing were: Only one student speaks at a time and the first time around the

circle a feeling must be given. The teacher spent time at the beginning of the year discussing the value of a feeling and that a feeling is not a thought or opinion. The second time around the circle, students could pass or comment on their own feelings. In this manner, students began to understand differences and accept each other. Children like Spencer who many times miss social cues began to understand why problems sometimes occurred. Spencer could understand the concept but did not generalize into his daily life because he didn't accept it or remember it.

In class Spencer never wanted to stop until a project was finished. He could not understand that time would be given later to complete the project. As the next subject began, he continued to work on the first project, but could retain information from the new conversation and answer questions. However, his behavior became a distraction to others. When asked to attend to the subject at hand, he became angry and verbally disruptive. Perhaps he was trying to self-advocate, knowing he might forget to finish or lose the project. Spencer needed a strategy to assist him in understanding the class situation as well as strategies for organizing more efficiently. Now a university senior, Spencer still has little toleration for schedules not of his own making.

Meeting the social and emotional needs of a student who is twice exceptional requires teams to understand the student's behavior and assist him in accepting and acting upon both his strengths and challenges. Designing an intervention plan that will allow a student to self-advocate requires the educational team to analyze the function or purpose of the student's behavior. This functional assessment is a process of observation, data collection and analysis. Through assessment, the team pinpoints why a certain behavior "works" for the student so that an appropriate replacement behavior can be identified and taught.

Behavior is a form of communication, whether verbal or nonverbal, and serves three functions:

- To gain attention, control or a desired tangible;
- To escape or avoid an aversive, such as an activity, situation or person; and
- To meet sensory needs.

Effective interventions teach students to meet their needs in a more appropriate manner. It is important to identify "why" a behavior occurs from the student's perspective. Too often,

behavioral plans address the topography or what the behavior looks like instead of the function or student need. For example, in a classroom of 20 students, a teacher may find three refusing to complete an assigned task. Each demonstrates the same topography, throwing or shoving their books: Sally refuses to complete her worksheets because she is bored. John refuses because he is frustrated and cannot read the material. Larry is distracted by the noisy air conditioner.

Each of these students is demonstrating the same behavior but for different reasons; therefore, different interventions must be employed. For instance, Sally may be permitted to do the “most difficult first.” As she demonstrates mastery, she does not need to practice any more and can choose to complete an independent project that builds on her strengths and interests.

Table 2.1: Detail from Table 5.1: Differentiated Instructional Strategies

Strategy	Description of Strategy	Why Appropriate for Students Who Are Twice Exceptional?
Most Difficult First	Students can demonstrate mastery of a concept by completing the five most difficult problems with 85% accuracy. Students who demonstrate mastery do not need to practice any more.	Honors student’s mastery of a concept. Eliminates unnecessary drill and practice. Reduces homework load of students who can demonstrate mastery.

A tape-recorded version of the worksheet allows John to read along and complete the task, eliminating his frustration. Larry wears headphones to block out the noises of the classroom, reducing the sensory stimulation. If a challenging behavior is occurring, it is necessary to identify the function as well as the mismatch between the student need and the environment.

Spencer needed to understand his social behavior and its inappropriateness. His inappropriate behaviors occurred whenever the teacher requested the class to move to a different activity and he was not finished with the previous one. He would yell out in frustration, “I’m not done,” and refuse to put the materials away. His teacher communicated to the class how many minutes remained before transitioning to a new task. The signal “You have ten minutes remaining” worked for the majority of the class but not for Spencer. He needed to learn a replacement behavior and a plan for transitioning from one activity to another.

Spencer needed to be taught a more appropriate way to deal with his frustration. His teacher was unable to talk to him when he was frustrated. He needed to be taught ways to calm himself

down and control transitions between activities. Spencer needed a social story, a visual timer, a visual schedule denoting the day's activities, and earlier and more frequent individual reminders. (Social stories are described in Chapter 4.)

The classroom's visual schedule would organize Spencer, allowing him to know what needed to be done sequentially throughout the day. As he completed each activity, Spencer would remove the picture icon of the activity. This would assist him in predicting what would happen next. Setting a timer near Spencer would assist him in knowing how much time was left before transitioning. Finally Spencer would be taught how to use a social story, providing him a strategy for calming himself down and dealing with frustration.

*Spencer needed to control his time and environment. He was unable to comply due to his disability. He could not move forward. **Differentiating between “could not” or “would not” is key to the success of intervention planning.** His teacher realizes today that Spencer and others like him must be given a pathway to accomplish a task — steps to get to the other side.*

Often the most appropriate intervention is a change in the environment (Webb et al. 2005). Williard-Holt (1990) suggests asking the following questions to assist a team in understanding the function of a child's behavior with ADHD by analyzing the mismatch between the child and the environment. These questions have implications for all students who exhibit challenging behavior.

- Could the behaviors be responses to inappropriate placement, insufficient challenge or lack of intellectual peers?
- Is the child able to concentrate when interested in the activity?
- Have any curricular modifications been made in an attempt to change inappropriate behaviors?
- Has the child been interviewed? What are his/her feelings about the behaviors?
- Does the child feel out of control? Do the parents perceive the child as being out of control?
- Do the behaviors occur at certain times of the day, during certain activities, with certain teachers or in certain environments?

Students continue to use behavior that “works” for them. It is necessary to determine what need is being met by a child's behavior and replace the inappropriate behavior with an appropriate one

that meets the same need. To do this, the team must understand the function that a behavior serves for the child. Teams use a collaborative problem-solving process and data to hypothesize as to the function a behavior serves a child. Once the function is identified, they develop, implement and monitor the effectiveness interventions. (See *Ohio's Integrated Service Model* and *Positive Behavior Support Materials* for additional tools.)

Steps in the problem-solving process include:

- Identify the problem by describing it in observable terms;
- Analyze the problem and hypothesize as to the function of the behavior;
- Set goals stated in positive terms that lead to a student's learning new skills;
- Develop and implement an intervention plan;
- Evaluate the plan; and
- Modify the plan if needed.

Conducting a functional assessment may have assisted Spencer's teacher in understanding why he experienced frustration during transitions. This assessment results in a hypothesis statement that informs intervention planning.

Spencer's hypothesis statement:

During class transitions when the teacher states, "You have 10 minutes remaining," Spencer yells and refuses to put his work away because he needs to maintain control of the situation.

Spencer's intervention plan including a visual schedule, timer and social story would teach him strategies to more appropriately control the situation.

Matthew illustrates the importance of designing interventions to meet the function of a student's behavior.

Matthew's academic progress is severely hindered by his emotional disability. He makes adequate yearly progress, but is prone to outbursts when faced with frustration. His strength area is math, and he is able to complete work and remain on task. His math teacher is positive about his ability to be successful in class. A functional behavior assessment was conducted to better understand his behaviors. Several of his teachers remarked that he is prone to negative self-talk and will become frustrated when he perceives a task to be too difficult.

When upset, Matthew cannot be redirected or soothed by encouragement. His rage escalates from yelling to throwing furniture. However, in art class, he is able to express his frustration and is permitted to self-select an alternate activity. Only once has he exhibited inappropriate behavior in art. When told he could not bring a project home, he became upset and had to be removed to the office.

Matthew is able to identify factors that cause frustration and, when prompted, can make good choices about his behavior. However, he is still prone to perfectionist tendencies that override his ability to make good choices on his own. In most school situations he requires consistent prompting from adults to make good choices regarding his behavior. However, according to his art teacher, he is able to control his anger and independently use self-mediation techniques. For example, he is able to find creative solutions to mistakes made on his artwork rather than discard the work and lose control. It may be that his comfort level in art and solid knowledge base in the area permits him a wider store from which to draw confidence and allows him to remain calm when faced with adversity. Teachers confirm that he is able to maintain control of his emotions when he perceives himself to be capable.

Finding areas of strength is vital for many students who are twice exceptional, but for students like Matthew, it is imperative for his success because his behavior is integrally tied to his self-perception of his ability. It is important for teachers to be able to see beyond behaviors to talent areas.

“How do teachers help keep students who are twice exceptional from becoming overwhelmed when they are also working with gifted children who do not have disabilities?”

Teach students to accept and understand that we all have unique strengths and weaknesses. Encourage students to accept these differences. Provide opportunities for students to share their interests and strengths with each other. Students who are twice exceptional are often not recognized for their talents, because so much attention is given to the disability. Teach

students to understand that weaknesses can be addressed by learning new ways for organizing or completing tasks, by using different strategies to learn new information, or by using technology. Invite an adult who is twice exceptional into your classroom to describe childhood experiences and share strategies that work for him or her.

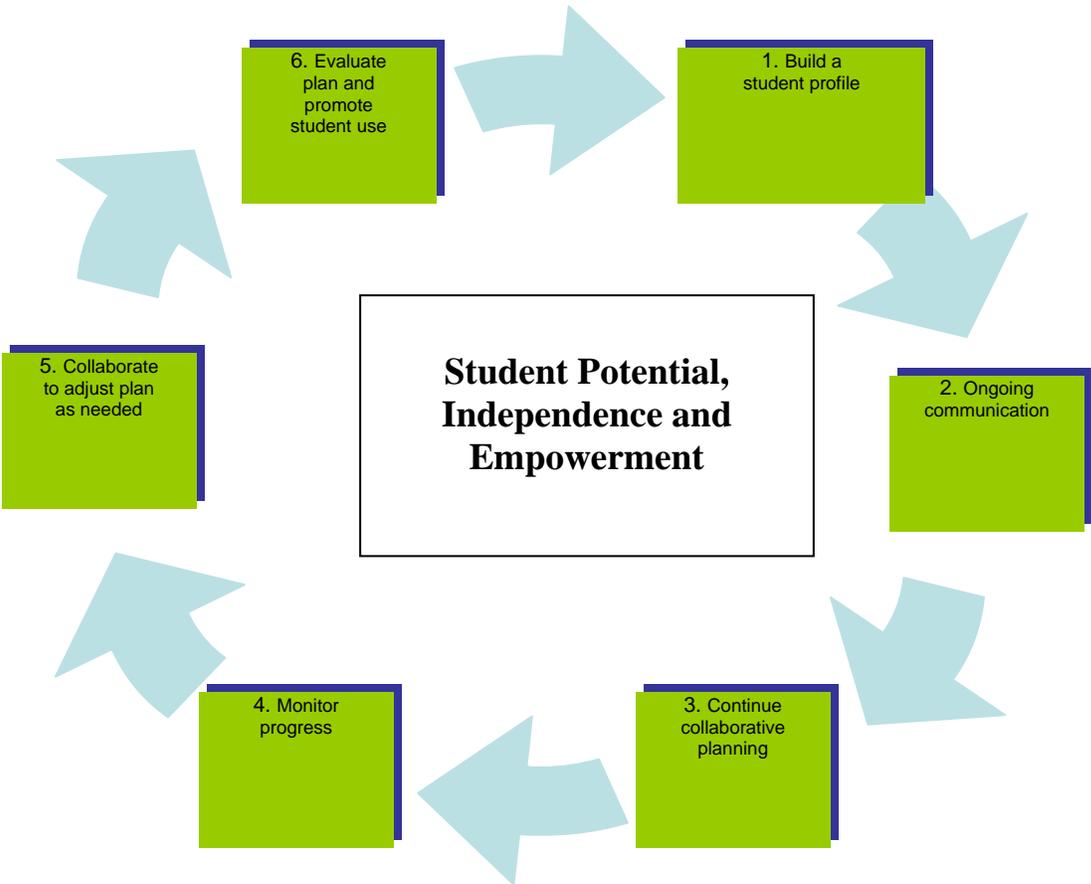
Betts (2004) suggests providing the learner at least ten percent of school time for independent learning with the assistance of a teacher or other adult resource. The adult can help the student develop long-term goals, break the goals into a structured framework and identify the resources and materials needed to accomplish the goals. Students who are twice exceptional may also lack the organizational skills needed to perform independently. The use of adult resources may be necessary to guide students into becoming “autonomous learners” (Betts, 2004). As the student delves deeply into an area of study, a mentor may be needed to assist in the particular content area.

Chapter Three
Strength-based Instructional Planning

What is strength-based instructional planning and how does it work in a standards-based educational system?

Strength-based instructional planning provides teams a structure in which to enhance collaboration and to design personalized, independent, self-directed learning for each student. This is an ongoing process as illustrated in Figure 3.1.

Figure 3.1: Student Potential, Independence and Empowerment



Schools may use an existing team structure for strength-based instructional planning. Team members may include intervention specialists in gifted and special education, the regular classroom teacher, a visual or performing arts teacher, parents, students, a guidance counselor, a curriculum director, an administrator and anyone in the school community who knows the student. The planning begins by identifying a student's strengths and documenting his academic learning and behavior over time.

Teams must address the following questions for setting priorities in instructional plans for students who are gifted (Rogers, 2002):

- Does the plan provide for academic progress?
- Does the plan remediate academic weaknesses?
- Does the plan enhance psychological adjustment?
- Does the plan provide for socialization?

Additional questions must be addressed for students who are gifted and have a disability.

- Does the plan promote a positive sense of self and of the future?
- Does the plan enhance the development of meta-cognitive skills and executive functioning?

Strength-based planning includes the following steps:

- Step 1: Identify the potential and vision for the future.
- Step 2: Plan for a continuum of abilities.
- Step 3: Identify critical needs, based FIRST on the strengths and then on the challenges.
- Step 4: Connect to the Ohio Academic Content Standards.
- Step 5: Design individualized instructional goals.
- Step 6: Plan for instruction.
- Step 7: Plan for services.

Step 1: Identify the potential and vision for the future. Help parents develop a vision for their child by focusing on the child's strengths. Although some of the following questions may seem redundant, it is often useful to have multiple prompts or opportunities to think through the process thoroughly. If parents cannot identify strengths, the teacher may have to identify them. Be sure to involve the child in the planning. Ask the following questions:

- What does your son/daughter do well?
- How do you think the school year is progressing?
- What are your child's strengths?
- What are your child's challenges?
- What are his/her unique gifts?

Step 2: Plan for a continuum of abilities. Continue to build from the child's strengths as they relate to general intellectual ability, specific academics, creativity, visual/performing arts, disability, and/or social and emotional/behavioral needs. Identify the challenges presented by the child's gifts and disability. Determine the baseline for areas of need.

- What is the child's learning preference?
- What are the child's current interests?
- In what subject areas is he/she strong?
- Who will advocate or mentor the child outside of school and collaborate with the teachers within school?
- What organizational tools does he/she need to accomplish a goal or task?
- What consistent supports need to be in place to enable the child to initiate work and monitor his/her work to stay focused and evaluate the results?
- Where can the child seek assistance if needed?
- Does he/she know how to ask for help?

Step 3: Identify critical needs, based FIRST on the strengths and then on the challenges. Build from the student's strengths to develop the talents. Prioritize the student's needs and determine which are critical.

- What strategies does the child need to learn to develop his/her talents?
- What explicit instruction is needed to enable the child to independently use the strategies?
- How do you ease transitions from one year to the next and, in high school, from one period to the next?

Step 4: Connect to the Ohio Academic Content Standards. Use district data to determine whether the student is making adequate yearly progress. **Is the student gaining a year’s growth each year?** Use pretest data to identify areas of mastery related to the benchmarks and indicators, and **eliminate unnecessary work.** (See the book *Standards-based Instruction for All Learners: The Treasure Chest for Principal-Led Building Teams.*)

- What content areas are strengths?
- What content areas are challenges?
- What do you need to teach the child?
- What social skills, organizational skills, etc., are needed?
- How will you know that the student is making progress over time?
- What assessment techniques will you use?
- What big ideas and essential questions are addressed for each standard?

Step 5: Design individualized instructional goals. Involving the student in developing goals will increase his or her “buy-in” and motivation. It is essential, once again, to **build from the strengths.** We want the child to use what he/she does well to overcome challenges, so that the challenges become smaller and the strengths larger.

- What academic goals are needed?
- What social-emotional goals are needed?
- What skills does he/she do well? How can these strengths be used to overcome the challenges?
- What accommodations does he/she need to facilitate learning?

Step 6: Plan for instruction. Identify differentiation strategies to meet dual needs. Also identify areas requiring explicit instruction. See Tables 4.1-4.8 of the Strength-based Planning Tool and also Appendix.

- What areas require acceleration?
- What areas require accommodations?
- Which areas require both acceleration and accommodations?

Step 7: Plan for services. Services are delivered in collaboration with the regular classroom teacher and the intervention specialists in both gifted and special education. In many cases the intervention specialists will provide consultation services to the regular classroom teacher. Oftentimes, however, multiple service providers may be used.

- **How will the services work in your district?**
- **Who needs to be involved? Who are the collaborators?**
- **Which team is needed? Intervention team, individualized educational plan (IEP) team, written educational plan (WEP) team?**
- **How will you facilitate collaboration between intervention specialists in gifted and special education and the regular classroom teachers?**

Using the steps of strength-based planning, collaborative teams build a profile of the student. This is the first step in maximizing potential. Additionally, the team must provide for ongoing communication, continued collaborative planning, monitoring of progress, adjusting the plan if needed and evaluating. Involving the student in the planning, monitoring, adjusting and evaluating processes increases independence.

The following is an example of strength-based planning for Spencer as a third grader.

Step 1: Identify the potential and vision for the future. *Spencer played the piano by ear at the age of two. His teachers appreciate his uniqueness. He is very creative with a variety of interests, which he enjoys pursuing. Spencer has definite opinions and is happy and willing to voice them. However, it is difficult for him to receive the opinions of others or to respond appropriately. Spencer's mother wants him to be successful in school and to have friends. Spencer desires to pursue his interests in creative ways.*

Step 2: Plan for a continuum of abilities. *Spencer is a kinesthetic and visual learner who learns best through music and hands-on experiences. He excels in reading and enjoys independent reading assignments. Spencer gets tired of doing the "same old thing" and prefers to choose his own work. He cried at the beginning of each elementary school year because every teacher's routines were different. His social skills were always a problem, and behavior was noted as a problem each year. He did assignments well but often did not turn them in because he could not find them.*

Step 3: Identify critical needs, based FIRST on the strengths and then on the challenges.

Spencer has a large knowledge base, is highly imaginative, and is quick to understand new information and content. He needed advanced content, especially in reading. His teacher needed to compact the curriculum by pre-testing and eliminating the unnecessary work, work that he had already mastered.

Table 3.1: Detail from Table 5.1: Differentiated Instructional Strategies

Strategy	Description of Strategy	Why Appropriate for Students who are Twice Exceptional?
Compacting	A 3-step process that (1) assesses what a student knows about material to be studied and what the student still needs to master, (2) plans for learning what is not known, and (3) plans for freed-up time to spend in enriched or accelerated study.	Eliminates boredom from unnecessary drill and practice. Satisfies student's desire to learn more about a topic than school often allows. Encourages independence. Buys time for additional enrichment, acceleration and remediation.

Spencer's peers did not accept him socially. His poor social judgments resulted in behaviors that were often inappropriate for the situation at hand. Therefore, Spencer needed social skills instruction. He also needed to be taught to use social stories to ease his transition from one activity to the next. His classroom materials needed to be organized and presented routinely. Spencer's teacher needed to model the use of classroom organizational strategies such as color-coded supplies, and then work with him to use the strategies to develop his own organizational system.

Step 4: Connect to the Ohio Academic Content Standards. *By connecting to math through reading and problem solving, two of Spencer's strengths, his teacher increased his motivation. Using the English Language Arts' Research standards, his teacher built upon Spencer's interests, allowing him to choose a topic to focus his research.*

Table 3.2: Detail from Table 5.1: Differentiated Instructional Strategies

Strategy	Description of Strategy	Why Appropriate for Students Who Are Twice Exceptional?
Independent Projects, Group Investigations	A process through which student and teacher identify problems or topics of interest to the student. Both student and teacher plan a method of investigating the problem or topic and identifying the type of product the student will develop. The product should address the problem and demonstrate the student's ability to apply skills and knowledge to the problem or topic.	<p>Builds on student interests and encourages independence.</p> <p>Teacher provides guidance and structure to supplement student's capacity to plan.</p> <p>Uses preset timelines to zap procrastination and logs to document the process involved.</p> <p>Teachers and students establish criteria for success.</p>

Through differentiated instruction, benchmarks of a higher level are naturally added. Spencer had mastered all 17 third-grade writing convention standards. His teacher added higher-level benchmarks, those obtained by the end of the grades five through seven.

Writing Process:

- A. Generate writing topics and establish a purpose appropriate for the audience.*
- C. Clarify ideas for writing assignments by using graphics or other organizers.*
- F. Edit to improve fluency, grammar and usage.*

Research:

- A. Formulate open-ended research questions suitable for inquiry and investigation and develop a plan for gathering information.*
- B. Locate and summarize important information from multiple sources.*
- E. Communicate findings orally, visually and in writing or through multimedia.*

Step 5: Design individualized instructional goals. *Spencer needed accelerated goals in reading. However, it was difficult for him to go into another classroom for accelerated learning, due to his discomfort with differing routines and transitions. Through consultation with the intervention specialist in gifted education, his teacher would provide accelerated reading within the classroom setting.*

Table 3.3: Detail from Table 5.1: Differentiated Instructional Strategies

Service Option	Description of Option	Why to Consider for Twice Exceptional?	What to Consider for Twice Exceptional?
Individual Subject Acceleration	The practice of assigning a student to a higher grade level than is typical given the student’s age, for the purpose of providing access to appropriately challenging learning opportunities in one or more subject areas.	Allows student to advance academically in areas of strength with accommodations to address learning challenges. Research: 75-85 percent of elementary students of average to above-average ability can pass subject pretests with 92-93 percent mastery (Rogers, 2002).	Curriculum can be delivered by moving the student to a higher grade level within the building. Curriculum can be delivered by having the student work with a higher grade level in his/her own age-based classroom.

Compacting the curriculum would “buy time” for more independent work and provide Spencer opportunity to pursue his interests. Spencer’s teacher reported:

- *Spencer would not have to do a “note” sheet or lookup vocabulary to prepare for writing.*
- *He knew about simple, compound and complex sentences.*
- *He was excellent in the area of technology and in understanding what he read.*
- *He was an excellent writer and one shot at proofreading would have been enough for him.*
- *Handwriting was frustrating for him, as his mind worked faster than his hand. Allowing him to use a computer would have been wonderful.*
- *Spelling was not a problem, and I would not have required him to do any preparation for spelling tests – just take the final test.*
- *No mundane work with grammar was needed. Practice homework would have been eliminated unless he lapsed in a particular area. He would have to take assessments.*

Spencer’s teacher would teach him how to interact socially by involving him with another child in a positive, guided way. Spencer’s reading level was many grades above his third-grade status. Although a fluent reader, Spencer required organizational skills and social skills. Explicit instruction in social skills, such as “Planning a Task” and “Asking for Help” (Goldstein, 1999), would address both areas of need.

Step 6: Plan for instruction. *Communicating a concept as an idea or thought allowed Spencer to create mental pictures in his mind. Natural lighting instead of overhead glare always improved his performance. Instruction that engaged Spencer in creative thinking, and problem solving helped him to develop a picture of the work. Providing Spencer with opportunities to choose activities and topics increased his motivation to learn. Spencer was more interested in*

learning than doing the writing or getting a grade. He always thought that he had an “A” and did not care what his teacher thought.

Step 7: Plan for services. *Strength-based accommodations include cross-age peer teaming and designing instruction with his love of music in mind. A pianist in the community will mentor him.*

Accommodations to facilitate learning addressed the following needs:

Organization:

- *Picture schedules will be used for transitioning between activities. A daily picture schedule in a manipulative form will keep Spencer informed of the day’s sequence of activities.*
- *The teacher will provide a “crate” for Spencer to organize his work according to the sequence of needed materials.*
- *Spencer will practice using the schedule before using it independently.*
- *A visual timer will be used, with decreasing amounts of time required to complete scheduled activities.*
- *Spencer’s peer helper will be a student who is very organized and highly intellectual.*

Processing:

- *“Fidgets” will be provided for Spencer to use when he feels he is about to interrupt.*
- *Visuals will be provided for him to hold up, to help him refrain from shouting out comments.*
- *When Spencer is upset, the teacher will use “first, then” cards to facilitate his actions.*

Social-Emotional Behavior:

- *Children’s literature will be used to set the stage for learning and to engage Spencer through his love of reading.*
- *Sharing circle will be used throughout the year to build a classroom of acceptance.*
- *Creative movement activities will be used to portray emotion and feelings to music.*
- *Movement will also be used to demonstrate the mood of poetry.*

Spencer will receive his services in his regular third-grade classroom. His classroom teacher will consult and collaborate with the intervention specialists in gifted and special education to gain ideas for enrichment, acceleration and accommodation. The occupational therapist will also be consulted to address Spencer’s sensory needs.

Kimberly provides an example of how collaboration increases a school’s ability to serve a student who is twice exceptional.

A teacher working with Kimberly on an informal reading inventory noted that she “did an excellent job and is sometimes difficult to work with. Otherwise she does a great job.” The goals listed on her IEP include:

- Develop age-appropriate social skills to use in a variety of school settings;*
- Demonstrate proper learner participation in the regular classroom setting; and*
- Use strategies learned through a social skills program to monitor herself throughout the day.*

Kimberly’s social skills program uses sensory integration activities, assistive devices and self-regulation techniques to help students with autism reduce stress and maintain focus. She responds well to this program and has made gains; however, she still requires redirection. Her ability to work in the classroom remains inconsistent because of behavior outbursts. She reacts negatively to disruptions in routine, changes in classroom personnel, unexpected noises or disinterest in the task at hand.

Kimberly is able to use her advanced cognitive abilities to maintain academic progress when her behaviors preclude her participation in the classroom. She makes up work at home or independently when she is calmed after an outburst. Her teachers find her to be an intelligent and energetic child. She is able to maintain concentration on a task, particularly when it is in an area of interest. She tends to perseverate on a topic for anywhere from weeks to months. Currently she is interested in drawing and insects. These are used as rewards to motivate her commitment to the task at hand. These interest areas are also used during gifted pullout.

The gifted intervention specialist provides consultation services in the regular classroom and indicated that he creates specific activities for Kimberly that combine sensory integration activities with academic pursuits. She responds well to movement and consistency, even during gifted programming. Understanding the unique needs of any student will help him or her find success in school. For students like Kimberly, whose behavior is influenced by uncontrollable issues, classroom management becomes a challenge. Combining the efforts of each person who works with her is essential, because each brings a different perspective. For example, consulting with the occupational therapist was found to be a productive activity for the gifted teacher,

because he discovered techniques to help keep Kimberly focused. Including advanced material designed by the gifted teacher allows the regular classroom teacher and the classroom aide to provide appropriately challenging material to a student who has superior cognitive capacity. If the school just concentrated on maintaining behaviors, Kimberly's academic needs would go unmet, and consequently her behavior problems would be exacerbated.

Each professional who works with Kimberly brings a different perspective to her levels of functioning and techniques that aid learning. Understanding the characteristics and needs of students with Asperger's Syndrome is vital, because the behaviors and abilities of these students may not fit the expectations we have for students in gifted programs. Consultation becomes the driving force in providing services, and the role of the gifted intervention specialist is integral because of enrichment requirements. As is documented by this case study, students with Asperger's Syndrome may demonstrate advanced knowledge in a specific topic or spend extended periods of time learning about a specific topic. Adding depth and breadth to learning are among the goals of many gifted programs, making the role of the intervention specialist in gifted education all the more important. Integrating services for the student who is twice exceptional cannot be stressed enough, and coordinating efforts cannot be accomplished unless there is **collaboration among professionals**.

Chapter Four

Instructional Strategies and Interventions

Students who are gifted with disabilities are often holistic learners who learn best when instruction assists them in creating relationships among ideas. Teachers can facilitate instruction by:

- Teaching skills within concepts;
- Teaching from essential understandings and essential questions; and
- Using advance organizers to illustrate overarching concepts and themes. (See the book *Standards-based Instruction for All Learners: The Treasure Chest for Principal-led Building Teams.*)

Students who are twice exceptional are often visual learners, using mental pictures to process information and recall details. Instruction that communicates a concept as an idea or thought supported by multisensory activities enhances success.

Twice exceptional students are often motivated by higher-level thinking rather than making a grade. Motivation increases when teachers:

- Engage them in abstract thinking and problem solving;
- Pre-assess their skills in order to compact the curriculum, thereby eliminating unnecessary work, work they have already mastered;
- Integrate creative thinking and problem solving; and
- Use compacting to “buy time” for independent work.

Students with learning disabilities are more different than they are alike. Richard Lavoie uses the analogy of the Periodic Table to illustrate the complexity of combinations of characteristics of learning disability. Any combination or series of combinations of characteristics creates a new scenario.

Tables 4.1-4.8 are adapted from the work of Montgomery County Public Schools in Maryland and the Colorado Department of Education. They suggest instructional strategies that are helpful for students, including strength-based accommodations and accommodations to facilitate learning. General suggestions are provided, as well as suggestions specific to reading, mathematics, writing, organization, processing, metacognition and the social-emotional and

behavioral needs of students. Many of the strategies and interventions referenced in the tables are further explained in this chapter.

Table 4.1: General Instructional Strategies and Interventions

Instruction		Accommodations	
What Works	What Is Less Helpful	Strength/Interest-based	To Facilitate Learning
<p>Teach skills within concepts.</p> <p>Teach from essential understandings and essential questions.</p> <p>Use advance organizers to illustrate overarching concepts and themes.</p> <p>Communicate a concept as an idea or thought – a mental picture or image in one’s mind.</p> <p>Use multisensory instruction, programs and materials. Teach to all senses.</p> <p>Use soft lighting to encourage relaxation and participation.</p> <p>Provide content learning that engages students in abstract thinking and problem solving.</p> <p>Pre-assess the student and compact the curriculum to buy time for pursuing interests, reducing boredom and off-task behavior.</p> <p>Integrate creative thinking and problem solving into the curriculum.</p> <p>Use high-level problem solving approaches that emphasize open-ended problems with multiple solutions or multiple paths to the solution.</p> <p>Build a classroom climate of acceptance where differences are valued.</p> <p>Differentiate instruction to accommodate both strengths and challenges.</p> <p>Create authentic learning experiences and authentic audiences.</p>	<p>A focus on whole group instruction that is not differentiated.</p> <p>A focus on remediation, which addresses challenges to learning without providing an opportunity for advanced learning in the areas of strength.</p>	<p>Use flexible, nonpermanent instructional grouping practices to facilitate accelerated and advanced academic learning.</p> <p>Use cluster groups, cross-age peer groups, interest groups, learning preference groups.</p> <p>Provide fast-paced instruction and provisions for progress through the curricula at an accelerated learning rate.</p> <p>Use grade-level indicators and benchmarks for pre-assessing a student to determine what the student already knows and to eliminate tasks that the student has mastered.</p> <p>Design instruction with students’ learning preferences or interests in mind.</p> <p>Provide opportunities for independent investigations and projects.</p> <p>Use inquiry, primary sources and technology.</p>	<p>Give clear, specific directions in written, picture and verbal formats.</p> <p>Post directions at centers and for lab work.</p> <p>Present models or samples of completed work.</p> <p>Use highlighted texts, lectures, study guides. Use highlighting tape, pens.</p> <p>Reduce or minimize distractions in the classroom.</p> <p>Vary activities. Use visual, auditory, spatial and kinesthetic activities.</p> <p>Provide opportunities for working as a whole class, alone, in small groups and with partners.</p> <p>Tape lectures for replaying.</p> <p>Use manipulatives.</p> <p>Give alternatives for lengthy written assignments.</p> <p>Break assignments into parts. Reinforce the student as each part is completed.</p> <p>Allow for alternative methods of responding.</p>

Adapted from *A Guidebook for Twice Exceptional Students: Supporting the Achievement of Gifted Students with Special Needs*. Rockville, MD; Montgomery County Public Schools, and *Twice Exceptional Students: Gifted Students with Disabilities: An Introductory Resource Book*, Denver, CO; Colorado Department of Education.

Table 4.2: Reading

Instruction		Accommodations	
What Works	What Is Less Helpful	Strength/Interest-based	To Facilitate Learning
<p>Explicit instruction in:</p> <ul style="list-style-type: none"> Phonological awareness, phonics and reading; Comprehension strategies such as inference and prediction; SQ3R (Survey, Question, Read, Recite, Review). <p>Emphasize comprehension, listening and gaining information.</p> <p>Use curriculum materials that engage students in abstract reasoning, comprehension and higher-order questioning.</p> <p>Teach students how to highlight.</p> <p>Connect reading and writing.</p> <p>Provide for self-directed projects.</p> <p>Use nonfiction.</p> <p>Analyze speeches and advertisements.</p>	<p>Worksheets.</p> <p>Round robin reading.</p> <p>Focusing on word attack errors that do not affect comprehension.</p>	<p>Teach decoding and encoding through multi- sensory approaches.</p> <p>Use high-interest reading material that personally connects to the student.</p> <p>Use literature that increases motivation and interest in reading.</p> <p>Emphasize abstract thinking and problem solving.</p> <p>Use interdisciplinary instruction to increase connections.</p> <p>Relate content to intense interests of the student.</p> <p>Consider student’s learning preferences.</p> <p>Use biographies of gifted individuals.</p> <p>Provide student choices for independent reading.</p>	<p>Use audio books.</p> <p>Use a scanner and text-to-speech software.</p> <p>Highlight the text to identify main ideas.</p> <p>Have students isolate the key words in sentences as they respond to questions.</p> <p>Use texts that have the key words or main ideas in bold print.</p> <p>Use colored overlays; have students choose the color that works best for them.</p> <p>Use graphic organizers.</p> <p>Use jigsaw techniques to read a lengthy passage.</p> <p>Permit the student to move around the classroom.</p> <p>Provide opportunities for the student to change work space.</p>

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Table 4.3: Math

Instruction		Accommodations	
What Works	What Is Less Helpful	Strength/Interest-based	To Facilitate Learning
<p>Teach math as the science of patterns:</p> <ul style="list-style-type: none"> • Making patterns; • Seeing patterns; • Extending patterns. <p>Make connections across math, the curriculum and the real world.</p> <p>Teach skills within concepts.</p> <p>Teach number sense through 12th grade.</p> <p>Develop problem-solving skills.</p> <p>Pre-assess mastery of mathematical categories such as decimals, fractions, whole numbers, statistics and probability.</p> <p>Pre-assess mastery of mathematical benchmarks.</p> <p>Provide very specific, deliberate directions.</p> <p>Use the board effectively. Start at the left and use it in an organized fashion.</p> <p>Have high expectations. Students often know more math than they are capable of putting into words.</p> <p>Communicate the mathematical goal for the lesson. Emphasize communication and reflection.</p> <p>Assign one good open-ended problem for homework. One good problem is more effective, challenging and motivating than a page of rote problems.</p> <p>Focus on accuracy and understanding.</p> <p>Use alternate ways of assessing mastery.</p>	<p>Practicing incorrectly.</p> <p>Focusing on pencil-and-paper tasks.</p> <p>Repetition and remediation.</p> <p>Watering down the mathematical vocabulary.</p> <p>More is not always better.</p> <p>Reliance on pencil-and-paper assessments.</p> <p>Copying from the text or board.</p> <p>Lengthy assignments.</p> <p>Focus only on computation.</p> <p>Focus on speed.</p>	<p>Capitalize on the student’s visual strength, need for tactile stimulation and movement.</p> <p>Use manipulatives and model their use. Use commercial, teacher-made and student-made manipulatives. Use Cuisenaire rods or blocks for patterns. Use cut paper or a tile floor for proportions.</p> <p>Use body movement to teach symmetry.</p> <p>Create a human number line to teach operations.</p> <p>Use real mathematical vocabulary terms. Adjust the definitions and scaffold the definitions as the student acquires new skills.</p> <p>Provide concrete opportunities to engage the student’s cognitive strengths. Twice exceptional students can think; however, they need something to hold onto and control.</p> <p>Provide novelty and challenge rather than repetition and remediation.</p> <p>Use games for composing and decomposing numbers, teaching attributes, solving problems and logic.</p>	<p>Reduce the number of problems.</p> <p>Highlight the math sign.</p> <p>Provide additional space on worksheets.</p> <p>Chunk the work.</p> <p>Cut the worksheet into thirds. Have the student complete one-third at a time.</p> <p>Place the worksheet into a manila folder with the top of the folder cut into thirds. The student opens the first flap and completes the work, then opens the second flap, etc.</p> <p>Use the prompts: First..., Then..., This... and Finally...</p> <p>First engage in math through use of manipulatives, then move to pencil and paper.</p> <p>Use technology.</p> <p>Use calculators.</p> <p>Have students build three-dimensional models of math concepts.</p>

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Table 4.4: Writing

Instruction		Accommodations	
What Works	What Is Less Helpful	Strength/Interest-based	To Facilitate Learning
<p>Teach students to use graphic organizers such as webs, flowcharts and storyboards.</p> <p>Teach students how to keep an idea log. Do not correct the log for spelling and grammar.</p> <p>Use rubrics to evaluate written assignments.</p> <p>Provide the rubric prior to giving an assignment.</p> <p>Teach students to evaluate their own work using the rubric.</p> <p>Provide explicit instruction in learning strategies such as DEFENDS: “Decide on goals and theme, Estimate main ideas and details, Figure the best order of main ideas and details, Express the theme in the first sentence, Note each main idea and supporting points, Drive home the message in the last sentence, Search for errors and correct” (Ellis, 1993).</p> <p>Teach students how to plan an assignment and break it into parts. Estimate how long each part will take. Recognize the student for accomplishments after each part is completed, to encourage success. When completed, determine how long the task actually took.</p> <p>Focus on one to two problem areas at a time when giving critical feedback, rather than marking every error in grammar, syntax and spelling.</p> <p>Focus on writing as a process of drafting and revision in the “real world.” Weaknesses in grammar and spelling are only problematic when students cannot or do not proofread, edit and re-write.</p>	<p>Lengthy writing assignments.</p> <p>Pencil-and-paper tasks.</p> <p>Time limits.</p> <p>Emphasis on handwriting.</p> <p>Writing assignments that lack a purpose.</p>	<p>Plan assignments based on student interests and preferences.</p> <p>Provide multiple tasks and allow the student to choose from a menu of challenging options.</p> <p>Use authentic audiences. Write for a purpose. The written assignment, then, is connected to a real issue and presented to a real audience. For example, students research a dangerous intersection in the community, collect data and prepare a report to present to city council.</p> <p>Have students develop story starters for later use.</p>	<p>Use assistive technology software to brainstorm and organize ideas.</p> <p>Use charts and visuals.</p> <p>Use computer word processing, spell check, thesaurus and grammar check.</p> <p>Use step-by-step written directions.</p> <p>Use story starters.</p> <p>Use larger print.</p> <p>Have the student dictate a writing assignment for someone to scribe.</p> <p>Provide mechanical pencils and pencil grips.</p> <p>Use technology.</p> <p>Use paper with raised lines.</p> <p>Use gel pens on black or colored paper.</p> <p>Change the texture of the writing surface.</p> <p>Allow the student to first audiotape essays and assignments.</p> <p>Allow students to create visuals, pictures or storyboards of the “movie in their mind.”</p> <p>Allow students to demonstrate their ideas in a variety of ways.</p> <p>Provide scripts that teach what should go into a written assignment (Lovecky, 2004):</p> <ul style="list-style-type: none"> • Model the use of the script; • Coach the student in its use; • Monitor the student’s use; • Provide feedback.

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Table 4.5: Organization

Instruction		Accommodations	
What Works	What Is Less Helpful	Strength/Interest-based	To Facilitate Learning
<p>Provide explicit instruction in time management.</p> <p>Use simple, short directions.</p> <p>Use timelines to help students understand how long a task will take. Scaffold their understanding. Begin by breaking down the task by class period, then by week, etc.</p> <p>Send written communications home to parents about deadlines. Use e-mail if available to parents.</p> <p>Teach students to break down tasks and to talk through the steps. Encourage students to use “self-talk” as they work through a task.</p> <p>Teach note-taking using two column notes (Pauk) to reduce confusion caused by inability to sequentially organize information.</p> <p>Provide direct instruction in learning strategies to improve note-taking, such as LINKS: “Listen, Identify key words, Note Key words and Stack information into outline form” (Deschler, Ellis & Lenz, 1996).</p> <p>Offer students a variety of organizational options, and encourage them to choose some that match their learning style. There is no one “best” way to organize.</p> <p>Create guided opportunities for students to develop planning, organizational and time-management skills, such as having students help plan the itinerary for a field trip or schedule an open house or other school event.</p>	<p>Assuming the student has effective organizational skills.</p> <p>Assuming the lack of productivity is due to student laziness or lack of motivation.</p>	<p>Present planning visually to the student as a timeline, graphic, picture schedule or other visual support.</p> <p>Present lecture notes visually to the student.</p> <p>Use visual instructional formats such as models, Venn diagrams, webs, flowcharts and other graphic organizers.</p> <p>Provide study guides that help the student locate information and answers.</p> <p>Use assignment notebooks.</p> <p>Use PDAs.</p> <p>Post assignments in the classroom in the same place daily, or tape record the assignments. Check first daily then weekly to ensure the student has recorded the assignment in his/her notebook.</p>	<p>Have the student use a visual daily schedule.</p> <p>Chunk learning into manageable subtasks.</p> <p>Provide time at the end of the day or class period for students to get organized.</p> <p>Have the student use a day planner, electronic organizer or visual schedule.</p> <p>Color subject materials. For instance, math is red. The book cover, math folder, and compartment for turning in math work are all red.</p> <p>Align the subject color coding to the student’s class schedule. For example, first period math is blue; second period language arts is red.</p> <p>Have the student organize his/her locker according to the schedule and color-coding. Have the student create a mnemonic to assist in remembering the order of classes. Or use school colors or the flag colors to assist memory, such as first period red, second period white, third period blue.</p> <p>Review and practice time management in real situations to increase generalization.</p> <p>Involve the student in the organizational structure of the classroom, such as crossing off tasks on the class schedule after they are completed.</p> <p>Pair an organized student with one who is less organized. Be sure that each has a strength to offer to the project. Each one contributes.</p>

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Table 4.6: Processing

Instruction		Accommodations	
What Works	What Is Less Helpful	Strength/Interest-based	To Facilitate Learning
<p>Connect new learning to a student’s past experience or prior knowledge.</p> <p>Engage students in new learning that makes sense from the student’s perspective and is meaningful to the student.</p> <p>Increase connections in learning by integrating the curriculum.</p> <p>Understand that the first step to taking in new learning is through the sensory register.</p> <p>Capitalize on all senses through the use of multi-sensory instruction, programs and materials that address sight, hearing, touch, smell and taste.</p> <p>Use mnemonics and associations for increasing memory.</p> <p>Teach students to create their own mnemonics. Use the FIRST strategy to create mnemonics. “Form a word, Insert a letter(s), Rearrange the letters, Shape a sentence and Try combinations.” (Deschler, Ellis, & Lenz, 1996)</p> <p>Allow a ten-second “wait time” to promote acquisition of new learning and critical thinking. Teach class the importance of wait time. Model your use of wait time by thinking aloud as you solve a problem or complete a task.</p>	<p>Responding to student’s frustration with academic tasks and to subsequent avoidance behaviors by re-teaching the material at a slower pace or in a louder voice.</p>	<p>Observe the student to determine choice of preferred sensory activity. Look for patterns.</p> <p>Pay attention to and honor individual feelings.</p> <p>Acknowledge unusual talents.</p>	<p>Allow use of “fidgets” to provide for movement.</p> <p>Use visual graphs and charts to support learning.</p> <p>Use semantic mapping and graphic organizers.</p> <p>Use word processors for essays.</p> <p>Highlight and color code.</p> <p>Allow students more time to think about or process new information.</p> <p>Use audio recordings.</p> <p>Use indicator words such as first, second, many, several, stages, steps and examples.</p> <p>Use “think aloud” to model a skill such as problem solving or to think through an answer.</p>

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Table 4.7: Metacognition

Instruction		Accommodations	
What Works	What Is Less Helpful	Strength/Interest-based	To Facilitate Learning
<p>Teach metacognition as the awareness and understanding of one’s thinking and cognitive processes, or “thinking about your thinking.” Help students to become more conscious of their metacognition.</p> <p>Think aloud through a cognitive task, and model the use of self-talk as you teach a lesson, skill or solve a problem. Explain the benefit of using self-talk in planning, monitoring and re-planning learning strategies.</p> <p>Script the steps for thinking through a new skill, problem or completion of a task.</p> <ul style="list-style-type: none"> • Involve the student in scripting these steps. • Teach students to create a mnemonic for remembering the steps to a script. • Model the new skill for the student by thinking aloud through the steps and acting them out. • Have students role-play using the skill by thinking aloud through the steps and acting them out. • Coach students through the role-play to reach a positive outcome. • Provide student feedback and encourage use of the skill throughout the day. • Teach students to recognize when they have lost focus. <p>“Teach them to focus on such as talking to oneself about the task, dividing the task into smaller parts and doing each part in a short time saying the directions sub-vocally as the task is done” (Lovecky, 2004).</p> <p>Teach students to evaluate their own work.</p>	<p>Assuming the student can think through problems to reach a solution or complete a task.</p>	<p>Describe self-talk to the student as “running a movie through your head,” “bubble talk” or “comic strip talk.”</p> <p>Begin by using self-talk to accomplish small tasks that the student desires to accomplish. Provide the student a menu from which to choose.</p> <p>Teach metacognition by building on an area of strength or intense interest. As the student becomes proficient, teach him/her to use self-talk to overcome problems: STOP – THINK – ACT.</p> <p>Encourage the student to use self-talk during daily interactions and tasks.</p> <p>Discuss the use of self-talk (metacognition) periodically with the student.</p> <p>Provide positive feedback. Reinforce student use of metacognition.</p>	<p>Use the “bubble talk” signal (pointing to your head) to prompt the student to think aloud through the steps the task demands or the problem requires.</p> <p>Scaffold the use of self-talk by having the student think through a small, desirable task; build to an in-class task; and then apply to a larger task.</p> <p>Use “wait time” to allow students to be more metacognitive.</p> <p>Use the “think, pair, share” strategy when asking questions, to increase individual think time.</p> <p>When presenting a completed project, ask the student to reflect on what went well, what didn’t work so well and what he/she would do differently.</p>

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Table 4.8: Social-Emotional and Behavioral

Instruction		Accommodations	
What Works	What is Less Helpful	Strength/Interest Based	To Facilitate Learning
<p>Teach knowledge of oneself, including learning preferences and interests. Teach students to value individual differences.</p> <p>Help students deal with fear of failure, fear of success, procrastination and anxiety.</p> <p>Help students understand that mistakes are a part of the learning process.</p> <p>Teach knowledge and skills necessary for managing potential difficulties in learning, such as perfectionism.</p> <p>Recognize small accomplishments, to increase self-esteem.</p> <p>Teach students to use positive self-talk.</p> <p>Provide direct instruction in social skills using concrete visual approaches. Talking about behavior is often not effective (Neihart, 2000).</p> <p>Recognize that a student's behavior is a form of communication. Design interventions that address the purpose or function of the behavior. Behaviors serve three functions: to gain attention, control or a tangible; to escape or avoid; or to meet sensory needs. (See Chapter 2).</p> <p>Use the problem-solving approach to conduct a functional behavior assessment, to determine what purpose the behavior serves and what need is being met. Design interventions that match the function.</p> <p>Involve students in collecting and graphing data toward achieving a goal.</p> <p>Model appropriate responses to mistakes, accidents and challenging situations.</p>	<p>Focusing on the topography of the behavior or what it "looks like."</p> <p>Designing interventions that address the behavior's topography rather than the need or function the behavior serves for the student.</p>	<p>Involve the student in the functional assessment problem-solving process.</p> <p>Break a goal down into successive approximations or incremental steps. Reinforce the student after he/she reaches each small step toward the larger goal.</p>	<p>Students with Asperger's Syndrome may not be able to read the social cues of a role-play situation. Work with a mirror, video camera and/or tape recorder to role-play social skills or scripts. Viewing provides imitative exercises.</p> <p>Use social stories to improve social understanding.</p> <p>Use self-monitoring to increase on-task behavior and productivity.</p> <p>Use sharing circles to help students express and deal with emotions.</p>

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How can a teacher support, instill confidence and assist students who are twice exceptional so they may learn to discover their strengths, learn compensatory strategies and become self-advocates?

Teachers can provide explicit instruction in the use of alternative strategies. **Strategy instruction provides students the ability to self-regulate their behavior, motivation and learning.** Through explicit instruction they become aware of their learning and come to know why, where and when to use specific strategies to overcome deficits. They are better able to identify and control the resources required to produce. They come to view themselves as successful individuals, increasing their willingness to use alternative strategies in the future and building the base for self-advocacy.

Through strategy instruction, students learn to identify and control the resources required to complete a task and come to change their beliefs or mental constructs regarding their ability to succeed through positive self-talk and evaluation.

There are two types of strategies, cognitive strategies (thinking about the task or problem) and metacognitive strategies (thinking about thinking). Cognitive strategies assist students with tasks such as note taking or study skills. Metacognitive strategies assist with self-regulation such as planning and, if necessary, re-planning a project; monitoring work toward its successful completion; and evaluation.

Many students who are both gifted and have disabilities have deficits in executive functioning, or the ability to attend to, organize and process information. Some students may have difficulty planning a goal or task, taking action, monitoring their success and evaluating the plan. Others have problems with the concept of time and sequential tasks, making it difficult to follow directions, which leads to confusion. Still others may be overly distractible, impulsive and/or hyperactive, which adversely affects their ability to concentrate on a task. Regardless of the need, **students can be taught alternative strategies.** However, successful instruction in the use of alternate strategies begins with accurately matching the strategy to the student's academic or behavioral needs.

Spencer has difficulty judging how long a task will take and is often frustrated with schedules imposed upon him. Fran’s creativity is underdeveloped. Although she can articulate an elaborate story, she struggles to produce a written product. Russ has the ability to succeed academically but lacks the internal motivation and skills to set a long-term goal and implement an action plan for achieving his goal.

Each of these students benefits from explicit instruction in the use of alternative strategies. Spencer needs a visual schedule and a social story so that he can remain in control of his time and transition from one academic task to another.

Table 4.9: Detail from Table 4.10: Instructional Strategies and Interventions to Increase Self-Regulation and Enhance Motivation

Strategy	Description of Strategy	Why Appropriate for Students Who Are Twice Exceptional?
Social Stories	Social stories (Carol Gray) are short written scripts that assist a student in performing in a social situation. Students must be taught how to use their social story with coaching and feedback.	Students who are twice exceptional may have difficulty understanding the social cues of a given situation. Social stories provide a context from which to interact in more socially acceptable manners.

Strategy instruction would enable Spencer to self-regulate his time and talk himself through the frustrations he experiences when he has to move to another task. Fran can verbalize her creative endeavors but requires a learning strategy to express herself in writing. She needs explicit instruction in working through the steps of producing a written product. Russ requires explicit instruction in setting goals. Instruction for Russ consists of social skills training in setting goals and the use of a visual goal-setting tool.

“Twice exceptional students’ learning challenges often emanate from a series of neurological twists and turns as messages try to make their way to the brain from the original stimulus. By the same token, many students labeled as having a learning disability do not actually have neurological implications. Such students would better be labeled as “learning strategies disabled” because their academic outcomes can improve dramatically when they learn to use appropriate compensation strategies” (Winnebrenner, 2004).

“What skills do learners need to take control of their learning and get past the reluctance to produce?”

Reis, McGuire and Neu (2000) found that interventions in teaching students to think about their thinking and engage in self-reflection and questioning were particularly important for successful learning. When students developed individual sets of strategies for learning, they were able to achieve at high levels. Students in the Reis study reported:

“If I have a list of terms or subcategories to learn I usually use mnemonics. Using the first letter of each one I make up a little saying or something like that to see if it spells a word; I’ll use that. It depends on what I am trying to learn. I think I’ve found what works for me.”

“I check in the margins those things in the text that I think are important. Then I go back, and I write a question out for what was discussed, and then in my own words I answer it underneath and that way I can quiz myself.”

As noted in this study, students who are able to take control of their own learning through the use of self-regulation strategies become more confident learners. Students who are able to self-instruct, set goals and monitor and recognize their successes are motivated to work past challenges to learning.

Table 4.10 outlines instructional strategies educational teams may use to enhance a student’s self-regulation and motivation. These strategies are explained in detail later in this chapter.

Table 4.10: Instructional Strategies and Interventions to Increase Self-Regulation and Enhance Motivation

Strategy	Description of Strategy	Why Appropriate for Students Who Are Twice Exceptional?
Explicit Instruction	A clear, structured approach for teaching a skill. Teachers follow specific steps before, during and after instruction. Pre-assessment is used to determine mastery of standards, benchmarks and indicators. See Figure 4.1 for a template.	Students who are twice exceptional often have difficulty following directions and/or understanding words or concepts. This structured approach reduces the chance of misunderstanding. Pre-assessments allow teachers to identify strength-based accommodations, “buying time” for accelerated or advanced learning.
Learning Strategies Instruction	Provides systematic, organized, step-by-step instructions for completing a task such as taking notes or writing an essay. The steps of the strategy are usually introduced with a mnemonic.	Students who are twice exceptional benefit from strategies instruction to address weaknesses in memorization, organization and written expression (Bisland, 2004).
Metacognition	Metacognition is thinking about one’s thinking or self-talk.	Young, gifted and students who are underachieving (Manning, Glassner, & Smith, 1996) have underdeveloped metacognitive skills. Metacognition increases the likelihood of achievement by building positive self-talk and internal feedback.
Self-monitoring	A form of internal feedback or self-talk. Students monitor their on-task behavior and/or productivity.	Self-monitoring often utilizes graphs and charts. Students who are twice exceptional are often visual learners, thus benefiting from these visual representations of their achievements. Graphs depicting success serve as continued motivation.
Social Stories	Social stories (Carol Gray) are short written scripts that assist a student in performing in a social situation. Students must be taught how to use their social story with coaching and feedback.	Students who are twice exceptional may have difficulty understanding the social cues of a given situation. Social stories provide a context from which to interact in more socially acceptable manners.
Sharing Circle	A teacher-directed, structured opportunity to share thoughts and feelings. The teacher explains the differences among feelings, thoughts and opinions.	Assists students in dealing with emotions. Students begin to understand differences and accept each other as individuals.
Mnemonics	An instructional strategy that assists in enhancing memory. Pictures, keywords and peg word mnemonics are commonly used. Sentence mnemonics can also be created.	Mnemonics assist in organizing the steps to a strategy or information to be learned. They also provide visual supports for learning. Students can tap their creativity by creating their own mnemonics to enhance their learning.
Social Skills Instruction	Explicit instruction in social skills, such as asking for help, setting goals or starting a conversation. Instruction includes describing the steps to the skill, modeling and demonstration, practice, coaching, and feedback.	Some students who are twice exceptional lack the social pragmatics or social reciprocity required for interacting in social situations. Gifted students with Asperger’s Syndrome may not be able to read the social cues in a role play. Imitative exercises using a mirror, video recording or audio recording may be more successful.

Explicit Instruction

The key to successful use of alternative strategies is explicit instruction. Deborah Simmons, Douglas Fuchs and Lynn Fuchs (1991) developed an instructional template that outlines the steps to explicit instruction. Although the authors designed this template for reading instruction, the steps are applicable to any skill instruction. It has been adapted to include pre-assessment for the purposes of compacting the curriculum. Standards-based instruction begins with assessment; assessment informs instruction. Assessment provides us with information as to what the student already has mastered to “buy time” for accelerated or enriched learning and to design strength-based instruction. Figure 4.1 provides a template for explicit instruction.

Figure 4.1: Explicit Instruction Template

Explicit Instruction Template (Adapted from Simmons, Fuchs, & Fuchs, 1991)	
BEFORE INSTRUCTION	
1. Time allocated for instruction:	
Total time _____	
Estimated time for teacher-directed instruction: _____	
2. Lesson objective: The target child will be able to _____	
3. Conduct a pre-assessment to determine what the targeted student already knows about the topic/skill and what the student still needs to master. Eliminate what the student already knows to “buy time” for accelerated/enriched/remediated learning.	
Knows: _____	
Needs to know: _____	
4. Pre-skills/prior learning to review: “Before we begin, let’s review _____.”	
DURING INSTRUCTION	
1. Frame lesson: “Today we’re going to learn _____.” “_____.” “This is important because _____.”	
2. Present target skill: “Listen and watch as I show you _____.”	
3. Guided practice: “Let’s try this one together.”	
4. Correct errors and provide feedback:	
Correct response: “That’s right.” Specify correct behavior.	
Hesitant response: “Good.” Repeat rule or procedure used.	
Incorrect response: Use prompts on process errors. Model correct response when there are factual errors.	
5. Prepare for independent practice: “Let’s do the first one together.”	
AFTER INSTRUCTION	
1. Monitor independent practice. Circulate throughout the room and provide feedback to students. Keep interactions brief.	
2. Review new skills. Review skills at the end of lesson and systematically throughout the instructional year.	

Students who are twice exceptional often have difficulty following directions and/or understanding words or concepts. This template offers a structured and clear approach to learning a new skill, thereby reducing the chance of misunderstanding. It can be used as a guide for teachers, ensuring that new skills:

- Are taught in a predictable manner;
- Build upon the student’s prior knowledge;
- Provide modeling and role playing of the skill; and
- Result in successful independent practice through coaching and feedback.

Most importantly, the student is made aware of learning, increasing the likelihood that the student will understand why, where and when to use the strategy in the future.

LEARNING STRATEGIES INSTRUCTION

Research suggests that learning strategies instruction is appropriate for students who experience “difficulty decoding and comprehending text, communication delays, lack of organizational skills, weak problem-solving skills, difficulty with abstract concepts, delays in mathematical concepts and short- and long-term memory problems.” (Access Center, 2005)

Deschler and Schumaker’s (1993) Strategy Instruction Model is an “eight stage interactive process that is guided by the teacher.” The authors explain that the eight stages are not applied in rote but implemented in a way that meets the needs of the student as well as the demands of the task. The steps are as follows (Deschler & Schumaker, cited in Bisland, 2004):

- **Pretest** to identify the student’s learning need, select a strategy appropriate to the task, explain the benefits of using the strategy and involve the student in the decision to use the strategy to increase motivation and commitment.
- **Introduce** the new strategy by describing its steps. Use mnemonics, pictures or icons to increase memory. Brainstorm ways the student may use the strategy.
- **Model** the strategy by narrating or thinking aloud while performing the strategy.
- **Rehearse** the steps of the strategy, with the student providing guidance until he or she has memorized the steps. Provide prompts and scaffolding to assist the student toward independent use of the strategy. These prompts may be provided by the teacher, another student or through visual supports.
- Provide the student **time for practice and feedback**. Structure feedback in a way that the student can use the same method independently. Provide for practice and feedback when applying the strategy, while remembering that gifted students often master content with less practice than most others. Students who are twice exceptional may quickly

understand the steps but may not remember them and may need more practice or additional supports.

- **Use post-testing** to determine whether the student has successfully learned and used the new strategy.
- **Generalization** occurs when the student knows where, when, why and how to use the strategy.

Bisland (2004) finds that students who are twice exceptional benefit from learning strategies instruction to address weaknesses in memorization, organization and written expression.

Introducing strategy instruction by focusing on students' interests and by building on their strengths results in a stronger student commitment to work through challenges that negatively impact production. Learning strategies are often introduced with a mnemonic, to assist the learner in remembering the components or steps to the strategy. Knowing what a strategy is, how to use it, and when and why to use it is a necessary part of the instruction. Instruction in the use of learning strategies requires direct teaching, scaffolding and fading of support. Students who are gifted may ask "why" to learning and may resist instruction and assessment they do not see as relevant. Learning strategy instruction that clearly communicates the intent of purposeful learning increases a student's motivation and effort. Bisland (2004) suggests using two-column note taking along with LINKS to improve note taking and DEFENDS to improve written expression.

Ellis (1993) describes the LINKS strategy to improve note taking:

- **L**isten;
- **I**dentify key words;
- **N**ote key words;
- **S**tack information into outline form.

Ellis (1993) describes the DEFENDS strategy for written instruction:

- **D**ecide on goals and theme;
- **E**stimate main ideas and details;
- **F**igure the best order of main ideas and details;
- **E**xpress the theme first in the first sentence;
- **N**ote each main idea and supporting points;
- **D**rive home the message in the last sentence;
- **S**EARCH for errors and correct;
 1. **S**et editing goals;
 2. **E**xamine your essay to see if it makes sense;
 3. **A**sk yourself whether your message will be clear to others;
 4. **R**eveal picky errors (e.g., capitalization, spelling, punctuation);
 5. **C**opy over neatly;
 6. **H**ave a last look at errors.

“How can a teacher incorporate strategies instruction into curriculum so that learners who are twice exceptional develop the skills they need to succeed?”

Strategies instruction can be implemented in various ways. Intervention specialists and classroom teachers working together can offer a broad array of instructional options. Some students, especially students with learning disabilities, benefit from intense, explicit instruction and guidance in the use of strategies during small group instruction, with opportunities to apply the strategies in the general curriculum. Embedding the strategies instruction into the existing curriculum is another option. Deschler and Schumaker (1993) recommend finding an “instructional balance between content and strategies instruction.” An example of a strategy that can be taught to students for use across the curriculum is the Cornell Note-taking System (Pauk). Teachers teach students to use two-column note-taking, providing opportunities to use the strategy in multiple settings. When students practice such a strategy in multiple ways, they are more likely to use it independently. That is, they have internalized the strategy and know its value. Whatever model is designed and implemented, options for explicit instruction in the use of strategies, as well as opportunities for application and generalization into the general curriculum, are necessary.

METACOGNITION

Metacognition is “thinking about thinking,” and is also referred to as self-talk or internalized speech. Metacognitive readers are aware when their comprehension breaks down and can choose from strategies to gain the information. For instance, while reading a technical manual, a reader’s mind wanders and he or she chooses to reread the last paragraph for meaning. Or perhaps he/she will continue reading in hopes of grasping the main ideas.

The research of Manning, Glasner and Smith (1996) provides evidence that “particular gifted learners (e.g., young gifted and underachieving gifted) possess less developed metacognitive/self-regulative skills than others.” They recommend that skills in metacognition be implemented in gifted education. These authors describe a “self-regulated learning pedagogy.” This approach mirrors the steps to explicit instruction by providing the learner a model, demonstration and guided practice. Learners are guided through a five step process,

“ASK, TELL, TRY, CHECK and CHEER,” building skills through correct practice and positive feedback. Feedback is first provided by adults, then students are taught to use positive self-talk as they work through the process. Being positive is essential. Many times, underachievers “don’t” because they think “can’t.” A student stated (Higgins & Nielsen, in Kay, 2000), “Language can be very violent. We commit violence toward ourselves through self-talk, by stopping ourselves from learning and growing, by not allowing ourselves to make mistakes.”

Teaching students to use metacognition builds the skill of positive internal feedback, bridging them from feeling powerless to feeling empowered.

SELF-MONITORING

Self-monitoring is synonymous with internal feedback. It is a form of self-regulation and is an effective intervention. Herron (1998) presents self-monitoring as a “mature” intervention, with evidence of effectiveness in increasing on-task behaviors and productivity. It is a socially valid intervention that can be incorporated easily into the classroom. Self-monitoring of attention and/or performance is typically used. Self-monitoring of attention requires students to record whether they are “paying attention” or are “on-task”. The recording is usually cued while the behavior is occurring. The teacher, a timer or other signaling device may provide cues. Students record whether they are “on-task” or “off-task.”

Figure 4.2: “On-task?”

Time Intervals	Yes	No
		
9:00 am		
9:15 am		
9:30 am		

Self-monitoring of performance requires students to record whether they are completing academic tasks. Figure 4.2 is a sample of a chart the student could use for self-monitoring.

Cuing occurs during or after the performance. Self-monitoring is a concrete and visual approach, involving charting, graphing or self-recording sheets. It provides students with feedback about their performance. It empowers them by visually representing their progress toward a task or goal and sending a message that “when I work harder, I get results.” As they come to regard themselves as competent persons who “know that they can achieve something,” their motivation and willingness to use new strategies increases. Graphs also serve as a form of self-monitoring for students.

Figure 4.3: How Long It Takes Me to Begin a Task

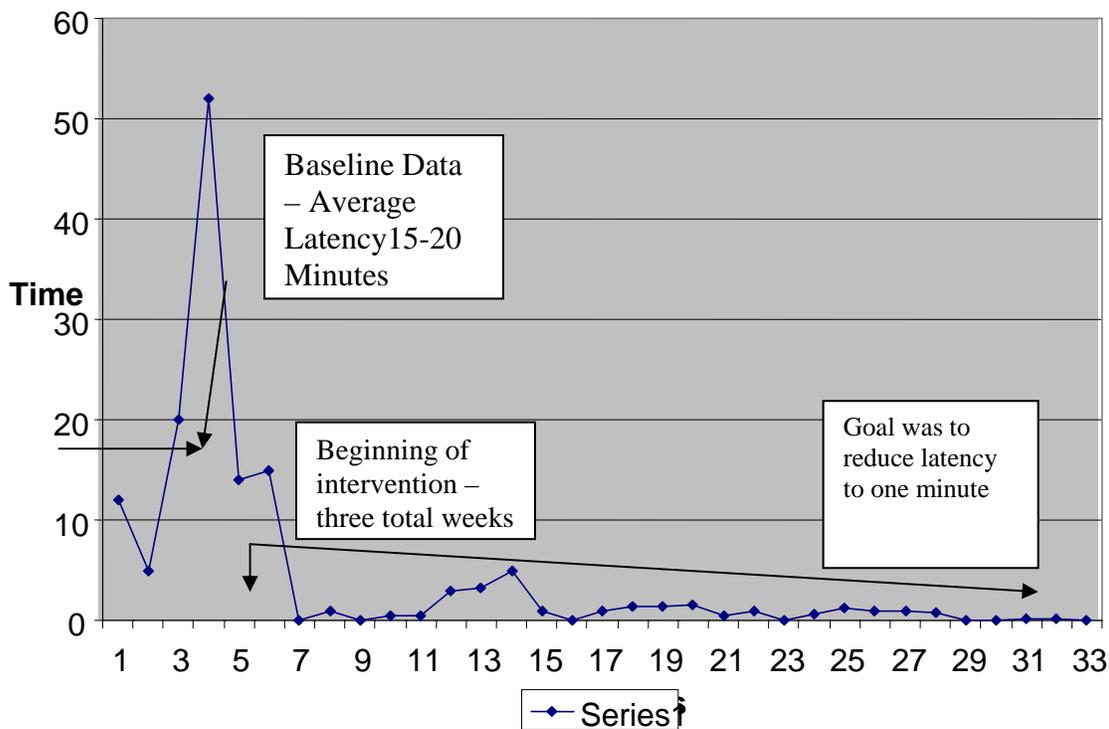


Figure 4.3 depicts a student's *latency*, or how soon the student began working after an assignment was given. The first six data points were baseline prior to intervention. The remaining data points were taken over a three-week period during intervention implementation. All teachers were involved in the implementing of interventions, which included positive reinforcement of on-task behaviors.

Again, students must be taught how to self-monitor. Herron (1998) suggests the following guidelines for teaching self-monitoring:

- Identify and define the target behavior;
- Discuss the target behavior with the student, using the student's own words;
- Select a way to measure the behavior;
- Train the student to use the measurement;
- Once the student is using the system, conduct an accuracy check;
- Provide feedback.

SOCIAL STORIES

Social stories (Carol Gray) are short written scripts that provide students with accurate information regarding situations they encounter. Spencer's social story assists him in transitioning from one classroom activity to another. Social stories contain four types of sentences: descriptive, perspective, directive and control sentences. Stories may also contain visual symbols or cues to further assist a student. Neihart (2000) finds that gifted students with Asperger's Syndrome benefit from using visual supports in order to manage daily routines and social demands, and suggests using comic strip conversations as well as social stories. Many students with autism experience difficulty reading, interpreting and responding to their world. Gray (1994) finds that "social stories address this confusion by requiring parents and professionals to first stop and consider a situation from the perspective of the student with an autism spectrum disorder. The result is often an improvement in social understanding on both sides of the social equation."

Spencer's Social Story

Descriptive sentence: *In school there are many subjects and interesting activities that the class is going to participate in throughout the day. When it is time to change subjects, the teacher or teacher's helper has the students stop and listen.*

Descriptive sentence: *When the students are listening, the teacher or teacher's helper will instruct them to put their finished work into their finished work folder or basket. After they put their finished work away, the teacher or teacher's helper will have the students place their unfinished work into their unfinished work folder or basket. Students will have time to go back to their unfinished work and complete what they were working on, or they can take it home and show their parents how to complete the unfinished work.*

Perspective sentence: *When the students are prepared for the next subject, the teacher is happy to see everyone ready to learn. Many students are excited to learn about a new subject.*

Control sentence: *After the class puts their unfinished work away, the teacher or teacher's helper has the students get ready for the next class or activity. "I remember it is important to place my unfinished work in the unfinished basket. It is like placing work in a folder on my computer. When I put the work in the proper basket, it is like labeling my folder and saving it on my hard drive for future work."*

Descriptive sentence: *After the work is put away, the teacher or teacher's helper has the students get out their materials for the next class or activity.*

SHARING CIRCLES

Sharing circles help students who are twice exceptional express and deal with emotions. Steps used for a sharing circle are (Ericson & Kohler, 1995):

1. Only one student may speak at a time.
2. Students respond to the "prompt" with a feeling the first time around the circle. Prompts may be positive or negative in nature. Two examples of a prompt are, "How do you feel when someone pushes you on the playground?" and, "How do you feel when it is a beautiful, sunny day?"
3. The second time around, each child may respond about a feeling if he or she wishes. Respect a child's desire to "pass" for a few weeks. Each child will join in when ready.
4. Begin with safe prompts.
5. Reinforce that feelings are not right or wrong, and opinions are not for sharing circle.
6. Do not allow other students to interrupt.

MNEMONICS

Mnemonics are an instructional strategy used to increase memory or aid in attention. They link new learning to a student's prior knowledge. There are many forms of mnemonics. The most

familiar is the letter strategy. For example, many learned the names of the Great Lakes by remembering the mnemonic “HOMES” (Huron, Ontario, Michigan, Erie, Superior). Teachers can present mnemonics to students or tap a student’s creativity and challenge them to create their own mnemonics. Bisland (2004) encourages her students to use the FIRST learning strategy to create their own mnemonics.

- Form a word;
- Insert a letter;
- Rearrange the letters;
- Shape a sentence;
- Try combinations.

SOCIAL SKILLS INSTRUCTION

Lovecky (2004) describes a student with Asperger’s Syndrome as wanting to do only what is on his mind. His social skills are undeveloped and the rigid expectations manifested by his disability often cause problems in social situations. Students with Asperger’s Syndrome may have trouble understanding the perspective of others and often don’t know how someone else may feel. Other students may not have the social pragmatics to participate in social situations. Again, **explicit instruction provides students the opportunity to learn new skills and how to interact in socially acceptable ways.** Students may need instruction in how to set goals, how to start a conversation, how to apologize, how to ask for help, or similar social skills. When learning a social skill, students need to understand the components of the skill, what the skill means and how to use it in their daily lives. Teach by modeling the skill within a positive context. A skill such as setting a goal is broken down into sequential steps (Goldstein, 1999):

- Decide what goal you want to reach;
- Find out all the information you can about how to reach your goal;
- Think about the steps you will need to take to reach your goal; and
- Take the first step toward your goal.

After modeling the skill for the student, provide opportunities for the student to role-play the skill, coaching him or her through the steps and providing feedback and additional practice as needed.

Baum, Cooper and Neu (2001) state that once students regard themselves as competent learners, they often improve in reading and writing. Weinfeld, Barnes-Robinson, Jeweler and Shevitz

(2001) found that teaching students self-advocacy and compensatory skills was necessary for their success. **Students must understand their strengths and weaknesses and learn ways to circumvent or accommodate their weaknesses.** They must come to know that they have the ability to succeed.

Chapter Five

Differentiated Lessons

“How can a teacher provide opportunities to help students who are twice exceptional excel in their areas of strength as well as offer appropriate accommodations and modifications in their areas of need?”

A teacher can differentiate content, process or products in response to a child’s learning profile, interests or readiness (Tomlinson, 1999). Given the diversity in our classrooms, differentiating instruction provides teachers a framework for creating multiple ways for students to reach the same goals. Understanding that people learn differently creates the opportunity for teachers to plan and deliver instruction using a variety of instructional strategies and formats.

Collaborate with intervention specialists in gifted and special education for assistance in differentiating the curriculum. Through collaboration, educators build a system of support that meets the dual needs of a learner who is gifted and who also has a disability. Begin this dual differentiation (Baum, Cooper, & Neu, 2001) in the learner’s area of talent, interest or strength.

Use the Strength-based Instructional Planning Tables 4.1-4.8 to design instruction and/or accommodations that are strength-based or interest-based. Instruction that addresses strengths and areas of need is differentiated instruction. Use the Differentiated Instructional Strategies Table 5.1 to plan activities. Use collaboration as a tool to design, implement and evaluate instructional strategies.

Table 5.1: Differentiated Instructional Strategies

Strategy	Description of Strategy	Why Appropriate for Students Who Are Twice Exceptional?
Flexible Skills Grouping	Students are matched to skills work by virtue of readiness, not with the assumption that all need the same spelling task, computation drill, writing assignment, etc. Movement among groups is common, based on the readiness on a given skill and growth in that skill.	Exempts students from basic skills work in areas where they demonstrate a high level of performance (100 percent is not required). Can allow a chance for independent work at the student's own pace.
Compacting	A three-step process that (1) assesses what a student knows about material to be studied and what the student still needs to master, (2) plans for learning what is not known, and (3) plans for freed-up time to spend in enriched or accelerated study.	Eliminates boredom from unnecessary drill and practice. Satisfies student's desire to learn more about a topic than school often allows. Encourages independence. Buys time for additional enrichment, acceleration and remediation.
Most Difficult First	Students can demonstrate mastery of a concept by completing the five most difficult problems with 85 percent accuracy. Students who demonstrate mastery do not need to practice any more.	Honors the student's mastery of a concept. Eliminates unnecessary drill and practice. Reduces homework load for students who can demonstrate mastery.
Independent Projects, Group Investigations	A process through which student and teacher identify problems or topics of interest to the student. Both student and teacher plan a method of investigating the problem or topic and identifying the type of product the student will develop. The product should address the problem and demonstrate the student's ability to apply skills and knowledge to the problem or topic.	Builds on student interests and encourages independence. Teacher provides guidance and structure to supplement the student's capacity to plan. Uses preset timelines to zap procrastination and logs to document the process involved. Teachers and students establish criteria for success.
Problem-based Learning	The student is placed in the active role of solving problems as a professional would.	Uses varied learning strengths, allows use of a range of resources and provides a good opportunity for balancing student choice with teacher coaching.
Agendas	A personalized list of tasks that a particular student must complete in a specified time.	Teacher moves among individual students, coaching and monitoring their understanding and progress.
Learning Centers, Interest Centers	Centers are flexible enough to address variable learning needs. Interest centers are designed to motivate student exploration of a topic. Learning centers are a collection of activities designed to teach, reinforce, or extend a skill or concept.	Materials and activities address a wide range of reading levels, learning profiles and student interests. Activities vary from simple to complex, concrete to abstract, structured to open-ended.
Choice Boards, Tic-tac-toe	Students make a work selection from a certain row or column. Teachers can target work toward student needs while giving students choice.	Well-suited to dealing with readiness, interests and learning style preferences among students.

Strategy	Description of Strategy	Why Appropriate for Students Who Are Twice Exceptional?
Portfolios	A collection of student work that can be a powerful way of reflecting on student growth over time.	Portfolios are motivating because of their emphasis on student choice and their focus on readiness, interests and learning profile.
Assessment	Assessment is ongoing and diagnostic. It provides the teacher with day-to-day data on students' readiness, interests and learning profiles. Assessment has more to do with helping students grow than with cataloging their mistakes.	Assessment is used to formally record student growth. Various means of assessment are used so that all students can fully display their skill and understanding.

Adapted from *The Differentiated Classroom: Responding to the Needs of All Learners* by Carol Ann Tomlinson. Source: Colorado Department of Education. These strategies are also cited throughout this document to illustrate their application.

Ohio's Instructional Information Management System provides lessons that collaborative teams can use as a springboard for designing differentiated instruction. The following third-grade lesson, "Class with Character," has been further differentiated to address Spencer's social-emotional and behavioral needs. Notes for Spencer are written in bold italics.

Class with Character
Grade 3

Ohio Academic Content Standards Connection:

Citizenship Rights and Responsibilities

Benchmark A

Explain how citizens take part in civic life in order to promote the common good.

Indicator 2

Demonstrate effective citizenship traits including:

- a. Civility;
- b. Respect for the rights and dignity of each person;
- c. Volunteerism;
- d. Compromise;
- e. Compassion;
- f. Persistence in achieving goals;
- g. Civic-mindedness.

For Spencer: Using this benchmark and indicator, divide the class into several groups and assign each group one of the topics under Indicator 2. Spencer would be paired with one peer to work on “b” – respect for the rights and dignity of each person. This choice is based upon his critical area of need. Other groups would have more children. Spencer’s accommodation of only one other child would be necessary for him to best interact and share with the least resistance.

Lesson Summary:

Students will participate in a two-day lesson that promotes the citizenship trait of respect listed in the indicator. Day One focuses on establishing rules to promote the safety and respect of each person. Day Two focuses on demonstrating respect for each person. The lesson could be part of a citizenship unit, which would include lessons that address the other traits listed in the indicator. This lesson lays the foundation for good citizenship traits to be learned, observed and demonstrated throughout the year.

For Spencer: The unit begins with the book Mimi and Momo – Type Tales, setting the stage for the importance of respect.

Estimated Duration: Two hours

Commentary:

The group work in this lesson lends itself to discussions and demonstrations of good citizenship. You can add additional lessons corresponding with the other citizenship traits in this indicator. Guidance counselors or school psychologists can be used as resources for additional information. This lesson could also be part of a comprehensive citizenship and/or service-learning unit and reinforced as a yearlong classroom study.

One field-test participant commented that this lesson is easy to incorporate into the classroom and does not require extra planning or materials. The teacher also commented that activities similar to those in this lesson could be implemented when studying the other citizenship traits listed in the indicator. Another field-test participant stated that as a result of this lesson, students “became more aware of how their behavior affects others,” and that the students “gained greater respect for rules and how to treat others.”

Pre-Assessment:

Have students write a response to the following prompt: *What is a good citizen? To meet Spencer’s needs: This pre-assessment would be done orally in a sharing circle and then in a short paragraph. Children would discuss what they thought their topic meant.*

Scoring Guidelines:

Students are to show that they have a basic understanding of the word “citizen” and include at least two reasons a person is considered to be a “good citizen.” The pre-assessment is not scored but is used to assess pre-existing knowledge and to help guide instruction. Examples might include:

- A good citizen follows the rules of the government.
- A good citizen helps others.
- A good citizen votes.

Post-Assessment:

- Have students write a paragraph responding to the same prompt as in the pre-assessment: *What is a good citizen?*
- Develop the criteria and share them with the students before administering the post-assessment.

Table 5.2: Detail from Table 5.1: Differentiated Instructional Strategies

Strategy	Description of Strategy	Why Appropriate for Students Who Are Twice Exceptional?
Assessment	Assessment is ongoing and diagnostic. It provides the teacher with day-to-day data on students’ readiness, interests and learning profiles. Assessment has more to do with helping students grow than with cataloging their mistakes.	Assessment is used to formally record student growth. Various means of assessment are used so that all students can fully display their skills and understanding.

- *To meet Spencer’s needs: Students would write an individual paragraph with more specifics, graded with a rubric. Each group of children would present their topic orally and explain how their problem-solving process worked for them. The teacher would facilitate Spencer’s team but not be part of the presentation.*

Scoring Guidelines:

Criteria for the students’ paragraphs may vary based on teacher preference (e.g., content or number of traits that make a good citizen, paragraph-writing skills, etc.).

Instructional Procedures:

Day One – Class Act

1. Divide students into teams of four. Direct student teams to brainstorm a list of rules they consider “unfair” but may also be necessary. Have someone in the group record the group’s responses. Examples may include:
 - Bedtime at 8:30 p.m.;
 - No candy before dinner;
 - Homework and chores must be completed before watching television.

Table 5.3: Detail from Table 5.1: Differentiated Instructional Strategies

Strategy	Description of Strategy	Why Appropriate for Students Who Are Twice Exceptional?
Flexible Skills Grouping	Students are matched to skills work by virtue of readiness, not with the assumption that all need the same spelling task, computation drill, writing assignment, etc. Movement among groups is common, based on the readiness on a given skill and growth in that skill.	Exempts students from basic skills work in areas where they demonstrate a high level of performance (100 percent is not required). Can allow a chance for independent work at the student’s own pace.

To meet Spencer's needs: The groups are purposefully formed to differentiate the activity by process and readiness. Some groups will brainstorm a list of "unfair" rules. Other groups, one which includes Spencer and just one other child, will brainstorm the list and debate why the rule is unfair, supporting their claim and clarifying for others in the group.

2. Allow each team to share one of its rules with the class. Have each group explain why the rule it chose seems unfair to members but why this rule might be necessary. (e.g., going to bed at 8:30 p.m. might make a student miss a popular television program, but the student will be rested and able to concentrate at school.)
3. Direct each team to create a suggested list of no more than 10 rules for the classroom, and record them on chart paper for display. Each team should have reasons why each of the 10 rules may be necessary for the safety of and respect for each person.
4. Display classroom rules for consideration. Allow time for each group to read through the rules formed by other teams. Compile a set of rules for the classroom, based on the rules that best provide for the safety of and respect for each person.

Instructional Tip:

You may want to limit the number of classroom rules or combine some under one category to make it less cumbersome for the next step. You may also want to have the students use some of the wording from the indicator (e.g., respect, compassion, compromise, civility).

Day Two — R-E-S-P-E-C-T

5. Divide students into teams of four. (These can be different combinations from the previous day.)

To meet Spencer's needs: The groups are purposefully formed to differentiate the activity by process and readiness. Some groups will brainstorm a list of "unfair" rules. Spencer's group will have two children in it to accommodate his needs. A third student will be added to his group as he gains the social skills.

6. Ask, "What does it mean to be respectful? How do we show respect?" Ask for and offer examples (e.g., listening to the teacher or to your parents, asking for something without just grabbing it). Record student responses.
7. Ask the students if any of them know what spectacles are (glasses). Explain to the students that they are going to make "respect-acles" (write the word so they can see the word respect in it). They will be able to look through their pair of respect-acles and observe others acting respectfully.
8. Have students work independently, in pairs or in groups to make pairs of respect-acles:
 - Pass out one 12-inch pipe cleaner and two six-inch pipe cleaners per student;
 - Twist the ends of the 12-inch pipe cleaner together to form a circle;
 - Twist the circle to make a figure eight;
 - Give the figure eight an added twist to make the nose bridge;
 - Attach the two six-inch pipe cleaners to each side;
9. After the task is complete, ask several questions about respect so students can visualize and "test" the respect-acles:
 - If the class is lining up for recess and people are shoving each other, how should they act to show more respect?

- If there is only one game at indoor recess time, but everyone wants to play it, how can they show respect?

10. Read aloud a story about respect. Tell students to listen for circumstances where the character(s) demonstrate(s) respect.

Table 5.4: Detail from Table 5.1: Differentiated Instructional Strategies

Strategy	Description of Strategy	Why Appropriate for Students Who Are Twice Exceptional?
Learning Centers, Interest Centers	Centers are flexible enough to address variable learning needs. Interest centers are designed to motivate student exploration of a topic. Learning centers are a collection of activities designed to teach, reinforce, or extend a skill or concept.	Materials and activities address a wide range of reading levels, learning profiles and student interests. Activities vary from simple to complex, concrete to abstract, structured to open-ended.

To meet Spencer’s needs: Offer multiple stories/literature at differing reading levels to further differentiate learning. Create centers for flexibility.

11. Individually or working together, have students identify each incident in the story where respect is demonstrated, and have them explain why they think each incident demonstrates respect. Record responses.
12. Have students generate a list of all the different ways they can demonstrate respect at school, at home and in public. Record responses. You could title the chart(s) “How We Demonstrate Respect.”
13. Have students work individually or in pairs to choose one of the responses from the list, write it on a sheet of white paper (8 ½ x 11 minimum), and illustrate their “demonstration of respect.” Display annotated illustrations, or use them to create a class book.

Differentiated Instructional Support:

Instruction is differentiated according to learner needs to help all learners either meet the intent of the specified indicator(s) or, if the indicator is already met, to advance beyond the specified indicator(s).

Spencer had mastered all grade-level standards related to writing conventions. His teacher naturally added higher-level benchmarks, those obtained by the end of the grades five through seven program:

Writing Process:

- Generate writing topics and establish a purpose appropriate for the audience.*
- Clarify ideas for writing assignments by using graphics or other organizers.*
- [Spencer would independently] Edit to improve fluency, grammar and usage.*

Research:

- Formulate open-ended research questions suitable for inquiry and investigation and develop a plan for gathering information.*
- Locate and summarize important information from multiple sources.*
- Communicate findings orally, visually and in writing or through multimedia.*

- For students who have difficulty in understanding the citizenship traits, work with them individually and use real-world situations.

For Spencer: Provide clear directions with a visual schedule. Post directions at his desk. Use work baskets labeled “finished” and “unfinished.” When transitioning to the next activity, Spencer places his work in the appropriate basket. When working in small groups, pair Spencer with a partner as a support for small group activities. Use manipulatives and technology. Provide reinforcement throughout the project/lesson. Allow Spencer the choice of writing a comic strip conversation instead of a paragraph for the final assessment.

- Use group activities to assist students who have difficulty working alone.
- For students who easily grasp the concepts relating to citizenship, have them read biographies and/or conduct research about respectable citizens and then create awards or trophies to honor those people.

Spencer’s teacher used pre-testing, portfolios and observation to identify his strengths and determine which third-grade indicators he had mastered to eliminate unnecessary work, thus “buying time” for the Biography Project.

Table 5.5: Detail from Table 5.1: Differentiated Instructional Strategies

Strategy	Description of Strategy	Why Appropriate for Students Who Are Twice Exceptional?
Portfolios	A collection of student work that can be a powerful way of reflecting on student growth over time.	Portfolios are motivating because of their emphasis on student choice and their focus on readiness, interests and learning profile.

Assessment led Spencer’s teacher to eliminate 17 third-grade writing convention indicators and three writing process indicators. The following strength-based accommodations were designed by his teacher.

- *Spencer would not have to do a “note” sheet or look up vocabulary to prepare for writing.*
- *He knew about simple, compound and complex sentences.*
- *He was excellent in the area of technology and understanding what he read.*
- *He was an excellent writer and one shot at proofreading would be enough for him.*
- *Handwriting was frustrating for him as his mind worked faster than his hand. Allowing him to use a computer would be wonderful.*
- *Spelling was not a problem and I would not have required him to do any preparation for spelling tests – just take the final test.*
- *No mundane work with grammar was needed. Practice homework would be eliminated unless he lapsed in a particular area. He would have to take assessments.*

To meet Spencer’s needs for being in control, students were provided choices by using the Tic-tac-toe differentiation strategy.

Table 5.6: Detail from Table 5.1: Differentiated Instructional Strategies

Strategy	Description of Strategy	Why Appropriate for Students Who Are Twice Exceptional?
Choice Boards, Tic-tac-toe	Students make a work selection from a certain row or column. Teachers can target work toward student needs while giving students choice.	Well suited to dealing with readiness, interests and learning style preferences among students.

Table 5.7: Tic Tac Toe: Biography Project

TIC TAC TOE: BIOGRAPHY PROJECT
(CHOOSE THREE - HORIZONTALLY OR DIAGONALLY)

Research a respectable citizen. Read at least one book about this person. Create a game about the person. Present your game to a small group of classmates and then play the game.	Respectable students follow school rules. We need consistency in our school. Design hallway rules that all ages of students could follow. Please interview the principal and three teachers before determining the rules. Take your first draft of suggested rules to the principal for discussion.	Create a Power Point presentation about the respectable citizen you researched. Present it to class.
Do a research report about a respectable citizen. Read at least one book about the person. How did learning about this person affect your thinking?	Create a survey to interview fifth- and sixth-graders investigating what is needed to be respectful in the upper grades. Use your research to prepare and give a presentation entitled, "How We Prepare for the Upper Grades." Include visuals and a written product in your presentation.	Write a dedication for the book you read.
Read a book about a respectable citizen. Write a commercial convincing the audience to read a book about the person you researched.	Give an oral presentation about a respectable person with a display board. What are some skills you learned from researching this person, and how might they help you?	Search the Internet for three more facts about this person that weren't in the book you read.

Extensions:

- During the course of the school year, have students keep a "citizenship journal" in which they record the daily and weekly connections they make as citizens of the classroom. Entries might include:
 - Acts of kindness (toward others, toward themselves);
 - Situations in which they showed respect, compassion, volunteerism, compromise and other good citizen traits;
 - Descriptions of volunteer activities, such as time spent assisting in a soup kitchen;
 - Goals to be achieved (goal-setting);

- Goals that have been achieved.
- Have the class work on a compassionate project, such as a food drive for a food pantry, winter clothing and accessories for a local shelter, small gift items for those living in a nursing home.
- Have students create mini-skits/role-playing situations to demonstrate knowledge of the trait being learned.

Homework Options and Home Connections:

- Have students find newspaper or magazine articles that focus on acts of kindness, compassion, volunteerism and respect for others. These can be posted on a class display.
- Have students volunteer some time after school or on weekends to do good deeds for someone or some organization. (This could involve doing good deeds for family members.)

Interdisciplinary Connections:

English Language Arts

- **Writing Process**

Benchmark C: Apply knowledge of graphic or other organizers to clarify ideas of writing assessments.

Indicator 4: Use organizational strategies (e.g., brainstorming, lists, webs and Venn diagrams) to plan writing.

No Benchmark

Indicator 9: Use available technology to compose text.

Benchmark I: Prepare writing for publication that is legible, follows an appropriate format and uses techniques such as electronic resources and graphics.

Indicator 16: Rewrite and illustrate writing samples for display and for sharing with others.

- **Writing Applications**

No Benchmark

Indicator 5: Produce informal writings (e.g., messages, journals, notes and poems) for various purposes.

Fine Arts – Visual Art

- **Creative Expression and Communication**

Benchmark C: Develop and select a range of subject matter and ideas to communicate meaning in two- and three-dimensional works of art.

Indicator 6: Create an original work of art that illustrates a story or interprets a theme.

Materials and Resources:

The inclusion of a specific resource in any lesson formulated by the Ohio Department of Education should not be interpreted as an endorsement of that particular resource, or any of its contents, by the Ohio Department of Education. The Ohio Department of Education does not endorse any particular resource. The Web addresses listed are for a given site's main page; therefore, it may be necessary to search within that site to find the specific information required for a given lesson. Please note that information published on the Internet changes over time; therefore, the links provided may no longer contain the specific information related to a given lesson. Teachers are advised to preview all sites before using them with students.

For the teacher: Chart paper, 12-inch pipe cleaners (one per student), six-inch pipe cleaners (two per student), assorted literature relating to citizenship.

For the students: Paper, pencil, dark marker.

Vocabulary:

- Respect
- Citizen
- Citizenship

Research Connections:

Robert J. Marzano, et al. *Classroom Instruction that Works: Research-based Strategies for Increasing Student Achievement*. Alexandria, VA.: Association for Supervision and Curriculum Development, 2001.

Nonlinguistic representations help students think about and recall knowledge. This includes the following:

- Creating graphic representations (organizers);
- Making physical models;
- Generating mental pictures;
- Drawing pictures and pictographs; and
- Engaging in kinesthetic activity.

Cooperative learning grouping has a powerful effect on student learning. This type of grouping includes the following elements:

- Positive interdependence;
- Face-to-face interaction;
- Individual and group accountability;
- Interpersonal and small group skills; and
- Group processing.

Daniels, H. and M. Bizar, M. *Methods that Matter: Six Structures for Best Practice Classrooms*. Portland, ME: Stenhouse Publishers, 1998.

Authentic experiences help students develop real-world knowledge and skills and apply their learning in ways that prepare them for their careers and lives beyond school.

General Tips:

- Whenever possible, integrate children's literature as a way to begin and/or to close each day.
- Role-playing can be used to have students demonstrate their understanding of each citizenship trait.
- When students are to record their responses or prepare written work, have them use graphic organizers to help them organize their thoughts and writing. Use this as an alternative to making lists for recording responses.

Chapter Six
The Building Principal:
Supporting Teachers in Recognizing and Serving
Students Who Are Twice Exceptional

Students who are twice exceptional are those who are gifted and who also have a disability such as ADHD, Asperger’s Syndrome, a learning disability, an emotional disturbance, a sensory disability such as hearing or vision impairment, or a physical disability. Many of the strategies for ensuring the success of students who are twice exceptional are strategies that often work for all students. A goal of public education is to produce students who achieve to their maximum potential. Empowering students with needed skills and dispositions, such as study skills, goal setting, social skills, self-regulation and motivation, will enable them to successfully transition from school to post-secondary options to the community work force, while discovering what to do with their lives. Leadership from the building principal is essential. This publication serves as a tool for school leaders in assisting teachers to better meet the needs of diverse learners. Skills presented in this text include recognizing the characteristics of students who are twice exceptional, understanding their social and emotional needs, designing strength-based instruction, implementing instructional and intervention strategies for increasing students’ self-regulation and motivation, and implementing differentiated instructional strategies.

What is the role of the building principal?

School leaders must:

- Create a positive supportive environment with high expectations for achievement, a climate where students of varying skills and interest have the opportunity to reach their potential;
- Align resources to build flexibility and collaboration among educators, support personnel and families;
- Make differentiating instruction for all students a priority by using a schoolwide approach, including providing ongoing professional development and verifying that teachers are truly differentiating instruction.

- Identify the strengths of individual staff members and build a culture of collaboration by pulling the staff together and empowering them to try new strategies; and
- Set a clear vision of success for every student, support the implementation of standards-based instruction, encourage collaboration and shared leadership, and work in partnership with families.

“How can a principal support teachers in increasing the achievement of all students, including those who are gifted and who also have a disability?”

School administrators must:

- Provide professional development to communicate and build a common understanding of the characteristics and needs of students who are twice exceptional.
- Create and support a system of strength-based instructional planning. Through collaboration, teams build a student profile, the first step in maximizing a student’s potential. The team must also provide for ongoing communication, continued collaborative planning, monitoring of progress, adjusting the plan if needed, and evaluation. Involving the student in the planning, monitoring and evaluation processes increases independence.
- Facilitate collaboration across special education, gifted education and general education to share areas of expertise. Working together to better understand a child’s strengths and needs leads to instructional planning that FIRST recognizes and builds upon those strengths while also addressing the child’s challenges.
- Provide a continuum of services through collaboration and communication. This continuum begins with differentiation. Intervention specialists in gifted education, special education and related service providers must work with the classroom teacher in designing and coordinating appropriate services. This begins with support and leadership from the building principal. The intervention specialists in gifted and/or special education are key members of the team.

“How can administrators build upon core curriculum to provide differentiated instruction to meet the diverse needs of students who are twice exceptional?”

Ten action steps for school leaders include:

1. Use school data to ensure that each student makes at least one year’s growth each year.
2. Embrace a philosophy of differentiation, provide on-going, job-embedded professional development and verify that teachers are successfully differentiating.
3. Build a library of resources on differentiation.
4. Place intervention specialists’ classrooms or work spaces in the same area of the building with their grade-level teams.
5. Encourage co-teaching by intervention specialists in gifted and special education with general education teachers. Provide teachers time to co-plan.
6. Allow intervention specialists in gifted and special education the opportunity to model differentiated lessons for classroom teachers. Teachers need to “see” differentiation in action.
7. Provide professional development to all staff to build a common understanding of the characteristics and needs of students who are twice exceptional.
8. Provide flexible grouping of students within and between classrooms.
9. Provide a continuum of services.
10. Use an existing building team, such as the continuous improvement team, intervention assistance team, grade-level team or IEP team, to transition students who are twice exceptional from grade to grade and to post-secondary options and the community workforce.

Differentiation

A study of Ohio schools (2005) found that embracing a philosophy of differentiation requires a whole-school approach, administrative commitment and an articulated vision. Intervention specialists in gifted education and special education should plan collaboratively with classroom teachers. Professional development is embedded into daily practice. A wide variety of options for student learning and teacher learning are provided. Data is used to determine adequate yearly progress for all students. Thoughtful and deliberate instruction is guided by research. Resources

are allocated, parents and the community are involved, and differentiation becomes a vital component of the school’s continuous improvement planning.

The Differentiated Instructional Strategies Table 5.1 and purposeful grouping strategies have been used to further differentiate a lesson (Chapter 5) from Ohio’s Information Management System (IMS). Encourage teachers to use the tools in this publication to differentiate existing lessons. Use Table 6.1 to verify the use of differentiation strategies, as well as to encourage teachers to use multiple forms of differentiation.

Table 6.1: Matrix to use when verifying the use of differentiation strategies

	CONTENT	PROCESS	PRODUCT
READINESS			
LEARNING PROFILE			
INTERESTS			

Planning for Services

Services for students who are twice exceptional may be unique and nontraditional. Yet many service options appropriate for these students are currently being offered in our schools. Table 6.2 identifies service options available for serving Ohio’s students. Many of these options are currently being offered, but students who are gifted with disabilities are often not considered because they lack the necessary skills to perform independently, or they pose behavioral challenges, eliminating them from consideration. However, many of these options are appropriate. By using this toolkit, principals can assist teachers in acquiring the skills to productively engage students in these challenging learning experiences. Note that educational options are learning experiences or activities that are designed to extend, enhance or supplement classroom instruction and meet individual student needs. Educational options are approved in accordance with school board policy and with parental approval. They include mentorships, distance learning, educational travel, independent study, study abroad and tutorial.

Table 6.2: Planning for Services

Service Option	Description of Option	Why to Consider for Twice Exceptional?	What to Consider for Twice Exceptional?
<p>Education Option: Mentorship</p>	<p>A mentorship is an educational activity including advanced or in-depth work by an individual, usually under the direction of a non-certified individual. Mentors are selected in accordance with board criteria and are subject to parental approval.</p>	<p>Use in early elementary, prior to patterns of underachievement, allows student to advance academically and provides a model of how to relate to another person.</p> <p>Use in the secondary grades provides opportunities to advance academically, clarify career interests and acquire leadership skills.</p> <p>Assists student in realizing creative and intellectual potential.</p> <p>Assists student in establishing coping strategies and acquiring a more positive view of self and hope for the future.</p>	<p>Pair the student with another student in his/her field of interest. At the elementary level, students may be paired with older students, university students or members of the community. At the high school level, mentors may be college faculty or community members.</p> <p>The study or investigation uses real data and real problems, and culminates in a presentation to a real audience.</p>
<p>Educational Option: Independent Study</p>	<p>An educational activity involving in-depth study on a topic chosen by the student under the direction of a person approved by the board of education and parent.</p>	<p>Independent studies teach self-regulation, promote self-efficacy and provide opportunities for success.</p>	<p>Design the independent study in an area of student interest. Involve the student in the design. Sign a contract to assist the student with self-regulation and goal setting.</p>
<p>Educational Option: Distance Learning</p>	<p>An educational option that employs systematic instruction in which the instructor and/or student participate by mail or electronic media.</p>	<p>Provides access to learning experiences not available locally.</p>	<p>Broadens learning opportunities to areas of specialized knowledge and interests.</p>
<p>Individual Subject Acceleration</p>	<p>The practice of assigning a student to a higher grade level than is typical given the student's age, for the purpose of providing access to appropriately challenging learning opportunities in one or more subject areas.</p>	<p>Allows student to advance academically in areas of strength with accommodations to address learning challenges.</p> <p>Research: 75-85 percent of elementary students of average to above average ability can pass subject pretests with 92-93 percent mastery. (Rogers, 2002)</p>	<p>Curriculum can be delivered by moving the student to a higher grade level within the building.</p> <p>Curriculum can be delivered by having the student work with a higher grade level in his/her own age-based classroom.</p>
<p>Whole Grade Acceleration</p>	<p>The practice of assigning a student to a higher grade level than is typical given the student's age on a full-time basis, for the purpose of providing access to appropriately challenging learning opportunities.</p>	<p>Students may not perform well on standardized tests. Students work well with older peers. Their chronological age mates are not usually peers.</p>	<p>Use the Iowa Acceleration Scale. Consider radical acceleration, as one grade may not be sufficient for some of these children.</p>

Service Option	Description of Option	Why to Consider for Twice Exceptional?	What to Consider for Twice Exceptional?
Early Admission to Kindergarten	The practice of admitting a student to kindergarten who has not yet reached the typical age at which students are admitted, for the purpose of providing access to appropriately challenging learning opportunities.	Young students who are gifted may demonstrate uneven development (asynchrony). They may be advanced in some areas and average in others. Allows schools to teach to a student's strengths and to direct instruction to areas that are advanced.	Addresses asynchrony and allows students to work with peers as role models.
Internships	Schools collaborate with local business to provide placements for students to work cooperatively with peers and an onsite mentor. Students earn academic credit.	Students may have multiple areas of interests to pursue. Internships assist in narrowing down the career possibilities. Also, some students may already know what career they choose to pursue. Internships provide a head start in that career.	Consider working with professional associations, colleges and universities to expand the pool of placements.
Post Secondary Enrollment Options (PSOE)	The PSOE program permits Ohio public and nonpublic high school students in grades nine through 12 to earn college credit and/or high school credit through the successful completion of college courses. The purpose of the program is to provide rigorous academic pursuits and to provide a variety of options to high school students. PSOE is also referred to as dual enrollment.	PSOE provides opportunities for extending learning to new disciplines. The program also provides access to intellectual peers and engaging learning environments.	Consider online delivery of courses.

Service Option	Description of Option	Why to Consider for Twice Exceptional?	What to Consider for Twice Exceptional?
Advanced Placement (AP)	AP courses allow students to take college level courses while still in high school.	<p>AP courses provide opportunities for a student to study a subject in which they have an intense curiosity and interest in greater depth and detail. Students are pushed intellectually and develop skills in writing, problem solving and study habits.</p> <p>AP provides services for students with a documented disability and may be eligible for accommodations in testing. Accommodations include extended time, Braille devices, computers or magnifying devices, a reader to dictate questions, a writer to record responses and, for hearing impaired students, a written copy of the exam instructions and/or a sign language interpreter to give directions. www.collegeboard.com</p>	Students who are eligible for accommodations must receive the same accommodations during classroom instruction and assessment.
Counseling	Services received from a guidance counselor and/or guidance program specifically designed to meet the social and emotional needs of gifted students, including academic and career choices.	<p>Students who are gifted and who also have a disability often display low academic self-concept, high levels of frustration, unrealistic self-expectations, hyperactivity and low self-esteem but a positive self-image (Higgins & Nielsen, in Kay, 2000).</p> <p>Providing group counseling can assist students to see that others experience problems similar to their own (Brody & Mills, 1997).</p>	Those responsible for providing guidance programs to meet the social-emotional needs of students should receive training in identifying and working with characteristics that are unique to these learners.
Early High School Graduation	The practice of facilitating completion of the high school program in fewer than four years, for the purpose of providing earlier than typical access to post-secondary educational opportunities.		

The Ohio Integrated Systems Model shown in Figure 6.1 integrates tiers of supports for both behavior and academic achievement. The model is designed to provide strong school-wide instruction and supports that would meet the needs of most students – not just students with disabilities. The green lower tier in the model represents instructional and behavioral support systems and strategies that would benefit all students. The yellow center tier represents strategies designed to help support a subset of the whole school population who may be at risk. When effective school-wide instruction and targeted supports are in place, a small percentage of students may still require intensive supports to meet more specialized needs and assume success. This red upper tier of the OISM model represents intensive, individualized supports designed to meet the needs of the remaining students at high risk for failure. A school with a continuum of prevention, intervention and support systems in place will give all students the best chance for success. It is also important to recognize that an individual student may benefit from a variety of supports and intervention strategies.

Figure 6.1: Ohio’s Integrated Systems Model

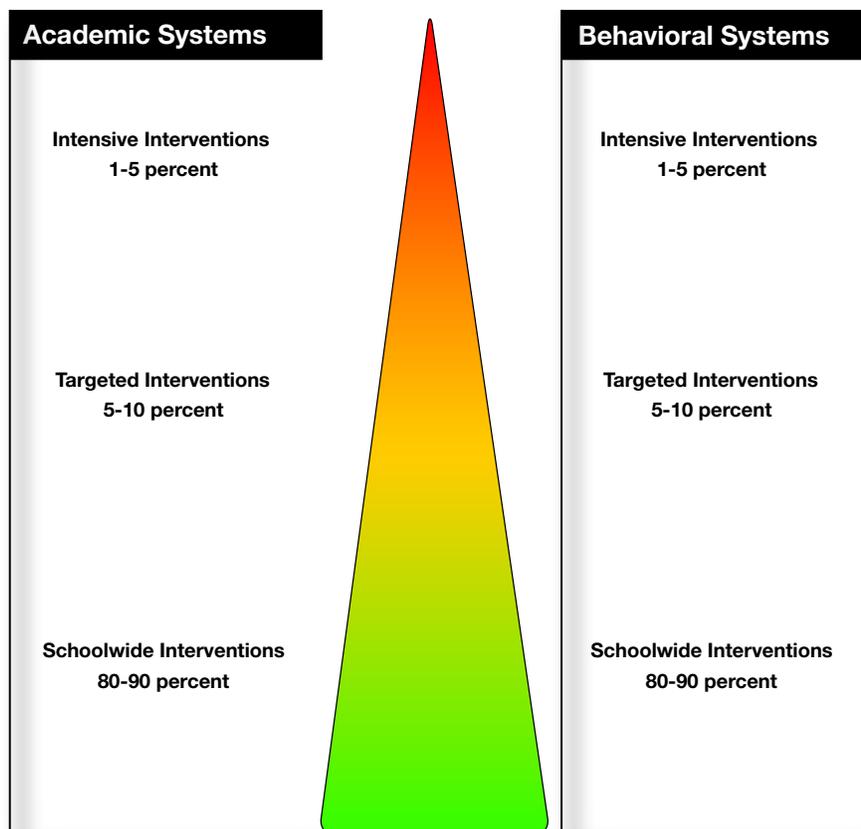
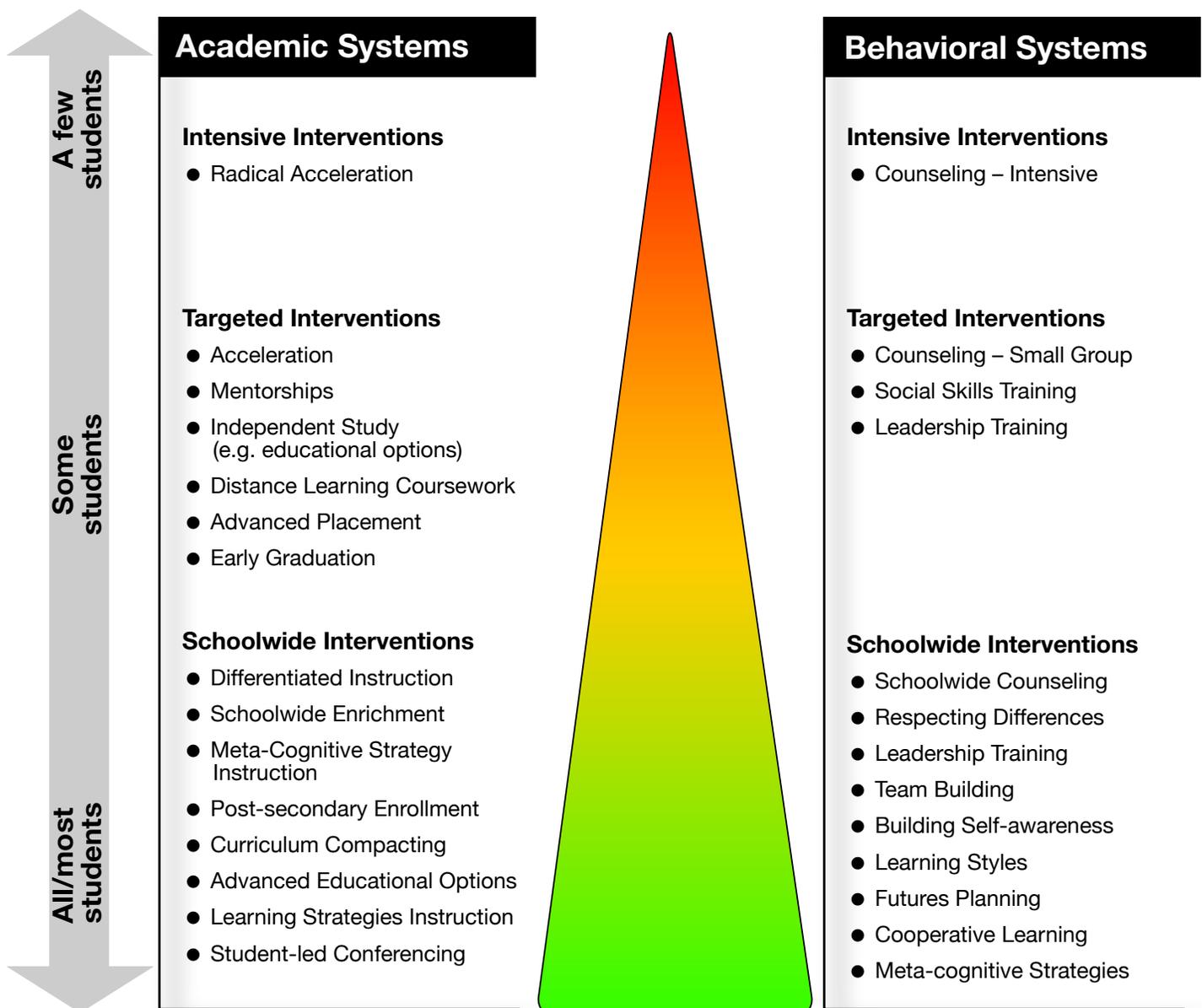


Figure 6.2 indicates program options, interventions and services, and provides a framework for designing systems for student success. Interventions and program options are tiered, providing flexibility. Services for students who are twice exceptional may be very unique and nontraditional. This system of tiered interventions that moves from universal interventions through supplemental to intensive practices provides a framework for differentiation. Targeting and building upon a rich core curriculum will meet the needs of most students.

Figure 6.2: Designing Schoolwide Systems for Success



A program for Spencer would draw from a menu of service options to provide the high levels of challenge and support he needs to fully develop his talents, including:

- Compact the curriculum that Spencer masters quickly;
- Use saved time to create opportunities for Spencer to complete independent study enrichment units related to his interests in music and oceans to build his confidence and develop talents;
- Help Spencer build social skills using flexible grouping strategies to allow him to work with students who share similar interests;
- Use classroom positive behavior strategies appropriate for all students. Supplement with individual or small group counseling focused on specific needs, such as social skills development;
- Involve Spencer in setting his Written Education Plan goals and involve him in charting his progress;
- Explicitly teach metacognitive skills to all students.

Transitioning Students from Grade to Grade

Transitions can often be difficult for students who are gifted and who also have a disability. Transitions from one activity to the next, one teacher to another and from one school year to another can be very trying. Planning for transitions and building communication systems can ease these difficulties. Use an existing team structure to transition students. This team includes intervention specialists in gifted education and special education, regular education teachers, visual/performing arts teachers, guidance counselors, curriculum directors and directors of special education. The team meets at least twice each year to address issues related to transitioning students who are both gifted and have special needs from one teacher to the next and between elementary, middle and high school. They also meet as needed to assist in designing interventions for specific students.

The transition planning, as well as the strength-based instructional strategies presented in this text, enables teams to move toward more thoughtful, deliberate services for students. “The needs of many could be met through appropriate identification of strengths and weaknesses and a

flexible, individualized approach to using the existing services and resources available in and out of school” (Brody & Mills, 1997).

Providing Professional Development Activities

Principals may choose to designate a leadership team to plan professional development activities that are embedded into the daily work of the school. The following activities may be used as a springboard for professional development:

- Form small groups of teachers across special education, gifted education and general education to conduct study groups or to collaborate as problem-solving groups. Study groups read and discuss relevant resources, books and videotapes. Use the resources suggested in building a professional library, or use this text as part of the reading for a study group.
- Form a collaborative problem-solving group. Teachers and administrators work through problems as well as share experiences of successes and failures. This text can be used to assist groups in designing strength-based instructional practices and interventions.
- Dedicate time at staff meetings to share resources, successes and challenges.

Professional Development Activities

Characteristics of Students Who Are Twice Exceptional:

Activity 1: Scenarios of the students profiled throughout this text as well as additional scenarios are provided in the Appendix. Have participants read one of the scenarios. Identify the student’s strengths and challenges. Tell the group that this scenario profiles a student who is both gifted and has a disability, or is twice exceptional. Ask participants to reflect on their personal and professional lives to identify someone they have known who is twice exceptional.

Activity 2: Use Table 6.3, *Common Characteristics of Students Who Are Twice Exceptional*. Cut the characteristics into strips. Divide participants into small groups of four or five, and give a mixed set of characteristics to each group. Instruct groups to divide the characteristics into three columns: strengths, challenges, and those characteristics that could be interpreted as either strengths or challenges, or perhaps both. Ask participants to provide a rationale for their decisions. What implications for planning instruction arise?

Table 6.3: Common Characteristics of Students Who Are Twice Exceptional

Large knowledge base	Low self-esteem	Wide variety of interests
Likes to have ideas known	Can solve a problem or reach a goal	Fails to see consequences of actions
Highly individualistic	Low tolerance for frustration	High energy level
Difficulty with temporal (time) concepts and tasks requiring sequencing	Probes facts and issues in depth	Quick to understand new information and concepts
Disorganized thinking results in poor organizational skills	Is curious about many things	Has intense feelings and opinions
Perfectionism	High energy level	Highly imaginative
Sharp sense of humor	Lacks social-emotional reciprocity and has poor social skills	Slow to complete work
Shows ability to invest time in a task	Is able to transfer learning to new situations	Sees relationships among seemingly unrelated things
Is aware of problems others do not see	Uneven academic development	Likes to have ideas known
Inflexible in adhering to non-typical routines		

Use Figure 1.2 (Chapter 1) to further the discussion. How does the work of the participants compare and contrast to the diagram? Identify additional implications for recognizing and instructing students who are twice exceptional. Lead participants in recognizing that **both giftedness and disability pose challenges as well as strengths.**

Strength-Based Instructional Planning:

Activity 1: Provide each participant with copies of the scenario introducing Russ, the *Strength Based Planning Tool* (Appendix E) and *Planning for Services* (Table 6.2). You may also refer to

Figure 1.2, *ADHD and Gifted Share Common Characteristics*. Divide participants into teams and provide the following directions to each team:

- Turn back the clock for Russ. He is in the fourth grade. His mother suspects attention problems and seeks advice from her family physician. Russ's teacher provides the family with documentation of learning challenges, work samples and a brief narrative of his classroom performance. Russ is diagnosed as having ADHD.
- Reflect upon Russ's needs in designing strength-based instructional options and services. Decide which grade range your group will address: elementary, middle school or high school. What services will Russ need to become an independent, self-directed learner? What educational settings, instruction, accommodations, and social-emotional and behavioral supports will he need? Who are the collaborators? Using the Steps to Strength-based Instructional Planning (Chapter 3) and additional resources, list the services you would you design for Russ. The first two steps have been started to provide additional information regarding Russ's areas of strength and need.

Strength-based Instructional Planning for Russ:

Step 1: Identifying the Potential

- Strong in English and the performing arts;
- A visual learner;
- Performs well when accelerated;
- Enjoys competition; and
- Is entertaining and enjoys performing for an audience.

Step 2: Plan for a Continuum of Abilities

- Lacks organizational skills and goal setting;
- Has so many interests that he has difficulty setting goals and meeting deadlines;
- Prefers to make his own choices; and
- High cognitive ability makes learning new information easy.

Step 3: Identify Critical Needs Based Upon Strengths and Challenges

Step 4: Connect to the Content Standards

Step 5: Design Individualized Instructional Goals

Step 6: Plan for Instruction

Step 7: Plan for Services

Activity 2: Ask participants to design strength-based instruction for a student they are currently teaching or have taught in the past. Again, divide the group into teams. Use *Differentiation Strategies* (Table 5.1), *Instructional Strategies and Interventions to Increase Self-Regulation and Enhance Motivation* (Table 4.10), *Strength-based Instructional Planning Tool* (Appendix E) and *Planning for Services* (Table 6.2).

Creating a System

Administrative planning teams should discuss the following questions:

- What are the outcomes and issues that arise in creating a district system for increasing the achievement of all students?
- How does the implementation of this system affect the way teachers teach and their core beliefs about their instructional strategies and their students?
- How does the documentation process assist teachers in recognizing student strengths and talents, thereby helping students reach their maximum potential?

Recognizing and honoring the individual differences in students instills in them a motivation to succeed and enhances their performance. When working with students who are twice exceptional, this is a dual task and oftentimes a confusing task, not only for the educator and family but also for the students themselves. Educators can recognize and honor individual differences by teaching to a student's strengths.

Understanding the characteristics and needs of students who are twice exceptional and teaching to their strengths are vital to honoring differences, because their behaviors and abilities may not fit the expectations we have for students in programs for the gifted.

Meeting the needs of all students is a daunting task. High-performing schools promote collaboration and flexibility, thereby increasing their ability to meet the needs of diverse learners. Administrators break down the walls of separate programs and create systems of communication, collaboration and problem solving. When schools offer flexible and varied program options, learning is enriched for all students.

Appendices

A. Glossary

B. Assembling a Professional Library for Differentiation

C. Scenarios: Russ, Fran, Spencer, Michael, Kimberly, Joey, Matthew and Ethan

D. Steps to Strength-based Instructional Planning

E. Bibliography

Appendix A: Glossary

Accommodations: Accommodations do not change the content being taught. Rather, accommodations are “whatever it takes” to make sure that a student can participate as fully as possible in challenging curricula. They include changes in the way material is presented or in the way a student responds to the materials, as well as changes in setting, timing and scheduling. Accommodations can be made for instructional methods and materials, assignments and assessments, physical learning environments, time demands and scheduling, and communication systems.

Asynchrony: Students who are gifted and who have a disability, or twice exceptional students, often excel in some areas and have challenges in others. Asynchrony is also referred to as uneven development.

Compacting: Compacting involves using pre-assessment to determine what the student has mastered in order to eliminate unnecessary work and thus create time for students to be engaged in advanced work.

Differentiation: Differentiated curriculum is curriculum that is responsive to the unique and diverse needs of each learner. Curriculum can be modified in terms of pace, depth and/or breadth of delivery by varying the content, process or product of the curriculum according to each learner’s readiness, interests or learning style. According to Tomlinson (1999), “teachers in a differentiated classroom provide specific ways for each individual to learn as deeply as possible and as quickly as possible, without assuming one student’s road map for learning is identical to anyone else’s.”

Dual Differentiation: A differentiated curriculum is the springboard for dual differentiation. Dual differentiation refers to a curriculum that addresses the dual needs of the child who is both gifted and has a disability. A dual differentiated curriculum is responsive to the academic, behavioral and/or social-emotional needs of each learner. According to Baum, Cooper and Neu (2001), “dual differentiation creates a balance between nurturing a child’s strengths and

compensating for learning deficits.” They describe a dual differentiated curriculum as being centered on authentic learning experiences and authentic assessment, where students set goals, work on relevant issues and share their research with real audiences.

Metacognition: The awareness and understanding of one’s thinking processes or one’s own self-knowledge and thinking.

Mnemonics: Mnemonics is a memory-enhancing strategy that links new knowledge to previously learned information. There are three types of mnemonics; letter, keyword and peg word. An example of letter mnemonics is the use of the acronym HOMES to remember the names of the Great Lakes: **H**uron, **O**ntario, **M**ichigan, **E**rie and **S**uperior.

Scaffolding: According to Pearson (1996), scaffolding allows teachers “to intervene in an environment and provide the cuing, questioning, coaching, corroboration and plain old information needed to allow students to complete a task before they are able to complete it independently.” Learning to ride a bicycle is an example of scaffolding. The learner first rides a tricycle, a bicycle with training wheels, a bicycle with physical support from another, culminating in independently riding the bicycle.

Strength-based Accommodations: Strength-based accommodations are intervention strategies for students who are twice exceptional that emphasize developing one’s talents over remediation. They provide for high levels of abstract thinking, creativity and problem solving. Strength-based interventions are often more successful because they engage students’ interests and abilities to enhance motivation and increase tolerance of frustration.

Strength-based Planning: Strength-based planning addresses gifts first and disabilities second. It provides a structure to enhance collaboration and allows teams to design personalized, independent, self-directed learning for each student. Strength-based planning begins by identifying a student’s strengths and documenting his or her academic learning and behavior over time. It emphasizes empowering a student to recognize and use his or her strengths for

focus on achievement rather than failure. A key to its success is involving the student in this self-directed, personalized planning. Teachers are facilitators and mentors of this process.

Twice Exceptional: The term twice exceptional is used in the literature to define students who are both gifted and have a disability, such as a learning disability, attention deficit hyperactivity disorder, emotional disturbance, Asperger's Syndrome, sensory disability or physical disability.

Appendix B: Assembling a Professional Library for Differentiation

ASCD Videotapes. *Instructional strategies for the differentiated classroom*.

Gregory, G., & Chapman, C. (2002). *Differentiated instructional strategies: One size doesn't fit all*. Thousand Oaks, CA: Corwin Press.

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Appendix C: Scenarios

Russ

I'm very competitive. In first grade the teacher would list each day's work on the board. My friend and I would show up early to complete the work. It was a race. We usually completed the work before lunch. After lunch we "hung out" and waited for everyone else to finish. By the end of sixth grade, school became really, really boring. I sat around and drew pictures. The teacher spent most of the time helping others who needed help. Junior high school was better. I was provided more options for acceleration. In high school I was able to pick my own schedule and pursue my own interests, or more so, within the requirements. I took two years of advanced placement English as well as calculus and physics. I am strong in English and the performing arts. I'm a visual learner. It's important to know how you are smart. After high school it got a lot harder. In college I was truly free for the first time. It was hard just to get to class. I'd have to find my own personal reasons to go to class. I had to have my own goals. I found it hard to find my own personal drive or passion for something. When I missed more than one or two classes in a row, I chose not to go. I'd dig myself into a hole. The deeper the hole became, the harder it was to get out. As the work piled up, it was easier just to give up. I never declared a major. If you don't know what you want to do, you're never going to pursue it.

Russ's Mom

During public schooling I never knew that my son had learning challenges. He was successful in school and graduated with a 3.5 average. He scored 31 on the ACT, 97th percentile or above in all specific academic areas and 150 IQ on group testing. In elementary school Russ made straight A's. His grades dropped in junior high school and dropped further in high school. I didn't know until after high school that he had attention problems. When he went off to college, his challenges became very obvious. Years after graduation his fourth-grade teacher told me that he had showed signs of attention deficit hyperactivity disorder. If I had known that in fourth grade, I would have sought out more information. Life is a struggle for Russ because he never learned strategies to compensate for his weaknesses. He's failing badly in the real world. He needed to learn goal setting. I would also have pursued counseling for Russ.

Spencer

I've tried to forget elementary school. I was in trouble a lot. I loved middle school because I had more freedom. I hated high school because there was no flexibility. I've been good at adjusting to college. I enjoy the variety. I do better at the beginning of each semester but get tired at the end. I get tired of the same thing. I have a 3.45 grade point average, though. As an adult my ADD has started kicking in more. I will graduate this summer (after five years) with a major in music composition. I tried a double major in vocal performance and music composition, but they kept giving me a new teacher for voice. Every teacher wanted to start over and teach me a different way. I couldn't stand that and focused on music composition. I am leaving my options open, but my dream job would be writing music for video games. Every year in elementary school I cried at the beginning of the year.

Note: There was no consistency for Spencer and adjustment was a problem. Teachers always loved him at the end of the year but behavior was always checked as a problem on his report card. Some teachers yelled at him and told him they needed to focus on the kids in their room who could not read. Spencer felt that they didn't have time for his needs.

Spencer's Mom

My son played the piano by ear when he was 2½. I sent him to two piano teachers who told me they could not do much for him. He could play a song after hearing it once. They suggested he audition with a renowned pianist in town. Spencer took lessons from her for years.

Social skills were always a problem. He is more accepted in college and has friends who are more like him. I have studied Asperger's Syndrome and think Spencer probably fits in there somewhere. Spencer is still Spencer. I still worry about him.

Spencer's Teacher

I have never forgotten Spencer. I tried in third grade to make school more interesting for him. Speaking to him years later, I think I failed. He does remember some of the fun hands-on projects we did and mentioned a few. He is extremely bright and a gifted musician. I had high expectations for Spencer, and he would do assignments well but could never find them. He got angry often and twirled down the halls when he left the classroom. He had a tough time socializing with the other kids. Giving him more independent work helped in reading. He enjoyed studying the ocean (until his project was due and he could not find it) and participating in visual kinesthetic math activities. When I spoke with Spencer, he was friendly and willing to talk. Isn't this amazing when he remembers my room with discomfort and unhappiness? Hopefully this experience for both of us will result in better opportunities for other children.

Spencer's advice to teachers: "Make sure you present education in many different forms- visual, auditory, etc. Everyone learns differently."

Fran

In elementary school I was like a whipped dog. When kids approached me, I lashed out. I blocked out the social through drawing and music. I could listen to music with headphones and block out the white noise. Teachers expected me to fit into a box. I don't fit into a box. Kids were puzzled that I knew things before we studied them. I've always been interested in genetics. In early elementary classes people didn't understand how I knew about DNA.

In high school I started going to clubs; I was more socially adept. I excelled in classical Latin but was failing rudimentary algebra. I evolved from an isolated child to a social child. In senior year I participated in quiz bowl; I was the fastest to hit the button. In poetry I wrote beautiful poems. In high school the teachers loved me. They loved my being "Earth Goddess," so full of life and vitality.

I'm a fun child and a difficult child. I can be rude, obnoxious, crude, coy and a braggart, but I can also be vivacious, loving, compassionate and generous. It all started to balance out when teachers began to know me as a person. The rages, the running and the panic attacks subsided when teachers got to know me.

I'm currently writing two novels. My advice to teachers: "Channel my creative force early instead of waiting until high school."

Michel

Michel is a 4-year-old child with spina bifida whose condition is complicated by brittle bone syndrome, making it necessary for him to be strapped into a special device to stimulate standing. A desktop can be extended to allow him to write, eat, play games and do puzzles. Recently, during a visit to Michel's special school for the handicapped, the school psychologist was greeted by a cheery, "Hi," and asked a quick series of questions. "Why are you here? What is in your briefcase? Are you a medical doctor?"

After completing his rounds the psychologist found the boy, who quickly invited him to dinner. He was surprised; the psychologist took his home telephone number and promised to call. When the psychologist questioned the school about Michel's educational program, he found that Michel received occupational therapy for part of the day and free play with other handicapped preschool youngsters for the remainder of the day.

What the psychologist noted was an alert, curious, outgoing, eager mind. He called the mother and asked if he could test the youngster at his office. She began to cry, saying that he was the first person who believed Michel had a mind. She told him about the school officials who wanted to talk about his handicap but not about his gifts.

Michel was given the Weschler Intelligence Test for Children (WISC-R) and achieved an IQ of 152. He demonstrated reading skills and the creative ability to tell favorite stories with changes of characters and settings.

As a result of the psychologist's intervention, Michel attended the first and second grade classes for reading and social studies and the kindergarten class for the remainder of the day. Working at his ability level, he began to blossom. His mother is grateful for the school's new perception of Michel as gifted. His medical prognosis is that he will live less than two years; however, the quality of his mental and emotional life is easing the struggle and pain of his physical life.

Kimberly

Kimberly is a 10-year-old fourth-grader who was identified in the first grade with Asperger's Syndrome and as being gifted in the superior cognitive category. Academically, Kimberly is making adequate yearly progress. Her fourth-grade Ohio Proficiency Test results indicate that she is in the proficient range for math and citizenship and advanced proficient in the area of science. She is in the accelerated range for reading, according to Ohio Achievement Tests taken in third grade. Kimberly has shown growth specifically in the area of behavior in the classroom. She works best in small groups and one-on-one situations. She is very sensitive to loud noises and often wears headphones when in large groups or noisy situations. Her IEP indicates that she should have an individual aide with her in the classroom. She is included in all regular education classes and receives pullout services for occupation and speech therapies.

A teacher working with Kimberly on an informal reading inventory noted that she "is sometimes difficult to work with; otherwise, once you get through, she does an excellent job." The goals listed on her IEP include developing age-appropriate social skills to use in a variety of school settings, demonstrating proper learner participation in the regular classroom setting, and using strategies learned through a social skills program to self-monitor throughout the day. This program uses sensory integration activities, assistive devices and self-regulation techniques to help students with autism to reduce stress and maintain focus. Kimberly responds well to this program and has made gains; however, she still requires redirection. Her ability to work in the classroom remains inconsistent because of behavior outbursts. She reacts negatively to disruptions in routine, changes in classroom personnel, unexpected noises or disinterest in the task at hand.

Kimberly is able to use her advanced cognitive abilities to maintain academic progress when her behaviors preclude her participation in the classroom. She makes up work at home or independently when she is calmed after an outburst. Her teachers find her to be an intelligent and energetic child. She is able to maintain focus, particularly when in an area of interest.

Kimberly tends to persevere on a topic for anywhere from weeks to months. Currently, she is interested in drawing and insects. These interests are used as rewards to motivate her commitment to the task at hand. These interest areas are also used during gifted pullout. The gifted intervention specialist also provides consultation services in the regular classroom and indicated that he creates specific activities for Kimberly that combine sensory integration activities with academic pursuits. She responds well to movement and consistency, even during gifted programming. Understanding the unique needs of any student will help that student find success in school. For students like Kimberly, whose behavior is influenced by uncontrollable issues, classroom management becomes a challenge. Combining the efforts of each person who works with her is essential, since each brings a different perspective. For example, consulting with the occupational therapist was found to be a productive activity for the gifted teacher, because he discovered techniques to help keep Kimberly focused.

Including advanced material designed by the gifted teacher allows the regular classroom teacher and classroom aide to provide appropriately challenging material to a student who has superior

cognitive capacity. If they just concentrated on maintaining behaviors, Kimberly's academic needs would go unmet, and consequently her behavior problems would be exacerbated.

Each professional who works with Kimberly brings a different perspective on her levels of functioning and techniques that aid learning. Understanding the characteristics and needs of students with Asperger's Syndrome is vital, because their behaviors and abilities may not fit the expectations we have for students in gifted programs. Consultation becomes the driving force in providing services, and the role of the gifted intervention specialist is integral because of enrichment requirements. As is confirmed by this case study, students with Asperger's Syndrome will demonstrate advanced knowledge in a specific topic or spend extended periods of time learning about a specific topic. Adding depth and breadth to learning are among the goals of many gifted programs, making the role of the intervention specialist in gifted education all the more important. Integrating services for the student who is twice exceptional cannot be stressed enough, and coordinating efforts cannot be accomplished unless there is collaboration among professionals.

Joey

Joey weighed ten pounds at birth and arrived without complications. He developed quickly and began walking at nine months. At less than one year Joey was physically active, observant and very much aware of his surroundings. His mother explained one incident in which one-year-old Joey used his keen sense of observation and recall. Joey was outdoors watching the neighbor across the street mowing his lawn. After watching the neighbor for some time, Joey and his mother got his toy lawnmower out of the garage. Joey began pushing the mower, imitating the neighbor. After a few minutes Joey noticed the man taking the grass catcher off and shaking the grass into the box. He then got a paper sack out of the garage and placed it on his mower as a grass catcher. Joey continued to push his mower, taking his grass catcher off and shaking the pretend grass into a grocery box, just like the neighbor.

His mother noted that he was very curious and would discover how things worked. He would screw nuts and bolts together to find out which objects would float and sink. By age three, Joey was riding a two-wheeler. He attended Montessori school as a preschooler and was advanced to first grade at age five. His mother noted that even though he was physically advanced for his age, he was limited in his vocabulary development. She remembered that Joey would cope with this limitation by showing her what he meant.

Joey showed little interest in board games, blocks or other activities that require fine motor skills, but would rather be involved in activities that required body movement. He used large strokes when painting at the easel and had difficulty with fine motor skills, as observed in his struggles with coloring small pictures on a worksheet page.

Joey's mother recognized his delayed vocabulary development and had him tested by a private psychologist, to diagnose Joey's learning problem. He was diagnosed as having a language-based learning disability. Joey's mother reported that there were several cases of dyslexia in the immediate family. Even with low reading scores, Joey retained information by observing, watching videos and listening to information from the teacher. Because of his intellectual ability and his ability to retain information, he easily masked his disability. His mother recalls that Joey was a sociable child with lots of friends in elementary, middle and high school. He gained the respect of his peers and was recognized for his leadership ability by election to serve on student council.

Joey displays his ability to retain information through his outstanding athletic ability. He quickly grasps the coach's football plays, since they are coded in pictures and are explained verbally. Joey's mom explained that, when he was 16 years old, he had a back injury that didn't allow him to attend summer football training. However, he played first string without the summer training camp, another example of his rapid comprehension of football plays. He was voted the number one defensive end as a junior in high school. Joey also competed in the high school varsity-wrestling program and won state championships.

Throughout Joey's schooling, teachers have been helpful. Once Joey was able to tell teachers what he needed in order to learn, he flourished. His IEP emphasizes his individualized needs for his language-based learning disability. His teachers describe him as a popular student in high school with an excellent self-concept despite his learning disability. His mother mentioned that Joey had tutors for math and literature for much of his education. Joey thrives when the special education teachers and content teachers collaborate in planning his educational program. As a senior he continues to be a successful suburban high school student in his academic classes and in the athletics program. Joey plans to attend college.

Matthew

Matthew is a ten-year-old fourth grade student. He was identified with an emotional disability (ED) because of a consistent pattern of oppositional, defiant behaviors. A functional behavior assessment was conducted, resulting in the ED identification. Matthew receives services in the regular classroom with consultation and pullout conducted by a behavior specialist. Among the annual goals on his IEP are that he will increase his ability to make appropriate choices when faced with frustrating or anger-causing events and that he will demonstrate measurable progress toward the mastery of coping skills needed to reduce his problem behaviors.

His art teacher recommended Matthew for gifted evaluation. He was identified as gifted in the visual arts.

Matthew's academic progress is severely hindered by his emotional disability. He makes adequate yearly progress but is prone to outbursts when faced with frustration. His strength area is math and he is able to complete work and remain on task. His math teacher is very positive about his ability to be successful in class. Several of his teachers remarked that he is prone to negative self-talk and will become frustrated when he perceives a task to be too difficult. When upset he cannot be re-directed or soothed by encouragement. His rage escalates from yelling to throwing furniture. However, in art class, he is able to express his frustration and is permitted to self-select an alternate activity. Only once has he exhibited inappropriate behavior in art. When told he could not bring a project home, he became upset and had to be removed to the office.

Matthew is able to identify factors that cause frustration and, when prompted, can make good choices about his behavior. However, he is still prone to perfectionist tendencies that override his ability to make good choices on his own. In most school situations he requires consistent prompting from adults to make good choices regarding his behavior. However, according to his art teacher, he is able to control his anger and independently use self-mediation techniques. For example, he is able to find creative solutions to mistakes made on his artwork rather than discard the work and lose control. It may be that his comfort level and solid knowledge base in art permit him a wider store from which to draw confidence and allow him to remain calm when faced with adversity. Teachers confirm that he is able to maintain control of his emotions when he perceives himself to be capable.

Finding areas of strength is vital for many students who are twice exceptional, but, for students like Matthew, it is imperative for his success because his behavior is integrally tied to his self-perception of his ability. It is important for teachers to be able to see beyond behaviors to talent areas.

Ethan

Ethan is a fifth-grade student who was first identified as gifted in the areas of math and science at the end of second grade. He was evaluated for special education services in fourth grade and was identified with a specific learning disability in the areas of reading, spelling and written expression.

Ethan is an intelligent young man who has a keen sense of how to be successful. He understands his own unique learning style and is able to incorporate accommodation suggestions. He is proactive in finding new ways to accomplish tasks and understands that he learns differently. It was noted that he still finds the concept of being twice exceptional confusing at times, particularly when he is unable to produce work of a certain caliber. He is particularly frustrated when he has trouble in science and math.

Ethan has a behavior plan that focuses on teaching him self-regulatory skills that help him maintain attention and develop efficient study skills. This formal plan also helps to ameliorate difficulties that result from his perfectionism. The team determined that his off-task behavior was not the result of an attention problem but rather an inability to complete tasks to his specifications. Oddly enough, his work was hampered by behaviors related to his giftedness and not his disability.

Ethan's teachers are able to use his ability to think and analyze to assist in his reading by incorporating advanced questioning techniques to increase comprehension. Proper understanding of Ethan's strengths and weaknesses by the school team resulted in educational planning that is multi-dimensional, mirroring the multi-dimensional nature of his strengths and weaknesses.

Appendix D: Steps to Strength-based Instructional Planning

Step 1: Identify the potential and vision for the future.

- What does your son/daughter do well?
- How do you think the school year is progressing?
- What are your child's strengths?
- What are your child's challenges?
- What are his/her gifts?

Step 2: Plan for a continuum of abilities.

- What is the child's learning preference?
- What are the child's current interests?
- In what subject areas is she/he strong?
- Who will advocate or mentor the child outside of school and collaborate with the teachers within school?
- What organizational tools does he/she need to accomplish a goal or task?
- What consistent supports need to be in place to enable the child to initiate work, monitor his/her work to stay focused, and evaluate the results?
- Where can the child seek assistance, if needed?
- Does he/she know how to ask for help?

Step 3: Identify critical needs, based FIRST on the strengths and then on the challenges.

- What strategies does the child need to learn to develop his/her talents?
- What explicit instruction is needed to enable the child to use the strategies independently?
- How do you ease transitions from one year to the next, and, in high school, from one period to the next?

Step 4: Connect to the Academic Content Standards.

- What content areas are strengths?
- What content areas are challenges?
- What do you need to teach the child? What social skills, organizational skills, etc. are needed?
- How will you know that the student is making progress over time?
- What assessment techniques will you use?
- What big ideas and essential questions are addressed for each standard?

Step 5: Design individualized instructional goals.

- What academic goals are needed?
- What social-emotional goals are needed?
- What skills does he/she do well?
- How can these strengths be used to overcome the challenges?
- What accommodations does the student need to facilitate learning?

Step 6: Plan for instruction.

- What areas require acceleration?
- What areas require accommodations?
- Which areas require both acceleration and accommodations?

Step 7: Plan for services.

- How will it work in your district?
- Who needs to be involved?
- Which team is needed? Intervention team, IEP team, WEP team?
- How will you facilitate collaboration between intervention specialists in gifted and special education and the regular classroom teachers?

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