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EXAMINING HIGH SCHOOL PLACEMENT METHODOLOGY WITH  
STRATEGIES TO IMPROVE STUDENTS WITH AUTISM OUTCOMES

A MASTER'S THESIS  
SUBMITTED TO THE FACULTY  
OF BETHEL UNIVERSITY

BY  
ELAINE MARTIN

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FOR THE DEGREE OF  
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BETHEL UNIVERSITY

EXAMINING HIGH SCHOOL PLACEMENT METHODOLOGY WITH  
STRATEGIES TO IMPROVE STUDENTS WITH AUTISM OUTCOMES

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APPROVED

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## Abstract

Graduation statistics indicate that students with disabilities like Autism Spectrum Disorder (ASD) are now completing high school at an average rate of about 60 percent. The purpose of this literature examination and application is to analyze the methodologies and criteria for the placement of high school students with ASD, to explore the present best practices in the assessment and placement of these students, and to suggest strategies to improve individual outcomes. High schools across America follow clearly defined academic and legal parameters that rely on careful assessment, consistent accommodations, community support, and self-regulation but students are still being placed in classes that are not a match for their abilities. Teachers must not only modify curriculum but work together to structure a class where there is differentiated learning, in order to ensure students are placed where they will succeed. Research indicates that academic achievement is directly connected to accurate assessment, curriculum modification, differentiated instruction, and faculty flexibility.

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## CHAPTER I: INTRODUCTION

Student success requires thoughtful analysis, assessment, curriculum modifications, differentiated instruction, and cooperation in implementation. This study will review past and present literature, analyzing assessment patterns for high school students with ASD, the methodologies used to implement them, and the potential effect of these tools on future success.

Students on the autism spectrum demonstrate varying skills; they can be strong in speech or math, and weak in writing or reading. Not all autism students are the same—when you’ve met one student with ASD you have *not* met them all—you’ve met just *one*. This literature will establish the need for prioritized placement and individualized, differentiated modifications that could make the difference in quality learning for students with ASD (Buzick, & Laitusis, 2010).

Current research points to the success of collaboration between special education teachers and general education teachers in placement and curriculum accommodations, rewriting materials or ordering curricula that include levels of differentiation. Modifications are needed in every subject area to help students process key concepts. Suggestions and strategies for successfully developing and applying these modifications will be addressed.

According to Hocutt, (1996), students with disabilities need focused, individualized instruction and vigilant progress monitoring. Placement is not critical, though, when compared to the significant investment of time, resources and efforts on the part of the teachers. This example of past academic literature demonstrates

the absence of placement as a vital tool—an attitude previously prevalent in many special education settings.

This author is passionate about helping students with autism be placed in the correct classroom, one that will encourage success. In order to accomplish this, it is necessary for schools to reevaluate how they define inclusion in the general education classroom for special education students.

Killoran et al., (2013), argue it is necessary for special education teachers and general education teachers to provide effective placement in the general education classroom, supporting the Leinhardt and Pally (1982) position that the Least Restrictive Environment promotes success.

This writer will examine three areas which will include mental health literacy, specific knowledge of disabilities, and effective collaborative IEP development and implementation to identify key strategies for success.

Under IDEA, the Least Restrictive Environment (LRE) integrates students with special needs into general education classrooms with general education students. This process helps student with special needs adapt socially and participate with peers his/her age. Unfortunately, the idea of LRE is misused and often students with severe disabilities are placed in a general education classroom that is too difficult for them (Tindal, Parker & Germann, 1990). Many schools make the mistake of integrating a student into the classroom rather than including them in the classroom.

For example, a young woman with severe autism is placed in an Introduction to Chemistry class to fulfill a graduation requirement for science and to promote inclusion which is based on LRE in federal law. This young lady is given several modifications and



accommodations in her IEP and a paraprofessional to assist her in class with notes, assignments, and tests. She also has the right to leave the room and move to a resource room so she can work in a quiet environment with a small group of students. As the semester progresses she begins hitting her paraprofessional and running around the classroom moaning and yelling. She refuses help and will not go to the resource room. Her case manager recognizes that this class is too difficult for her, and that she is having behaviors based on her boredom and frustration. The case manager wants to move her to a different class but is told she must remain in this class because taking another special education class will move her to a special education setting four. This setting is not serviced at the high school and would require the student to move to another school to accommodate her needs. The special education department tells the case manager to keep the student in the class and to work with the science teacher to modify content. After all, the student needs to take this class to graduate.

At this point, it is the case manager's responsibility to modify the class work so the student can meet the requirements of the school district and graduate (Phillips, 2008). When the case manager approaches the teacher for help, the teacher does not know what to do to modify the assignments. Key concepts are given to the case manager and she is required to modify content, continue teaching six special education classes, manage her caseload, meet with parents, and complete ESR and IEP paperwork on time.

This is one class out of seven for this student. Presently, one other class on her schedule is also too difficult for her and must be modified. Since this student has severe autism and is not verbal, it is not correct to place her in this general education class (Shifrer, Callahan, & Muller, 2013). Any paraprofessional assigned to help special

education students in this class will be devoting 90% of their time to her success. As a result, this placement would not be fair to other special education students, nor is it fair to the general education students.

The problem for special education teachers is they cannot be an effective case manager, teacher, and curriculum writer. The overwhelming responsibilities of the special education case manager contribute to the problem that results in only 64.6% of students in special education graduating as compared to their general education peers who graduate at a rate of 83.2% (DeBruin, Deppeler, Moore, & Diamond, 2013).

Another challenge with placement is an efficient assessment of a student's academic, behavioral, and social needs. The assessment of a young student named Jon, reading at a third-grade level, reflects the challenge faced in order to implement a successful placement plan. Although this checklist (see Appendix A) incorporates interests that will help differentiate instruction for students with disabilities, it does not specify subject strengths or weaknesses, and does not assist teachers in modifications.

Past placement did not have this kind of generalized analysis (DeBruin et al., 2013). Fortunately, Jon's teachers have access to his current evaluation and current IEP to help determine what classes Jon will take, and what accommodations and modifications are needed to help support Jon's needs in those classes. Fan (2014), concurs with DeBruin et al., (2013), but points out that these documents are not always available or as detailed as they need to be due to out of state or interstate transfers; school districts may use different special education forms that complicate the process.

In today's high school classroom, Jon's love of trains may help focus his interest in

subjects that he dislikes. He could be taught social skills or communication skills using trains as characters in stories about communicating with others, personal space, and social interactions. Intervention is essential for students to achieve success on assessments.

It is incumbent upon implementing states to ensure that the target group of students with disabilities...continue to be provided the opportunity to learn the content covered on the assessment and to make progress, hopefully to "catch up" to their age-peers to the extent that they may become eligible to take the state's regular assessments against more challenging achievement standards (Weigert, 2009).

This level of services places Jon at a level one setting. This determination is based on the total minutes each day Jon would require for interventions by specialists or the special education teacher. There are 300 minutes of instruction in a school day; Jon will spend less than 20-25% of this time with specialists and in a pull-out special education social skills class.

Shifrer et al., (2013), disagree that "pull-outs" are a positive strategy, arguing that a label prevents many students with disabilities from succeeding:

Large disparities in completion of college preparatory coursework, especially in math, science, and foreign language, even net of students' academic preparation for high school and their cognitive and noncognitive skills. The evidence supports the possibility that school processes contribute to the poorer course-taking outcomes of students labeled with learning disabilities (Shifrer et al., 2013).

Teachers involved with Jon would disagree, and argue that Jon's love of adult attention can be used to reinforce good social behaviors and communication skills, without affecting his self-esteem. Teachers could incorporate drawing and reading books into Jon's schedule as rewards for expected behaviors and counteract distraction or fidgeting with a break card, allowing him to go into the break area and do this activity. If available, a mini trampoline can be put into this area for Jon to jump on. These positive modifications are necessary and can be incorporated positively to achieve an individualized learning environment.

Jon has several preferences that could be incorporated into interventions to help him develop social skills and improve his communication. One idea would be to use a Picture Exchange Communication System (PECS) to help guide him when he is displaying undesirable behavior. For example, when Jon is picking his nose, a PECS card could be used to redirect his behavior and remind him that this is an undesirable behavior. If this is not helpful, Jon could be given a fidget that would teach a socially acceptable replacement behavior.

Another intervention that may help with communication and modeling behavior would be to assign a peer buddy. Through the guided help of an adult staff member and a peer buddy, Jon can learn to ask questions, respond to questions and experience other aspects of socialization with peers.

Finally, the general education teacher could use social stories written by the special education teacher to help Jon learn how to communicate and socialize with his peers. Using social cues or phrases would offer Jon an alternative to withdrawal and would be very beneficial to his communication skills. Also, attending a pull-out social skills class

or friendship group in a special education setting would teach Jon social skills through role playing, modeling and visualization.

This methodology should give Jon and students like him a measure of success. However, a common challenge in today's integrated classroom is that general education teachers are not trained to modify curriculum. Paraprofessionals assigned to assist a student cannot modify the curriculum and do not have time for one on one support. If a student's disability is severe, a paraprofessional cannot help the other four students placed in the general education class. Therefore, any student who does not have a severe disability suffers.

### **Rationale for Inclusion**

There is only one final goal for all students entering high school and that is to become equipped to handle life after high school. Preparation for adulthood is every student's final goal whether she or he is in general education or a student with ASD. Unlike darker days in education, the law now requires that students from every background have the chance to succeed outside of school (Leinhardt et al., 1982).

The Individuals with Disabilities Education Act (IDEA) was written and passed into law for all children with disabilities, to offer the chance for a better education, gainful employment, and independent living. No Child Left Behind (NCLB), passed in 2002, requires that a special education student be placed in the general classroom as often as possible while mandating that special education students take the same achievement tests as their peers in general education (Jennings & Lauen, 2016).

Madeleine C. Will, former assistant secretary for the Office of Special Education and Rehabilitation Services, U.S. Department of Education, once remarked:

At the heart of the special approach is the presumption that students with learning problems cannot be effectively taught in regular education programs even with a variety of support. Students need to be "pulled out" into special settings where they can receive remedial services. Although well-intentioned, this so called "pull-out" approach to the educational difficulties of students with learning problems has failed in many instances to meet the educational needs of these students and has created, however unwittingly, barriers to their successful education, as cited in Wiederholt, 1989.

Placement is important and although the methodology has a long and complicated history, it is a tool that can prevent or remove barriers in special education. Measurement criteria, once virtually non-existent, is now required and key tools such as IEPs implemented nationwide (Fan, 2014).

Modifications and accommodations have been developed; trained staff such as paraprofessionals are employed and special education students are integrated into the classroom to support the principle of inclusion, helping students gain acceptance in the classroom and develop social interaction amongst peers and the teacher will strengthen the social structure and improve the learning environment for everyone (McPhail, J. C., & Freeman, J. G., 2005).

Today, student evaluations often occur in stages, beginning with the initial interview, moving to the assessments and finally to the program, goals, accommodations, and modifications that best fit the student. According to Tindal et al., 1990), once placed in the least restrictive environment, students' progress must be consistently monitored throughout each course. This process relies heavily on the input of students, parents,

staff, and the medical community, as well as measurement through standardized testing.

Shifrer (2013), contends that a label is a stigma that damages a student's chance to succeed, but placement is mandated by law and must be implemented. According to present academic literature, successful placement is based on effective measurement, and the cooperation of student and staff, to arrive at a key decision that will impact a student's ability to achieve (Phillips, 2008).

### **Definition of Terms**

The term **ASD** refers to individuals diagnosed as being on the autism spectrum. Autism is a severely incapacitating life-long developmental disability. The symptoms are caused by physical disorders of the brain (Ritvo & Freeman, 1977). Students with ASD can experience many neurological symptoms such as language and/or speech problems; sensitivity to taste, texture or sound, and balance or physical movement challenges. Speech and language are often delayed or in low-functioning cases, absent. Social skills can be awkward and communication can be inhibited or misunderstood.

**Accommodations** are specific criteria designed to help special education students be successful in the general education classroom. It is a contractual agreement between regular class and special education teachers that defines shared responsibilities for delivering instruction (Tindal et al., 1990). Accommodations usually do not alter the subject or curriculum being measured.

**Modifications** consist of changes made within the curriculum, not just the environment. A teacher may modify by outlining key concepts in the curriculum, breaking down assignments into smaller sections or seating a student near them. This levels the playing field for ASD students, providing them with opportunities to learn

(Shifrer et al., 2013). Successful modifications reduce frustration and allow the student to concentrate on learning that is based on their ability level (see Appendix B). For example, a student with a reading disability is allowed to take an alternative English class that includes only literature and exams written three grade levels below the student's actual grade.

An **IEP** is a detailed Individual Education Plan or Program that individualizes a student's educational program. This ensures that a student with a disability will receive the special educational services as stipulated by law. It identifies strengths and weaknesses, and details the special education services the student will receive in order to be successful in the school environment. It also outlines educational, social, physical, behavioral and transitional goals and the means by which they will be measured. A competent case manager should re-evaluate student IEPs and goals throughout the school year (Fan, 2014) and keep communication open with parents.

**ESR** stands for Evaluation Summary Report. An initial student evaluation is completed with follow-up every three years to determine if student academic, behavior, supports or modifications need adjustment. An ESR is especially detailed in every individual section, compared to an IEP that summarizes and sets student goals (Greene, 2007). The Minnesota Department of Education requires that an ESR include a wealth of information, including documentation of information, description of testing, statement of any accommodations or modifications, evaluation of need for special education services, student's present levels of performance (PLP), description of disability, least restrictive environment, and a summary of evaluation results (Fan, 2014).

**Least Restrictive Environment or LRE** Placement puts a student with disabilities



into the general education environment as much as possible during the school day (Leinhardt et al., 1982). It provides a child with a disability an education that offers the same benefit to learn as a nondisabled child. Preferably, this education would be provided in a general education classroom with support services and aids that supplement a student's education. However, if the student inhibits the ability of other students to learn or is a danger to them, then a learning environment may be changed to provide a safe learning environment for all. Any new environment must still offer the student an equal opportunity to learn and offer the same educational benefits.

High school students with ASD are intelligent, resourceful, creative, and hard-working. They can thrive in a learning environment where specific accommodations and modifications facilitate achievement of their goals. As the father of a son with three disabilities, H. Rutherford Turnbull successfully makes the point that the positive outcomes of special education placement are worth the risk.

The English historian Arnold Toynbee famously observed that history proves that, given a challenge, mankind never fails to respond and create a better new world. Toynbee had it right. You special educators have always been doing that. You will continue to do so. (Turnbull, 2009)

## CHAPTER II: LITERATURE REVIEW

### History

Early use of the term “autism” was generally connected to schizophrenia and psychiatric disorders. There was no place in society for people with this disability. Very often they were placed in institutions, although a small percentage who displayed these characteristics were cared for at home. There was no diagnosis for autism, but its psychiatric history shows some research into the noticeable challenges children with autism faced (Wiederholt, 1989).

It wasn't until 1944 that Hans Asperger studied and explored a form of autism he considered to be less severe, and even though the cases he studied did not include any females, the diagnosis of Asperger's for higher functioning children with disabilities was proposed and gained acceptance. Hans Asperger established a pattern in the behavior of the boys he studied that would leave a lasting impact on special education (Müller-Wieland, 1957). Under the oppressive Nazi regime, Dr. Asperger protected the lives of the boys in his study from being euthanized for what was viewed by the Nazis as weakness, making the boys less desirable and not worthy to live. In response to this life or death situation, Dr. Asperger categorized the obsessive and repetitive behaviors of the boys as unique in a positive sense.

Asperger coined the term *Autistische Psychopathen* (autistic psychopathy) or *Autismus* for short to describe the children in his special education unit. In them he saw children with the minds of geniuses, eccentrics, obsessed with their special interests, some with amazing memories who could recall all the routes of the Viennese tramlines, others who could perform rapid arithmetical

calculation, and others with profound learning difficulties. When he submitted his thesis describing these children in 1943, he argued that many of them had a natural aptitude for science, for example giving a portrait of a child who was obsessive with performing chemistry experiments at home. He saw them as potential innovators, seeing the world with a fresh perspective, and called them his ‘little professors’. He suggested to his superiors that his ‘little professors’ would make superior code breakers for the Reich. While he recognized [sic] how broad the autism spectrum was, he emphasized their special talents, not their ‘degenerate defects’. (Baron-Cohen, 2015)

By the 1960s, early special education history portrays a segregated “group” community where students with disabilities were placed in their own schools or classrooms (Leinhardt et al., 1982). Placement methodology was virtually non-existent although Jenkins, Deno, and Mirkin (1979), contend that parents of handicapped children tried to protest and pressure schools into providing better options. Generally, though, the curriculum focused on the basics, along with social skills development. It wasn’t until 1972 that the Supreme Court ruled that children with disabilities had the equal right to access education, and not until 1990 that the Americans with Disabilities Act (ADA) was passed and students with special needs became visible in the classroom (Jennings and Lauen, 2016).

These laws eventually lead to a change in placement methodology, where teachers were required to place students in general education settings and provide accommodations and curriculum modifications for them, working with them to transition from high school to employment or postsecondary work. This was formally implemented

under the Individuals with Disabilities Education Act (IDEA). The means to accomplish this inclusion was the least restrictive environment or LRE (Jennings and Lauen, 2016).

The No Child Left Behind Act of 2002 required that all students have access to qualified teachers and general curriculum, and be included in the school district's assessment outcomes for math, science, English, writing, and reading. Although meant as a positive step, it had the negative affect of teachers choosing to "teach to the test" in order to produce higher achievement scores. School districts would then receive compensation for students whose scores fell within the "average" range (Jennings & Lauen, 2016).

There were many critics of NCLB and in 2015, the Every Student Succeeds Act was signed into law. This act continues to provide federal funding for schools but individual states can now determine the academic standards their students have to meet and when those tests will be given. Common core standards are suggested but states do not have to use these standards. States are given more opportunity to address the unique needs of their learners with special needs. Students with disabilities or minority students have increased access to government funding to improve learning (Jennings et al., 2016).

LRE enabled students with autism to learn with their peers but also contributed to student struggles when modifications were not considered part of the curriculum. This could often result in withdrawal or violent responses, and ultimately, rejection by their peers. Harrison, Bunford, Evans, and Owens (2013) argue that policy and research are important but not primary factors for placement and can minimize student behavior challenges. Tindal et al. (1990) agrees that student behaviors like acting out, aggression or ADHD will affect the LRE and require a thorough assessment and specific

modifications to maximize success. Often, the least restrictive environment is not easy to identify and behaviors can delay learning for everyone in the class (Harrison et al., 2013).

In recent years, school districts educate within policy parameters, working toward the primary goal of graduation success. Harrison et al., (2013) points out that both policy and legislative efforts prioritize youth with disabilities but largely within the parameters of LRE. This often means graduating a student based on an IEP as opposed to a past approach of demonstrating competency in multiple subjects. Although this is a positive method, it requires specific and consistent cooperation between teachers.

### **Current Practice Models**

Current practices employ co-teaching models and interventions that try to look at teacher instruction and how it affects student learning and achievement. According to Friend, Cook, Hurley-Chamberlain, and Shamberger (2010), co-teaching is a vehicle through which legislative expectations can be met, while also providing students with disabilities the specially designed instruction and other supports to which they are entitled.

The current approach in many high school environments is predominantly assessment-oriented, with measurement tools the crutch that many special education departments rely on to determine placement. Most academics and professionals agree that some kind of measurement system is necessary in order to benefit each child and lay the foundation for success (Buzick et al., 2010). It is needed to determine qualification for special education services and the best fit for a child within available educational programs. Unfortunately, the data used for diagnosis and that used for program planning do not always come together in a beneficial way (Jenkins et al., 1979). Assessments

require a cyclical, integrative approach, one that requires faculty agreement and collaborative relationships between students, parents, administration, and teachers.

Individual high school districts often find themselves educating within policy constraints where a broad range of goals end in one focus: matriculation. This often means graduating a student based on an IEP as opposed to a past approach of demonstrating competency in multiple subjects (Shifrer et al., 2013). DeBruin et al., (2013) point out that although this is a positive outcome, it neglects the multi-faceted needs of the students, and requires specific and consistent cooperation between teachers that is difficult to achieve. And without that cooperation and planning, students struggle through classes where they cannot possibly succeed—eventually graduating without the skillsets necessary to obtain a job.

One common method of inclusion is the Push In Model, where students are placed in general education classes based on their skills and ability levels. If students require assistance, paraprofessionals are assigned to the classroom to help them take notes, read materials or complete homework. To help students succeed in this setting it is important that case managers include specific accommodations and modifications (Fan, 2014).

Another method of inclusion is where teachers work in pairs to co-teach a class (see Appendix D). This allows students the chance to learn with their peers in a general education classroom. Students can receive more individualized help and lessons can be differentiated so many levels of learning are possible. Six types of co-teaching are:

1. One Teach, One Observe. Before class begins, both teachers determine what skill or information they wish to collect data on during instruction and a

method that will summarize the data. After class is over, the teachers can meet together to study the data.

2. **One Teach, One Assist.** In this approach to co-teaching, one teacher is responsible for teaching while the other teacher answers questions and assists students.

3. **Parallel Teaching.** As implied in the title of this co-teaching method, two teachers divide the class into two groups that parallel one another by learning the same lesson.

4. **Station Teaching.** In this co-teaching approach, teachers set up learning stations in the room. Each station has information regarding key concepts that the teachers want the students to learn. Students work at each station in small groups receiving instruction. One teacher teaches the first station while the other teacher teaches the second station. There may be a third station a paraprofessional may supervise and a fourth station where students may work independently.

5. **Alternative Teaching.** In this approach, students who may need more detailed and simplified instruction are taught by one teacher while the other teacher instructs the remainder of the class.

6. **Team Teaching.** In team teaching, both teachers instruct the class the same lesson at the same time. One teacher presents part of the lesson while the other teacher may continue the instruction using a different approach (Friend et al., 2010).

In the special education Pull-out Model, students are removed from certain classes such as English or math and work with a special education teacher in a class with a small number of students. Paraprofessionals may also work in class to assist the special

education teacher. Courses are taught at a remedial level to promote learning and help the special education student to achieve credit in core classes at his level (Phillips, 2008).

Setting three students are in their own classrooms for the school day or have a paraprofessional who assists them in any classes they may attend. The goal of these highly monitored settings is for teachers to intervene with students and self-regulate their behaviors (Fan, 2014).

### **Teaching Strategies**

New techniques used in the classroom for setting one and two students show promising results in encouraging student toward maturity in a broader sense. They include calming/problem-solving methods, visual systems, effective cues, useful prompts, the TEACCH program, structured teaching, gestalt learning, formal and informal teaching strategies, sensory processing, and developing an instructional plan that you can use in a classroom. TEACCH is **Treatment and Education of Autistic and Related Communication Handicapped Children**.

Teachers may feel frustrated or unsure of what technique to use to help a student learn or how to help students calm down. Individualizing the calming techniques ensure that a student's needs are met immediately. Visual systems for students with autism (transition cues, checklists, cue cards, individual calendars, semantic maps and social stories) emphasize the importance of getting to know your students so that each visual system can be individualized. Questions used to interview high school teachers on placement can help identify key issues (see Appendix C).

Effective cues and prompts help students respond correctly so the consequence will be what the teacher wants the child to learn (positive-basic behavior sequence). A



student needs to be prepared for instruction, then provided with instruction in a natural environment. This process may not always work, though, so it is imperative that teachers return to prompting and cueing to help the student achieve a positive response. When a child is learning, artificial cues such as words of praise, can be used but it is important to time them correctly. A mistimed cue can cause a negative response (Jenkins et al., 1979).

The TEACCH program, founded by Dr. Eric Schopler in 1972, offers a core set of services to students with autism and their families, ranging from clinical to social and support groups. Its goals provide an environment that is as comprehensible as possible, so the learner understands the expectations. It also helps to teach students with ASD as many skills as possible given their developmental ability. The emphasis in the TEACCH program on looking at the parents of a student as co-therapists is a unique approach. Parental involvement is always essential, and trying to engage the parents on this level so they can carry on techniques at home that are being taught at school is a goal that will benefit everyone (Tindal et al., 1990).

Structured teaching will answer questions regarding students' needs. Setting up a workstation to answer questions like: Where should I be? (Use schedules, mini calendars to help students know this.) What work or activity will I do? (Use a predictable location for an activity, baskets, charts, clips etc.) How much work will I do? (Use file folders-move work from left to right or containers with work in them to be completed nothing else.) How long will it last? (A timer can be used or the teacher may verbally remind the student when everything is gone the activity is done.) How will I know when I am done? (When materials are empty or have all been used, or use a checklist.) What will I do next? (Use a card that tells them what to do such as, "when

you are finished with work you may get a book and read or a picture of a book or snacks or toy” to direct them) (Murawski and Lochner, 2010).

An important theory in current practices is the gestalt learning style. This theory discusses how a student with ASD only understands the literal interpretation of information, without the ability to see another person’s perspective. Many students on the autism spectrum struggle with this style of learning or thinking. However, if a student is a gestalt learner, it does not mean that she is a gestalt thinker. Do not make the mistake of assuming that she thinks the way she learns (Greene, 2007).

Informal teaching strategies, formal teaching strategies, developing an instruction plan, and academic instruction are helpful tools. When teaching informal strategies, you must model language use (Murawski and Lochner, 2010). The following four labeling concepts help achieve this:

1. Everything has a name. You can speak and write a name.
2. Everything can be represented in different ways.
3. A word or visual symbol can represent a single thing and relate to something else. For example, a die is a part of a game.
4. Words are powerful. They help you get what you want.

When using formal strategies, you must introduce these concepts in a very structured way to show the full range of its meaning. Teachers should identify steps for instruction, define the concept, define related concepts, identify instructional examples, identify natural environments, plan and prepare visual references. It is essential to provide initial instruction, beginning with one-on-one; teachers can then show positive

and negative examples. As the teacher shows an example, she or he can verbally attach a label when an object is named or write it on a card and attach it to the object.

A key component in evaluating students is to be aware of what sensory type each student is. Sensory processing is a person's way of noticing and responding to sensory events that occur in everyday life. Having an imbalance (poor sensory modulation) can be the cause of sensory overload in students with ASD. If you are aware of their sensory threshold you can be a more effective teacher (Harrison et al., 2013).

Expanding instruction using touch or gesture is a creative tool: first the teacher does something and then the student does it. This type of instruction can be expanded by using variations—highlight the concept in different contexts and settings. Once the teacher understands how to teach a concept, the instructional plan can be developed. It is important to use stories, cue cards, checklists, videos, etc. to help teach a new social rule or academic concept to students. Every student is different and needs flexible strategies when they are initially learning, as they progress, and if they start to struggle with being actively involved (Harrison et al., 2013).

The paradoxical effect of a time out is an interesting dilemma. Crystal is a student who would purposefully misbehave to go to timeout—simply because she liked the quiet and knew she would do no work at this time. It can be a frustrating situation when a teacher has to implement an alternative, but if the time out does not benefit the student, it is an option that should be explored. Understanding the different types of responses to sensory input helps a teacher recognize how students process sensory events, so they can focus on learning, and not be distracted by their environment (Harrison et al., 2013).

Teachers must design individual systems that work effectively so that any miscommunication can be avoided. It is important to make sure each student is at the right development level, otherwise the picture cards will not work effectively. One challenge in doing this is that it is time consuming to determine which picture cards work the best for each student. Overusing or misusing verbal or artificial prompts can disrupt student participation and cause the student to lose focus. Students with autism often stop working when the staff tells them they are doing a good job. The teachers and staff are always perplexed as to why a student frequently stops working, but it is because artificial prompts disrupted student focus. Timing can be everything. It's not that verbal prompts are bad, it's just that a teacher needs to give genuine praise and be careful about how often the prompts are used (Mason, 2013).

Clearly informing a student on when a task needs to be performed independently is an important communication skill. The teacher should explain it, model it a few times, and then stop talking and point to the instructions/pictures so the student can independently perform the task. Using artificial cues such as verbal praise need to be timed so as not to distract.

Using the subject students are interested in to help teach a concept, semantic maps, pictures with words, checklists, visuals, etc. are good starting points. Breaking a task down to its most simple level is important to remember and the most difficult challenge can be figuring out how to individualize lesson plans and activities.

## International Research

Israel employs the “sorting hat” strategy, named after the famous sorting hat of Harry Potter fame. Resh (1998), details Israel’s track system, which is fairly rigid compared to the more flexible American education system, and remains largely in place today:

Although both elementary and junior high school have a common curriculum for all, high school is tracked and track structure is centrally defined. Tracks are fully differentiated, and students learn in separate classes within schools (in the case of comprehensive schools) or even in separate schools: academic, vocational, and low-level vocational. (Resh, 1998)

All students complete a general curriculum in elementary and junior high years, but once in high school, are separated into various educational tracks with specific criteria for placement and “credentials” after graduation. At least 50% of the high school system in Israel are vocational tracks (Resh, 1998). The other 50% follows an academic route, balancing each other out. Multiple studies show the positive learning results this approach produces, providing education and a pathway to future employment. This is a system the United States could benefit from studying, as many students with ASD do not plan to apply to college or universities.

According to Kivirauma, and Ruoho (2007), Finland includes over 17% of its educational population in part-time special education services as compared to other countries who only include 7% or less of their student population in special education. The goal in Finland is to identify students with special needs within the first three years

of school. Early identification of language or learning disabilities allows teachers to concentrate instruction on teaching student's language.

Even though Finland has a higher number of students that receive special education services, they have the lowest percentage of students that are placed in closed classroom services. In comparison, many other countries place more than 50% of their special education students into pull-out classes rather than including them in general education classes. A low percentage of students are put into segregated special education services (Kivirauma and Ruoho, 2007).

Finland and two other Nordic countries (Iceland and Denmark) top the list in international special education innovation. These three also differ from other countries in the low amount of segregated special education students. In many other countries, the proportion of segregated special education students consist of one-half or more (Kivirauma and Ruoho, 2007).

The approach of early identification, part-time special education services, a high inclusion rate in general education classes, and teaching special education teachers to become content masters in one area have all contributed to Finland receiving a reputation for being one of the leading special education educators in the world (Kivirauma and Ruoho, 2007).

Killoran et al. (2013), notes that Canada advocates for general education teachers to be taught to work on assessment and inclusion with special education teachers. These two areas are important as they address differentiated learning and encourage teachers to pursue highly qualified training. In Ontario, they have set up an internet network to help train teachers who would like to take Additional Qualification (AQ) courses in

assessment and inclusion strategies. Collaboration among teachers, combined with training, helps all highly qualified teachers in Canada to support students with diverse learning needs.

Powell (2009) successfully compares Germany's Special Education programs to America, noting that both are similar with Germany implementing inclusive strategies at a slower pace.

In international comparison, the United States and Germany have neither the most inclusive nor the most segregated educational systems. Among developed democracies, the range extends from nearly all students receiving additional resources to access the curriculum in segregated settings to nearly all students served in inclusive classrooms. Although the trend toward more school integration and inclusive education is unmistakable, the development remains far more gradual in Germany than in the United States. (Powell, 2009)

Changes in finance, along with the growing immigrant population, have forced Germany to reconsider the application of the global inclusion model (Powell, 2009). Most students in Germany, including those in special education, spend most of their time in a general education classroom since very few German schools have special education teachers or specific classrooms set aside for them. In contrast, American schools are more flexible in curriculum, accommodations, and modifications where German schools are more inflexible.

Like Israel, Germany prefers to "sort" and place individuals in rigid tracks, with an emphasis on the vocational for students with disabilities. The justification is that they are

better equipped to move from high school directly into specific employment, where American special education students graduate with a generalized diploma that does not equip them for either post-secondary or vocational opportunities.

According to Fish, et al., (2010), Japan's students score the highest on International Achievement tests and have the highest graduation rate of 94%. Japanese classrooms often include 35-45 students that have different abilities. Special education is not a category identified in Japanese schools. Students of all abilities are placed together in a classroom and taught the same curriculum. Engagement in a subject rather than a lecture is the prominent way to teach. Japanese teachers want their students to think through a problem often having students solve one problem per class. Each student writes down their answer, whether right or wrong. The teacher is interested in the thinking process, therefore, there is no emphasis put on a correct or incorrect outcome. The emphasis is on learning what the student's thought processes are and how she eventually solved a problem. The answer is always found but no congratulations or criticisms are verbally given to any student.

To help students who are falling behind in the curriculum, like other countries, Japan offers tutoring and after school support. Teachers are responsible for helping a student pass all courses. This responsibility does not lie with the students alone. As a supplement to school, Japanese students can attend a Cram school that trains its students to meet particular goals such as achieving good marks or passing the entrance examinations of high schools or universities (Fish et al., 2010).

When compared to western schools, the biggest difference in education is the strength of the Japanese culture. Students have homeroom every day for an hour with the



same teacher and group of students for years. They perceive this group of people as family. Students even go visit a teacher on her birthday. Respect for one another and emphasis on not letting the group down are important to Japanese society (Fish et al., 2010).

The most important thing about a Japanese school is its reputation and educational performance. If a student breaks a law his teacher and parents are called. Both apologize for the behavior as the school believes a student's behavior reflects what they have been taught. A student is aware of this process and it is very important not to embarrass their family or let their school group down. They work as a group and acceptance in that group is extremely important to each student and to the teachers (Fish et al., 2010).

This loyalty to one another, the environment of acceptance, the tutoring, the teachers' drive to help students pass a class, and the shared responsibility to learn the curriculum, all contribute to Japan's excellent education.

### **Future Implications**

Co-teaching is the service delivery model of choice for a growing number of school districts in the nation (Murawski et al., 2010). It is complicated by the fact that there are many different ways to do it, and the teachers involved must decide what model will work best in their classroom. Teachers must take the time to collaborate and work together to achieve successful implementation

Second, the Finland model where teachers are assigned to individual subject areas taught to become "master" teachers in that area has a proven record of success. For example, a special education teacher would be trained in Math strategies and then apply the best modifications for those strategies and teach it in the classroom. School Districts

currently lean more toward co-teaching and collaboration but the success of the students in Finland should encourage future exploration of this reform (Kivirauma et al., 2007).

Lastly, technology has already impacted special education instruction by allowing individuals to explore different learning opportunities. Virtual classes, video, tablet, and web-based learning help student to learn at their own pace but teachers need more training in these options (Baker, 2005).

The future world is technology-based. Technical knowledge helps students to transition into the workplace, find a house and bank online, fill out applications online, and be familiar with internet safety. The more they know about technology, the more they will graduate as well-rounded individuals (Baker, 2005).

Budgeting government funds continues to be a challenge for school districts. In Minnesota, autism programs usually receive the largest amount of funding per student, but these funds do not always impact individual students. A reassessment of how monies are applied can only help further the goals of each individual student (Greene, 2007).

Charter schools specifically focused on autism and vouchers that allow parents a choice have already proven successful, and should continue to draw the interest of families of children with disabilities. For example, Karner Blue is a unique school that opened recently in Blaine, Minnesota, designed specifically to address the needs of students with autism. It has been very successful and could be used as a model school for future planning.

# CHAPTER III: APPLICATION MATERIALS

## Autism Learning Slide Show Presentation to General Education Staff


### Faculty Handout and Opening Slide Autism, Learning, and Modification Strategies

## AUTISM & LEARNING

Autism is a neural development disorder that affects 1.5 million Americans. It impacts how a person thinks, learns and experiences the world.

### 1 OVERVIEW

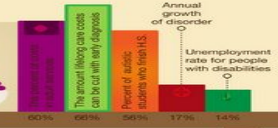
Autism, a "spectrum disorder" that impacts everyone differently and to a varying degree, typically appears during the first three years of life.



Autism impacts the brain's ability to process information by altering how nerve cells and their synapses organize.

**STATISTICS**

Autism affects every 1 in 110 births in the U.S.; 1 in every 70 boys. The lifetime cost of caring for a child with autism can range from \$3.5 million to \$5 million.



### 2 DIAGNOSIS & LEARNING

Children cannot outgrow autism, but studies show that it is treatable with early diagnosis and intervention. Here's what to look for:

**EARLY SIGNS**

abc

Lack of or delay in spoken language

Repetitive or stereotyped behaviors

Late or no eye contact

Lack of interest in peer relationships

Lack of spontaneous play

Fixation on parts of objects

**DEVELOPMENT ISSUES**

When it comes to learning, children with autism have difficulties in five main areas:

Communication	Trouble understanding or communicating their thoughts and needs to others, as well as trouble understanding directions and vocal and facial cues.
Social interaction	May exhibit challenging behaviors including bullying other students and becoming ostracized.
Sensory processing	Issues with maintaining eye contact, being touched and coping with loud environments.
Repetitive behavior	May feel the need to repeat the same behaviors or phrases again and again.
Information processing	Experiences trouble in this area because of an alteration in how the brain's synapses are connected.

**STRATEGIES TO HELP**

**VISUAL AIDS**

Students with autism learn well with visual aids. They can see what is going on throughout the day. With this, they know what to prepare for and what activity they will be doing next.

**STRUCTURE**

Structure reduces stress, confusion, anxiety and behavior problems by making things predictable. This can lead to independence and builds on the child's strengths.

**COMMUNICATE**


By paying attention to a child's behavior, a teacher can see how they are feeling or what they are trying to say. Teach the child ways to be flexible and use stories to show appropriate behavior in social situations.

Children with autism are easily distracted which often affects their ability to learn. Distractions can include lights, sounds, and smells. Give a child a conducive learning environment by minimizing these.


### 3 KEY ELEMENTS TO A SUCCESSFUL EDUCATION

Successfully supporting a child with autism involves understanding the unique way the characteristics are present in the child and how these characteristics impact on his/her life at school. Here are some ways to make education more successful:


Specialized curriculum and teaching methods




Coordinated team approach and parental involvement




Structured and modified learning environments




Support and services for students and families




Functional approach to problem behavior




Recurrent evaluation of inclusion procedures



Classroom and social support as well as a positive attitude by all involved.



Collaboration with home-schooling



### 4 ADDITIONAL RESOURCES

Helpful sites for both parents and educators:

**CDC**

If you think your child has autism:  
<http://www.cdc.gov/Features/DetectAutismEarly/>

Autism resources and programs vary greatly by state. See what your state offers here:  
<http://www.autism-society.org>

**About.com**

How to receive access to free resources, including an IEP:  
<http://autism.about.com/od/termsanddefinitions/g/IEPGlossary.htm>

**SOURCES:** Autism Society | Autism Help | CDC | Physicians for Learning | Education Next      Information provided by: **Online College.org**

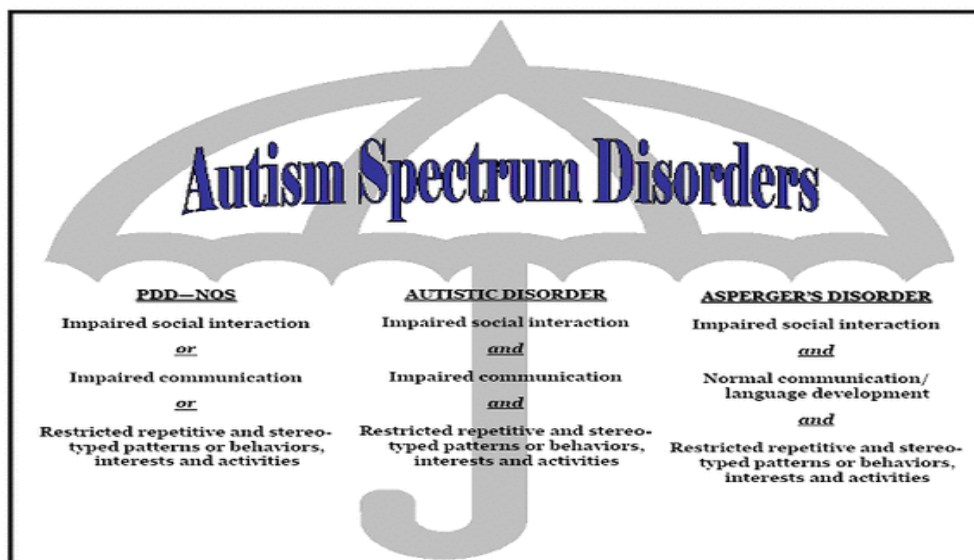
onlinecollege.org

## Objectives

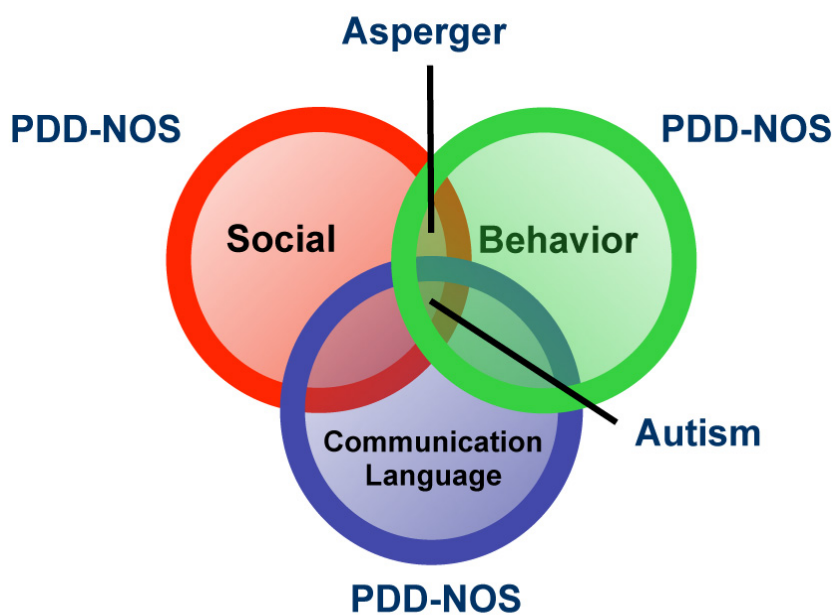
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- Participants will become familiar with the definition, characteristics, and other related information regarding autism spectrum disorders
- Participants will be able to recognize evidence-based practices in assessing students with ASD
- Participants will be able to recognize components for developing an effective educational program for students with ASD
- Participants will understand the importance of effective collaboration, resources, and supports for students with autism spectrum disorders

## *Yesterday*



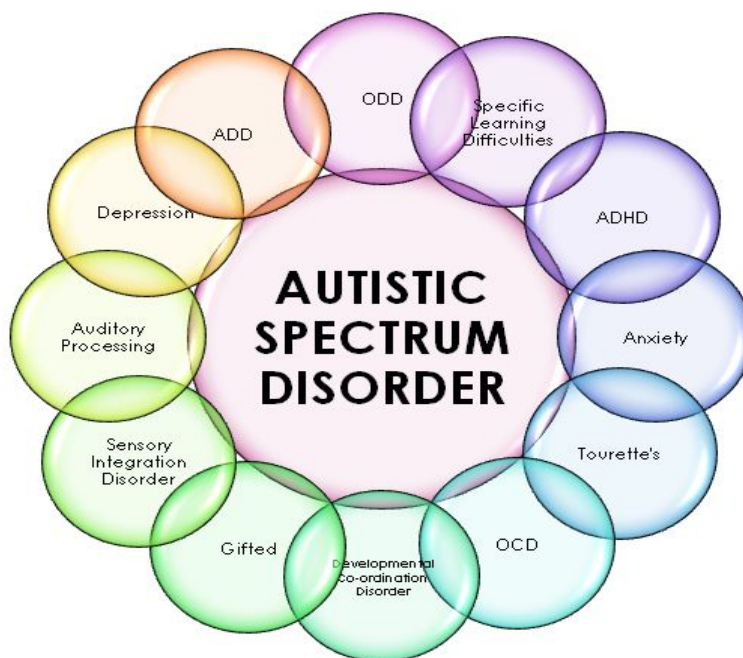
autism-community.com



*Today*



[slideshare.net/5Girls/autism-powerpoint-dhihh?related=3](https://www.slideshare.net/5Girls/autism-powerpoint-dhihh?related=3)



[socialworkhelper.com/Autism-spectrum-disorder](http://socialworkhelper.com/Autism-spectrum-disorder)





[betterhelp.com](http://betterhelp.com)

## IDEA and Part 200 Definition of ASD

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Autism means a developmental disability significantly affecting **verbal and nonverbal communication** and **social interaction**, generally evident before age three, that adversely affects a child's educational performance. Other characteristics often associated with autism are **engagement in repetitive activities and stereotyped movements**, **resistance to environmental change or change in daily routines**, and **unusual responses to sensory experiences**.

## Implications for the Classroom

### Social Deficits

- Social imitation (academic & non-academic) is lacking – **explicit instruction required**
- **Perception and interpretation** of body language and social cues **lacking** – watch for social misunderstandings
- Subtle and arbitrary **social rules not recognized**, understood, or valued – may need to explain or explicitly instruct; rules should be functional to make sense
- Will need significant **assistance with** establishing and maintaining **social relationships**; **self-advocacy**, and integration into the school community
- Often victims of bullying – be aware
- Lack **“Theory of Mind”** – doesn’t realize others may think and feel differently

## Related Characteristics

### Sensory Issues

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#### Processing sensory information

- **Over or under-sensitivity** to noises, lighting, odors, tastes, textures, pain
- Sensory **over-selectivity**
- Failure to respond
- Hidden “senses”
  - **vestibular** (movement and balance)
  - **proprioceptive** (feedback on how much force or pressure to apply when picking up something or holding an item)

## Related Characteristics

Cognitive Issues

- Difficulty drawing **conclusions**
- Difficulty with incidental learning
- Often excellent rote memory
- Slower at **retrieving** information
- Slower **processing** speed
- Problems with **working memory**
- Trouble **predicting** outcomes (e.g., people's reactions)
- Often do not see **cause-effect**

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## Related Characteristics

Cognitive Issues

- Problems with executive function
  - Issues with **shift**: moving freely from one activity/situation to another, **transitions**, **flexible problem solving**
  - Issues with **initiation**; can't begin tasks
  - Issues with **planning**, **organizing**, **sequencing**, setting goals/objectives
  - Issues with seeing "big picture" or main idea
  - Issues with **evaluating** activity; pace, completion,
  - Issues with modulating **emotional response**
  - Issues with controlling **impulses**

## Linking Assessment to Intervention

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- Determine the student's ability profile
- Determine the contextual support elements to maximize learning
- Know the curriculum/lessons and align content difficulty level with student ability, THEN select best instructional methods, activities, and format
- Differentiate instruction & differentially reinforce
- Evaluate progress and performance (continuous)
  - Problem solve
  - Revise
  - Re-assess

Magyar, C., (2008, November). *Developing a system of support for students with autism spectrum disorders: A classroom model*. Presentation given at the 7<sup>th</sup> Annual Conference sponsored by CARD-Albany, Albany, NY.

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## Effective Components for Educational Practices

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### Comprehensible/Structured Learning Environments

- Curriculum needs to be clear to both students and educational personnel
- Allows student to predict what's going to happen next
- Provide a schedule of activities
- Plan and provide choice-making
- Provide behavior support
- Define areas of classroom and school
- Provide temporal relations
- Facilitate transitions, flexibility, change

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## Promising Practice

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**TEACCH – Treatment and Education of Autistic and related Communication Handicapped Children- Structured Teaching**

- **Modifying environment to accommodate needs of individuals with ASD**
  - Physical organization
  - Work schedules
  - Work systems
  - Task organization

<http://www.teacch.com>

greatautism101.ppt



tes.com/teaching-resource/supporting-autism-poster

# SPECIAL EDUCATION ACCOMMODATIONS

## WRITING

- Use graphic organizers in the planning phase
- Record student's thoughts before beginning to write
- Provide sentence starters and individual word walls
- Write on a computer instead of a notebook
- Use word prediction and spell-check software

## HW & TESTS

- Provides directions in numbered steps
- Read directions and questions aloud
- Allow oral responses
- Limit answer choices and provide fewer questions per page
- Extend time
- Break assignment into smaller chunks

**by** LUMINOUSLEARNING

### Response Accommodations

Students might be allowed to:

- Write answers in a test booklet rather than on a separate answer sheet
- Use a computer to complete their work
- Use an [augmentative communication](#) device for verbal responses
- Use a scribe (e.g., have peer or adult write answers for them)
- Record responses
- Use a [braille writer](#)
- Circle or point at answers
- Use a spell checker or grammar checker
- Use a calculator
- Utilize a graphic organizer
- Practice with manipulatives
- Use a note-taker

[www3.canisius.edu/](http://www3.canisius.edu/)

## Modifications/Accommodations Options

### Faculty Handout and Closing Slide

Modifications/Accommodations for \_\_\_\_\_  
student name

#### MATERIALS/BOOK/ EQUIPMENT

- Alternative Text
- Calculator Use
- Computer Access
- Consumable Workbook
- Large-Print Textbook
- Manipulatives
- Spell Check
- Tape Recorder
- Visuals: supplementary
- Worksheets Modified

#### TESTS/QUIZZES/TIME

- Alternate Setting
- Extra Credit Options
- Extra Response Time
- Extra Time - Projects
- Extra Time - Tests
- Extra Time - Written Work
- Hands-on Projects
- Limited Multiple Choices
- Modified Tests
- Objective Tests
- Oral Testing
- Pace Long-term Tasks
- Prior Notice of Tests
- Prior Notice - Test Material
- Reduced Reading
- Rephrase Test Questions/  
Directions
- Short Sequenced Tasks
- Shortened Tests
- Simplified Test Wording
- Student Writes on Test
- Study Guide for Test
- Other \_\_\_\_\_

#### ORGANIZATION

- 1 Paper at a Time Given
- Assignment Pad
- Assignments Posted
- Daily Assignment List
- Daily Homework List

- Desktop List of Tasks
- Extra Space on Papers
- Folders to Hold Work
- List Sequenced Steps
- Pencil Box for Tools
- Pocket Folder for Work
- Routines Posted
- Study Outlines Provided
- Worksheet Formats
- Other \_\_\_\_\_

#### GRADING

- Audit
- Base Grade on Ability
- Base Grade on IEP
- Course Credit
- Grade Effort Plus Work
- Grade Improvement
- Modified Grades
- No Handwriting Penalty
- No Spelling Penalty
- Pass/Fail
- Other \_\_\_\_\_

#### ENVIRONMENT

- Clear Work Area
- Selective Seating
- Study Carrel

#### BEHAVIOR MANAGEMENT

- 1-to-1 Reminders
- Baseline Data
- Behavioral Contract
- Breaks Between Tasks
- Chart Progress
- Contingency Plan
- Cue Expected Behavior
- Daily Feedback to Student
- Parent/Guardian Sign Behavioral Chart

- Parent/Guardian Sign Homework
- Passive Physical Restraint
- Positive Reinforcement
- Proximity & Touch Control
- Set/Post Class Rules
- Structure Transitions
- Time Out From Positive Reinf
- Other \_\_\_\_\_

#### TEACHING STRATEGIES

- 1-to-1 Oral Reminders
- Auditory Presentation Support with Visual Materials
- By-Pass for Written Output
- Check Work in Progress
- Compute Assisted Instruction
- Concrete Examples
- Display Key Vocabulary
- Extra Drill/Practice
- Facial Clues/Gestures
- Highlight Key Words
- Immediate Feedback
- Lecture Notes Provided
- Manipulatives
- Mimed Clues
- Mnemonics
- Monitor Assignment
- Multisensory Approach
- Number Line
- Overlearning
- Personalized Examples
- Pictures/Charts
- Preteach Content
- Provide Models
- Repeat Instructions
- Review Directions
- Review Sessions for Tests
- Student Restates Information
- Visual Reinforcement
- Visual Reminders
- Vocabulary Word Bank
- Other \_\_\_\_\_

## CHAPTER IV: DISCUSSION AND CONCLUSION

### Summary

Determining proper placement in the least restrictive environment for high school students with autism in the general education setting is the biggest challenge for high school special education teachers today. Without proper placement, teacher education, co-teaching training for quality instruction, differentiated instruction, accommodations, and modifications, students with autism will not successfully stay on track to graduate.

Considering the different approaches and emphasis school districts put on training a general education teacher to implement accommodations and modifications for students with autism, best practice would now suggest that special education teachers and general education teachers need to collaborate to facilitate a modified curriculum with differentiated levels of teaching (Phillips, 2008). Modifications should be implemented that will make the general education classroom a successful endeavor of learning for a student with autism rather than a frustrating experience that will provoke disruptive behaviors that will inhibit all student's learning opportunities.

Co-teaching is the service delivery model of choice for a growing number of school districts in the nation (Murawski et al., 2010). The co-teaching model offers many opportunities for teacher collaboration and input. This provides teachers with a strong foundation of support and knowledge that, in turn, will create a more successful learning environment for students. Simmons and Magiera (2007) even suggested keeping co-teaching pairs together, having the special education teacher become part of content departments, and tracking student outcomes.

Teacher workshops and training during the summer months gives staff a chance to modify curriculum based on student needs rather than relying on a special education teacher to attempt modifications of a subject she does not teach during the school year. Pre-planning allows teachers to offer differentiated instruction that will enhance learning, not behaviors.

Proper training that puts emphasis on collaboration and student success is invaluable. In order to be effective, this collaboration must continue throughout the school year. This is a cyclical process that should continuously be updated as an individual student or group of students needs develop. At this time, co-teaching and teacher collaboration to modify curriculum seem to be the focus of many school districts and their determination for best practice regarding teaching high school students with autism and other disabilities.

### **Professional Application**

As a special education teacher, licensed in ASD and teaching at the high school level, my caseload primarily contains students with autism. However, when I teach I have worked with students with autism and students with other disabilities. As a result, I have worked with general education teachers to modify curriculum during the school year. Since general education teachers can be overwhelmed, they often ask me to tell them how to modify assignments, quizzes, and tests.

Last year, I worked with a ninth-grade student with autism who was placed in physical science. This student had a shared paraprofessional who was overwhelmed by the work required in these classes. All the other students who were assigned to this paraprofessional during this class did not receive the help they needed, as the class was



not modified for this student with autism. As a result, this student began exhibiting behaviors such as yelling and refusal to work. He was not learning and he was making it hard for other students to learn. Since I was the student's case manager, I tried to have him moved to another class. However, this class was required for graduation and we did not offer a special education science class—I was instructed to work with the general education teacher to modify the curriculum. Unfortunately, I was forced to modify his work as the general education teacher was too busy. This was frustrating for me, frustrating for the general education teacher, frustrating for the paraprofessional, and frustrating for the student.

Modifications were not always successful nor did they promote learning. I am not trained to teach high school science. Alone, I cannot make adequate modifications to ensure that the student was learning key concepts. The result was that the student's behaviors increased, he left class frequently, and he failed the class. This placement was inappropriate for him.

This is one example of what happened repeatedly over the year and it became so apparent that we were failing our students that the special education teachers and the school psychologist began to brainstorm ways to help our students be successful. At the time, the district was offering special education English class and a co-taught pre-Algebra class. The English class was for special education only and was successful but the pre-algebra class was struggling. Students were being co-taught by a special education teacher and a general education teacher but they were exhibiting behaviors and failing to learn.

Unfortunately, the co-teaching model only began last year in my school district and

I have not had the experience of collaborating in this way. However, I watched my colleagues working in pre-algebra follow this model. Their experience was a little frustrating as one teacher always felt like a paraprofessional in the classroom and did not think he contributed much. Of course, this was the first year for the model and many problems needed to be worked through before attaining an excellent co-teaching model.

Other colleagues I have spoken to about co-teaching have expressed trepidation in sharing ideas with another teacher and having those ideas rejected or modified. Many teachers are used to independent teaching partnerships in the classroom are uncomfortable for most teachers and it does require a lot of patience, kindness, and compromise to be successful.

I am excited about teachers beginning to collaborate on modifying curriculum for my students with autism. I see how frustrated my students become just by small mistakes in accommodations or modifications. For example, last year I had a high functioning student with autism on my caseload who did not like crowded rooms. To accommodate for this need, his middle school teacher put in the accommodations section of his IEP that he should sit by the teacher so he could concentrate.

The school year began and Steve did well in all his classes except computer safety class. Steve refused to go to class and would consistently ask to go to the sensory room. This caused Steve to miss the first ten minutes of class several times a week. I talked with his teacher and verified that his accommodations and modifications were being implemented. I talked to Steve and asked him why he was reluctant to attend class. Steve shut down and would not talk. He did not know me nor did he trust me.

After the second week of this behavior, I went to the classroom to explore the

layout. To my surprise, the teacher's desk was in the back of the room. Steve's accommodations stated he should sit next to the teacher. This was done, but Steve had to walk through a full class of students to get to his seat. He was mortified and did not want to go to class as he felt everyone was watching him. Even though his accommodations and modifications were being implemented, the location of the teacher's desk changed Steve's behavior. When Steve's seat was moved near the entrance of the room he never skipped class again. Steve and I were both delighted when he passed that class with a B-. What a difference an ecological modification can make.

As with Steve, many high school students often feel *placed* in a class rather than feeling *part* of a class. With the right assessment, accommodations, modifications, and qualified staff support, students with autism can look around a classroom and feel like they are part of the group—they are accepted. This acceptance leads to an environment of learning and belonging. Once Steve was able to feel comfortable in class, he started interacting with his teacher and his peers, and they began interacting with him. No longer was Steve a visitor to his classroom, he was included.

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## Appendix A Jon Assessment

### Reinforcer Assessment I. Activity and Tangible Reinforcers

*- Preference assessment*

Child's Name: Jonah Date: \_\_\_\_\_

Instructions: Place a check next to the preferred items and list preferred items in the blanks

Listening to music: \_\_\_\_\_

Playing with toys: Magna Doodle, trains, dinosaurs

Computer programs: \_\_\_\_\_

Snacks/Candy: \_\_\_\_\_

Drinks: \_\_\_\_\_

Playing games: \_\_\_\_\_

Puzzles

Helping/passing out materials

*Smiles to himself when he helps others (retro-acted with bag)*

Outside play

Balloons

Going for a walk

Cooking

Drawing

Stickers

Doing a job/task

Coloring

Snack time

Running/being chased

Riding toys/bikes

Balls

Painting

Other: Fidget

Sitting in a special seat

Other: \_\_\_\_\_

Water play

Other: \_\_\_\_\_

Free time

Other: \_\_\_\_\_

Reading books

## Appendix B

### Handout – Modifications/Accommodations Options

#### Modifications/Accommodations for \_\_\_\_\_ student name

##### MATERIALS/BOOK/ EQUIPMENT

- Alternative Text
- Calculator Use
- Computer Access
- Consumable Workbook
- Large-Print Textbook
- Manipulatives
- Spell Check
- Tape Recorder
- Visuals: supplementary
- Worksheets Modified

##### TESTS/QUIZZES/TIME

- Alternate Setting
- Extra Credit Options
- Extra Response Time
- Extra Time - Projects
- Extra Time - Tests
- Extra Time - Written Work
- Hands-on Projects
- Limited Multiple Choices
- Modified Tests
- Objective Tests
- Oral Testing
- Pace Long-term Tasks
- Prior Notice of Tests
- Prior Notice - Test Material
- Reduced Reading
- Rephrase Test Questions/  
Directions
- Short Sequenced Tasks
- Shortened Tests
- Simplified Test Wording
- Student Writes on Test
- Study Guide for Test
- Other \_\_\_\_\_

##### ORGANIZATION

- 1 Paper at a Time Given
- Assignment Pad
- Assignments Posted
- Daily Assignment List
- Daily Homework List

- Desktop List of Tasks
- Extra Space on Papers
- Folders to Hold Work
- List Sequenced Steps
- Pencil Box for Tools
- Pocket Folder for Work
- Routines Posted
- Study Outlines Provided
- Worksheet Formats
- Other \_\_\_\_\_

##### GRADING

- Audit
- Base Grade on Ability
- Base Grade on IEP
- Course Credit
- Grade Effort Plus Work
- Grade Improvement
- Modified Grades
- No Handwriting Penalty
- No Spelling Penalty
- Pass/Fail
- Other \_\_\_\_\_

##### ENVIRONMENT

- Clear Work Area
- Selective Seating
- Study Carrel

##### BEHAVIOR MANAGEMENT

- 1-to-1 Reminders
- Baseline Data
- Behavioral Contract
- Breaks Between Tasks
- Chart Progress
- Contingency Plan
- Cue Expected Behavior
- Daily Feedback to Student
- Parent/Guardian Sign  
Behavioral Chart

- Parent/Guardian Sign Homework
- Passive Physical Restraint
- Positive Reinforcement
- Proximity & Touch Control
- Set/Post Class Rules
- Structure Transitions
- Time Out From Positive Reinf
- Other \_\_\_\_\_

##### TEACHING STRATEGIES

- 1-to-1 Oral Reminders
- Auditory Presentation Support  
with Visual Materials
- By-Pass for Written Output
- Check Work in Progress
- Compute Assisted Instruction
- Concrete Examples
- Display Key Vocabulary
- Extra Drill/Practice
- Facial Clues/Gestures
- Highlight Key Words
- Immediate Feedback
- Lecture Notes Provided
- Manipulatives
- Mimed Clues
- Mnemonics
- Monitor Assignment
- Multisensory Approach
- Number Line
- Overlearning
- Personalized Examples
- Pictures/Charts
- Preteach Content
- Provide Models
- Repeat Instructions
- Review Directions
- Review Sessions for Tests
- Student Restates Information
- Visual Reinforcement
- Visual Reminders
- Vocabulary Word Bank
- Other \_\_\_\_\_

**Appendix C**  
Questions for Teachers

1. Please explain the bell schedule at your school, including grading period time frame and length of each class.
2. What process and criteria are used to determine placement for students with disabilities into math and English classes? For example, benchmark scores, previous state tests results, course grades, faculty recommendation, and parent request.
3. What courses have co-teachers included in the class?
4. Do all co-taught classes use the same method of co-teaching (one-teach/one-assist, team teaching, teaching stations, parallel teaching, etc?)
5. Please describe the co-taught English classes at your school.
6. Please describe the co-taught math classes at your school.
7. Is there equal accountability for general education teachers and special education teachers? If yes, please describe. If no, why not (Mason, 2013).

## Appendix D

### Co-teaching Charts

