

***AUTISM:
QUESTIONS AND
ANSWERS***

**INDEPENDENT STUDY
*A SIX CREDIT CLASS***

Course # ED445y/ED545y

INSTRUCTOR:

DR. MICHAEL SEDLER

Email: mike@communicationplus.net

(509) 443-1605

THE HERITAGE INSTITUTE

Please Do Not send in no more than 2 to 3 assignments at a time and I will send you back comments. Send them in numerical order (#1, #2, #3...). If you have signed up for multiple classes, please finish one before turning in work for the next one. And, there should be at least two weeks between course completions.

NOTE: This is an online class and all work should be turned in through The Heritage Institute site. NO work should be sent directly to the instructor. When you registered, you should have received information as to how this process works. If you are still unsure how to do this, please contact registrar@hol.edu and they can help you with this issue.

Thank you for signing up for my independent study classes. You may take up to six months to complete this course and may obtain an additional 3 month extension. DO NOT send in any completed papers unless you have registered for the class!

The checklist in the manual is to help you plan your schedule to successfully complete this course. The last page of the manual includes a General Bibliography. If you prefer, you may choose an alternate book not on the suggested list.

On the following page, I have given you a brief biography/resume of my background. You will see that I have a Masters Degree in Social Work; my K-8 Teaching Certification and am a Licensed Social Worker with the State of Washington. My current primary role is as a consultant and trainer for schools, businesses and agencies. I also worked in education for 15 years as a Director of Special Education, a Behavior Intervention Specialist, School Social Worker, and Teacher.

I teach classes and seminars throughout the United States and in Canada. I am an adjunct professor through two Universities in Washington. I am available for on-site training, classes, and in services for agencies and schools. I anticipate this class will be enjoyable and full of learning. Please contact me if you would like me to be involved directly with your school or business.

Thank you, once again, for signing up for it and I look forward to working with you over the next weeks/months.

Sincerely,

Michael Sedler
(509) 443-1605
E-mail: mike@communicationplus.net
Website: www.michaelsedler.com
P.O. BOX 30310 - Spokane, WA. - 99223

****** For those working in groups (400/500 level only!)- be sure to go to The Heritage Institute website at www.hol.edu and click on the "group collaboration" icon.

1. Each group member must pick a book to read (you may all choose the same book).
2. Each group member must read the entire manual.
3. Final evaluation/integration paper must be individually authored.

Please share about my classes with others. It is my main form of advertising.

MICHAEL SEDLER

(509) 443-1605 (w); (509) 939-6302 (c)

email: mike@communicationplus.net or michael@michaelsedler.com

website: www.michaelsedler.com

Education

B.A., Political Science

Master Degree, Social Work

Master Degree, Divinity

Doctorate Degree, Ministry

Teaching Certificate

Work Experience

Consultant/Trainer/Counselor

Director of Special Education

Developmental Disabilities Administration-behavior consultant

Supervisor, Educational Services

School Social Worker (K-12)

Behavior Intervention Specialist (K -12)

Classroom Teacher (elementary and middle school)

Assistant Pastor

Other Experiences

State Correctional Facility for Juveniles, Counselor and Supervisor

Community Mental Health Therapist

State Trainer in Autism (State of Washington)

Adjunct Professor for several Universities

Student Teacher Supervisor

Consultant for schools, business, churches throughout United States

Provide weekend marriage retreats

Interview and Speech Coach/Trainer for Miss Arizona, 3rd runner-up Miss America 2012

Author

When to Speak Up and When To Shut Up. (Jan., 2006 Revell Books, \$5.99). Book from faith-based perspective.

Communication book discussing conflict, power struggles, listening strategies, asking questions.

(Over 400,000 copies sold).

What To Do When Words Get Ugly. (October, 2016, Revell Books, \$5.99).

Updated/edited version of "Stop The Runaway Conversation.") Two new chapters in addition to edits. Book from faith-based perspective. Importance of not listening to negative discussions and how they impact a person's attitude.

Books are available through all bookstores, at www.bakerbooks.com, by calling 800 877 2665, or by checking with various online book companies. Revell is a division of Baker Publishing Group. Both books are available on CD as audio book

INDEPENDENT STUDY COLLEGE COURSES

THE HERITAGE INSTITUTE (credits through Antioch University, Seattle, WA)
MICHAEL SEDLER, INSTRUCTOR

Register for courses anytime. (6-month period for completion from the date you register). **Collaborate with fellow educators-only one set of assignments turned into instructor.** (Check out "Group Collaboration Guidelines" at www.hol.edu). **Clock hours available for partial course completion.

The following are **3 CREDIT CLASSES** (3 quarter credits = 2 semester credits)

1. Increasing Motivation and Self-Esteem in Students (SS401p/SS501p)

Strategies to help students feel confident and help educators find more successful approaches with them.

2. Parents: Adversary or Ally--A Cooperative Approach (SS401q/SS501q)

Specific ideas on connecting with parents and helping better communication between school and home.

3. Social Skills: A Foundation For Learning (SS401v/SS501v)

Activities and ideas to encourage students to improve their peer and social relations.

4. Understanding & Connecting With Aggressive Students (ED404d/ED504d)

Each person will increase their understanding of ways to de-escalate aggression and its' causes.

3 CREDIT COST: \$280-400/500 level; \$195-clock hours (3 quarter = 2 semester)

The following are **5 CREDIT CLASSES:** (5 quarter credits -3.3 semester credits)

1. Bullying Behaviors: Enough is Enough (ED437q/ED537q)

Identification and interventions to reduce bullying behaviors and victim mentality within schools and community.

2. Counseling Skills For Educators (ED409r/ED509r)

Helpful ideas on listening skills, asking questions, and communicating with students.

3. High Maintenance Behaviors & Interactions (SS409f/SS509f)

This course investigates the many aspects of high needs people, behaviors and effective interactions.

4. Mental Health Issues and Students (HE402n/HE502n)

Understand various disorders (oppositional defiant, obsessive compulsive, bi-polar) and interventions.

5. Nurturing Compassion Within Our Schools (ED434y/ED534y)

Ideas to help adults and children learn to be more sensitive, kind, and compassionate toward one another.

6. Organizational Teaching Skills (ED429w/ED529w)

Increase your own organizational and time management skills as well as helping students in these areas.

7. Stress Reduction in Staff and Students (HE401m/HE501m)

Strategies to reduce stress, become more effective in life, and teach these skills to students.

8. Student, Classroom and Whole-School Discipline (ED419g/ED519g)

Focus is on negative talk, gossip and rumors within schools. Behavioral strategies for each above area.

9. Youth Suicide (SS404u/SS504u)

Specific discussions on signs and interventions for suicide prevention.

5- CREDIT COST: \$415-400/500 LEVEL; \$315-clock hours (5 quarter = 3.3 semester)

NEXT PAGE FOR MORE CLASSES AND REGISTRATION INFORMATION

INDEPENDENT STUDY COLLEGE COURSES

THE HERITAGE INSTITUTE (credits through Antioch University, Seattle, WA)

MICHAEL SEDLER, INSTRUCTOR

The following are **6 CREDIT CLASSES**: (6 quarter credits - 4 semester credits)

1. Autism: Questions and Answers (ED445y/ED545y)

Understanding the general areas of autism, diagnosis, and overall strategies for interventions for children with special needs.

2. Establishing Rules and Boundaries (ED445x/ED545x)

Ideas to assist educators in setting up a successful work environment for children (rules, procedures, teaching tools).

3. Inspirational Education (ED452f/ED552f)

This course will re-charge the batteries and create a new excitement about teaching in each person.

4. The Impact Of Trauma and Loss in Students (ED464z/ED564z)

Strategies to support children who have experienced traumatic situations in life.

5. Why Children Act Out (ED458t/ED558t)

Recognize the underlying function of behaviors and interventions approaches.

6- CREDIT COST: \$495--400/500 LEVEL; \$380-clock hours (6 quarter = 4 semester)

REGISTRATION: Call The Heritage Institute--1 (360) 341-3020

Or register on line at www.hol.edu

QUESTIONS: Please call Michael Sedler at (509) 443-1605. Leave message when necessary.

Email address: mike@communicationplus.net Website: www.michaelsedler.com

****For clock hours, only complete the first section of the course. Remember, clock hours may not transfer to other districts or states. You cannot go back and acquire credit once clock hours have been earned for a class.**

ADDITIONAL ASSIGNMENTS REQUIRED for 400 or 500 LEVEL UNIVERSITY CREDIT.

This course assumes that most participants are educators. If you are not in a school setting, please contact the instructor for course modifications. **If completing during the summer**, apply your ideas with youth from your neighborhood, a parks department facility, with students in another teacher's summer classroom in session, experiences with students from past years, or use one of your own children or a relative.

Assignment #9:

Keep a journal for one week (7 days, minimum of one paragraph per day) of general learning and life observations on the topic of Autism. Learning may come through this class, media outlets (TV, newspaper, magazines, internet) or connection with individuals. **Send your journal or write up a 1-2 summary of the journal.**

Assignment #10:

Choose two interventions that you gained additional knowledge about from this class. Share about them with another educator (or individual). Write a **2 page summary** of your discussion.

Assignment #11: You must choose either "A" or "B" (Required for 400 and 500 Level)

Assignment #A:

- Develop a lesson to reflect what you've learned in this course.
- Implement your lesson with students in your classroom.
- Write a **2 page commentary** on what worked well and what could be improved.
- Include any student feedback on your lesson.

OR

Assignment #B:

Use this option if you do not have a classroom available.

- Develop a lesson to reflect what you've learned in this course. (Do not implement it.)
- Write a **2 page summary** concerning any noteworthy success you've had as a teacher with one or more students.

500 LEVEL ASSIGNMENT

Assignment #12: (500 Level only)

In addition to the 400 level assignments complete **one (1)** of the following options:

Option A) Mentor another individual in the concepts of this class. Have them share two or three key concepts that they would like to implement within their work or social setting. Develop a plan for the implementation of these ideas. **(1-2 pages).**

OR

Option B) Create a PowerPoint presentation for your staff based on this course and focused on perspectives or strategies you feel would be beneficial for your school. **Minimum of 15 slides.** Save this as a pdf.

OR

Option C) Another assignment of your own design, with instructor prior approval.

400 & 500 LEVEL ASSIGNMENT (To be completed by all participants taking this for credit)

Integration Paper

Assignment #13: (Required for 400 and 500 Level Credit)

Write a **2 page** Integration Paper answering these specific questions:

1. What did you learn vs. what you expected to learn from this course?
2. What aspects of the course were most helpful and why?
3. What further knowledge and skills in this general area do you feel you need?
4. How, when and where will you use what you have learned?
5. How and with what other school or community members might you share what you learned?

Must be individually authored (name and course title) for those taking in a group.

QUALIFICATIONS FOR TEACHING THIS COURSE:

Mike Sedler, M.S.W., D. Min., brings over 40 year of educational experience as a special education director, social worker, behavior specialist and teacher to each of his classes. He provides consultation and seminars throughout the United States and Canada for schools, agencies and businesses. He has a graduate degree in Social Work, a Doctoral degree in Ministry, a Counseling license, as well as his teaching certification. Mike has worked with children of all ages, specifically with children exhibiting behavioral challenges, mental health concerns, and characteristics of Autism Spectrum Disorder. In addition, he taught general education classes in the elementary school and middle school arenas. All of Mike's classes are practical and "field tested" in schools and classrooms. Educators have found success in implementing Mike's clear and concise approaches. All of his course material may be immediately implemented into a school or a home.

NOTES: You may work collaboratively and submit joint assignments on all but the Integration Paper portion which must be individually authored. Alternatives to written assignments such as a video, audio tape, photo collage, etc. are permissible with prior approval of instructor.

Full credit will be given to each student as long as all work is turned in. If something is missing, I will be in contact with you. Failure is not an option. ☺

This topic is often filled with emotions, controversy, mis-information, and confusion regarding causes, interventions, diagnosis, and preventative methods. Let me make a few statements about this course:

- I first became involved with the topic of Autism in 1983 when I spent the year attending week-long sessions, each month, being trained by national leaders and educators in the field of Autism. Topics included communication, behavior, functional skills, working with families, diagnosis, medical interventions, therapy, alternative approaches, community access, to name a few. My training led me to be one of nine State trainers in the field of Autism. In the late 1980's, I began my association with the Division of Developmental Disabilities (now called Developmental Disabilities Administration-DDA) where I provided behavior intervention services for individuals with special needs. I continue to offer these services to DDA as well as to many other agencies.
- This course is not intended as an exhaustive study or presentation on the topic of autism. While I have personally worked with special needs children and adults for over 30 years, I am still learning and attempting to understand strategies and interventions that will be successful for those I serve each day.
- I do not personally have a son or daughter with characteristics of autism and do not pretend to understand the struggles or emotions that any parent has regarding this area. I do not consider myself an "expert" when it comes to working with children or adults. However, I have been fortunate to work with thousands of children and families, and therefore, have amassed many ideas and strategies for working with difficult behaviors and characteristics.
- This manual contains ideas and interventions that I hope will increase your skill level. I have my own biases and thoughts on some interventions that are advocated within our society. I will clearly share research and thoughts on some of these topics. If you disagree with my statements, findings, or research, that is fine. Just research the topics deeper and be sure to fully understand the complete picture, to the best of your ability. Too often our thoughts and beliefs are based on our own "personal" experience and not on the larger macro picture in life.
- Finally, it is my hope and desire that each person taking this class will come away with a greater knowledge of the topic of autism and feel more equipped in their skill level when working with people in need.

This manual was updated in August, 2024. There will be new information and statistics available that are not included in this current revision of the manual.

UNDERSTANDING THE MANY ASPECTS OF AUTISM

Ten Things Every Child With Autism Wishes You Knew

By Ellen Notbohm, author

Some days it seems the only predictable thing about it is the unpredictability. The only consistent attribute - the inconsistency. There is little argument on any level, but that autism is baffling, even to those who spend their lives around it. The child who lives with autism may look "normal" but his behavior can be perplexing and downright difficult.

Autism was once thought an "incurable disorder," but that notion is crumbling in the face knowledge and understanding that is increasing even as you read this. Every day, individuals with autism are showing us that they can overcome, compensate for and otherwise manage many of autism's most challenging characteristics. Equipping those around our children with simple understanding of autism's most basic elements has a tremendous impact on their ability to journey towards productive, independent adulthood.

Autism is an extremely complex disorder but for purposes of this one article, we can distill its myriad characteristics into four fundamental areas: sensory processing challenges, speech/language delays and impairments, the elusive social interaction skills and whole child/self-esteem issues. And though these four elements may be common to many children, keep front-of-mind the fact that autism is a spectrum disorder: no two (or ten or twenty) children with autism will be completely alike. Every child will be at a different point on the spectrum. And, just as importantly - every parent, teacher and caregiver will be at a different point on the spectrum. Child or adult, each will have a unique set of needs.

Here are ten things every child with autism wishes you knew:

1. I am first and foremost a child. My autism is only one aspect of my total character. It does not define me as a person. Are you a person with thoughts, feelings and many talents, or are you just fat (overweight), myopic (wear glasses) or klutzy (uncoordinated, not good at sports)? Those may be things that I see first when I meet you, but they are not necessarily what you are all about.

As an adult, you have some control over how you define yourself. If you want to single out a single characteristic, you can make that known. As a child, I am still unfolding. Neither you nor I yet know what I may be capable of. Defining me by one characteristic runs the danger of setting up an expectation that may be too low. And if I get a sense that you don't think I "can do it," my natural response will be: Why try?

2. My sensory perceptions are disordered. Sensory integration may be the most difficult aspect of autism to understand, but it is arguably the most critical. It means that the ordinary sights, sounds, smells, tastes and touches of everyday that you may not even notice can be downright painful for me. The very environment in which I have to live often seems hostile. I may appear withdrawn or belligerent to you but I am really just trying to defend myself. Here is why a "simple" trip to the grocery store may be hell for me:

My hearing may be hyper-acute. Dozens of people are talking at once. The loudspeaker booms today's special. Musak whines from the sound system. Cash registers beep and cough, a coffee grinder is chugging. The meat cutter screeches, babies wail, carts creak, the fluorescent lighting hums. My brain can't filter all the input and I'm in overload!

My sense of smell may be highly sensitive. The fish at the meat counter isn't quite fresh, the guy standing next to us hasn't showered today, the deli is handing out sausage samples, the baby in line ahead of us has a poopy diaper, they're mopping up pickles on aisle 3 with ammonia. I can't sort it all out. I am dangerously nauseated.

Because I am visually oriented (see *more on this below*), this may be my first sense to become overstimulated. The fluorescent light is not only too bright, it buzzes and hums. The room seems to pulsate and it hurts my eyes. The pulsating light bounces off everything and distorts what I am seeing - the space seems to be constantly changing. There's glare from windows, too many items for me to be able to focus (I may compensate with "tunnel vision"), moving fans on the ceiling, so many bodies in constant motion. All this affects my vestibular and proprioceptive senses, and now I can't even tell where my body is in space.

3. Please remember to distinguish between won't (I choose not to) and can't (I am not able to).

Receptive and expressive language and vocabulary can be major challenges for me. It isn't that I don't listen to instructions. It's that I can't understand you. When you call to me from across the room, this is what I hear: "*&!%\$#@, Billy. Instead, come speak directly to me in plain words: "Please put your book in your desk, Billy. It's time to go to lunch." This tells me what you want me to do and what is going to happen next. Now it is much easier for me to comply.

4. I am a concrete thinker. This means I interpret language very literally.

It's very confusing for me when you say, "Hold your horses, cowboy!" when what you really mean is "Please stop running." Don't tell me something is a "piece of cake" when there is no dessert in sight and what you really mean is "this will be easy for you to do." When you say "Jamie really burned up the track." I see a kid playing with matches. Please just tell me "Jamie ran very fast." Idioms, puns, nuances, double entendres, inference, metaphors, allusions and sarcasm are lost on me.

5. Please be patient with my limited vocabulary. It's hard for me to tell you what I need when I don't know the words to describe my feelings. I may be hungry, frustrated, frightened or confused but right now those words are beyond my ability to express. Be alert for body language, withdrawal, agitation or other signs that something is wrong.

Or, there's a flip side to this: I may sound like a "little professor" or movie star, rattling off words or whole scripts well beyond my developmental age. These are messages I have memorized from the world around me to compensate for my language deficits because I know I am expected to respond when spoken to. They may come from books, TV, the speech of others. It is called echolalia.

I don't necessarily understand the context or the terminology I'm using; I just know that it gets me off the hook for coming up with a reply.

6. Because language is so difficult for me, I am very visually oriented.

Please show me how to do something rather than just telling me. And please be prepared to show me many times. Lots of consistent repetition helps me learn.

A visual schedule is extremely helpful as I move through my day. Like your day-timer, it relieves me of the stress of having to remember what comes next, makes for smooth transition between activities, helps me manage my time and meet your expectations.

I won't lose the need for a schedule as I get older, but my "level of representation" may change. Before I can read, I need a visual schedule with photographs or simple drawings. As I get older, a combination of words and pictures may work, and later still, just words.

7. Please focus and build on what I can do rather than what I can't do.

Like any other human, I can't learn in an environment where I'm constantly made to feel that I'm not good enough and that I need "fixing." Trying anything new when I am almost sure to be met with criticism, however "constructive," becomes something to be avoided. Look for my strengths and you will find them. There is more than one right way to do most things.

8. Please help me with social interactions. It may look like I don't want to play with the other kids on the playground, but sometimes it's just that I simply do not know how to start a conversation or enter a play situation. If you can encourage other children to invite me to join them at kickball or shooting baskets, it may be that I'm delighted to be included.

I do best in structured play activities that have a clear beginning and end. I don't know how to read facial expressions, body language or the emotions of others, so I appreciate ongoing coaching in proper social responses. For example, if I laugh when Emily falls off the slide, it's not that I think it's funny. It's that I don't know the proper response. Teach me to say "Are you OK?"

9. Try to identify what triggers my meltdowns. Meltdowns, blow-ups, tantrums or whatever you want to call them are even more horrid for me than they are for you. They occur because one or more of my senses has gone into overload. If you can figure out why my meltdowns occur, they can be prevented. Keep logs noting times, settings, people, and activities. A pattern may emerge. Try to remember that all behavior is a form of communication. It tells you, when my words cannot, how I perceive something that is happening in my environment.

Parents; keep in mind as well: persistent behavior may have an underlying medical cause. Food allergies and sensitivities; sleep disorders and gastrointestinal problems can all have profound effects on behavior.

10. Love me unconditionally. Banish thoughts like, "If he would just ..." and "Why can't she ..." You did not fulfill every last expectation your parents had for you and you wouldn't like being constantly reminded of it. I did not choose

to have autism. But remember that it is happening to me, not you. Without your support, my chances of successful, self-reliant adulthood are slim. With your support and guidance, the possibilities are broader than you might think. I promise you - I am worth it.

And finally, three words: Patience. Patience. Patience. Work to view my autism as a different ability rather than a disability. Look past what you may see as limitations and see the gifts autism has given me. It may be true that I'm not good at eye contact or conversation, but have you noticed that I don't lie, cheat at games, tattle on my classmates or pass judgment on other people? Also true that I probably won't be the next Michael Jordan. But with my attention to fine detail and capacity for extraordinary focus, I might be the next Einstein. Or Mozart. Or Van Gogh.

They may have had autism too. The answer to Alzheimer's, the enigma of extraterrestrial life - what future achievements from today's children with autism, children like me, lie ahead? All that I might become won't happen without you as my foundation. Be my advocate, be my friend, and we'll see just how far I can go.

Choose 2-3 'wish areas' and write your personal thoughts on them. 2 pages.

WHAT IS AUTISM?

The Diagnostic and Statistical Manual for Mental Disorders (DSM) has over 70 disorders listed, one of which is Autism Spectrum Disorder. The current diagnostic manual (implemented in March, 2022) no longer has separate categories for Autism. However, those with a diagnosis from previous DSM manuals are still recognized (i.e. Asperger's) by the medical profession and insurance companies. In this course, we will address some previous diagnoses for the purpose of discussing successful interventions and strategies.

Autism is a very confusing diagnostic label. Since the causes are still unknown, we often define Autism around a specific set of behavioral, communication, and social actions.

Autism Spectrum Disorder 299.00 (F84.0) (From DSM-V)

Diagnostic Criteria

A. Persistent deficits in social communication and social interaction across multiple contexts, as manifested by the following, currently or by history (examples are illustrative, not exhaustive, see text):

1. Deficits in social-emotional reciprocity, ranging, for example, from abnormal social approach and failure of normal back-and-forth conversation; to reduced sharing of interests, emotions, or affect; to failure to initiate or respond to social interactions.
2. Deficits in nonverbal communicative behaviors used for social interaction, ranging, for example, from poorly integrated verbal and nonverbal communication; to abnormalities in eye contact and body language or deficits in understanding and use of gestures; to a total lack of facial expressions and nonverbal communication.
3. Deficits in developing, maintaining, and understanding relationships, ranging, for example, from difficulties adjusting behavior to suit various social contexts; to difficulties in sharing imaginative play or in making friends; to absence of interest in peers.

It is a brain disorder that affects a person's ability to communicate, form relationships with others, and respond appropriately to the external world. People with autism often exhibit repetitive behaviors and show narrow, obsessive interests.

Autism is a disorder of development of brain function. It impacts people of all races and cultures. It is found everywhere in the world with males being more impacted than females (5 times more likely). It is estimated that 1 in 44 children in the U.S. are diagnosed with ASD. Girls tend to have more severe symptoms and greater cognitive impairment.

ASD is reported to occur in all racial, ethnic, and socio-economic groups. Studies in Asia, Europe, and North America have found a prevalence of about 1%. A study in South Korea found the prevalence as high as 2.6%.

The disability is often clear before the age of three or four and is lifelong in impact upon the person. Through careful training and therapy, there may be tremendous progress and improvement.

There is no “medical test” for autism. A variety of specific behavioral evaluations are used to identify characteristics. These should only be administered by a specially trained physician, psychologist, or other skilled professional. Some of these evaluations include the M-CHAT (modified checklist of autism for toddlers), Child Development Inventory, PEDS (parent evaluation of developmental status), Social-emotional growth chart, ASSQ (autism spectrum screening questionnaire), SCQ (social communication questionnaire). Genetic testing may occur as well as screening for related medical issues (seizures, anxiety, sleep)

COMPOUNDING CONCERNS

- ∇ Mental Retardation- 40% to 70% with autism diagnosed with retardation. Wide range due to difficulty in assessing cognitive levels.
- ∇ Anxiety and Depression- more common among higher functioning individuals. Studies have found close to 50% with Asperger’s suffer from anxiety or depression.
- ∇ Gastrointestinal Problems- children with autism are 40% to 50% more likely to have stomach or bowel issues than other children.
- ∇ Epilepsy- about 20% to 30% develop epilepsy before adulthood.
- ∇ ADHD- over 30% of children with ASD also have ADHD.
- ∇ Obsessive-Compulsive Disorder- about 30% of ASD children also have OCD.
- ∇ Sleep Disorder- between 40% to 60% also have sleep issues.

Prevalence of Autism

It is estimated that 1 in 44 children in the U.S. are diagnosed with ASD. Roughly translated, this means as many as 3 million Americans today are believed to have some form of autism. And this number appears to be on the rise. Based on statistics from the U.S. Department of Education and other governmental agencies, autism is growing at a startling rate of 10-17 percent per year. At this rate, the prevalence of autism could reach 4 million Americans in the next decade. It is estimated that 5 to 7 children per thousand will have autism.

Autism knows no racial, ethnic, social boundaries, family income, lifestyle, or educational levels and can affect any family, and any child. It is found everywhere in the world with males being more impacted than females (4:1 with classic Autism; 9:1 with Asperger's). Girls tend to have more severe symptoms and greater cognitive impairment.

DIAGNOSIS AND CONSULTATION

There are no medical tests for diagnosing autism. An accurate diagnosis must be based on observation of the individual's communication, behavior, and developmental levels. However, because many of the behaviors associated with autism are shared by other disorders, various medical tests may be ordered to rule out or identify other possible causes of the symptoms being exhibited. At first glance, some persons with autism may appear to have mental retardation, a behavior disorder, problems with hearing, or even odd and eccentric behavior. To complicate

matters further, these conditions can co-occur with autism. However, it is important to distinguish autism from other conditions, since an accurate diagnosis and early identification can provide the basis for building an appropriate and effective educational and treatment program.

A brief observation in a single setting cannot present a true picture of an individual's abilities and behaviors. Parental (and other caregivers' and/or teachers) input and developmental history are very important components of making an accurate diagnosis.

Early Diagnosis

Research indicates that early diagnosis is associated with dramatically better outcomes for individuals with autism. The earlier a child is diagnosed, the earlier the child can begin benefiting from one of the many specialized intervention approaches treatment and education. The characteristic behaviors of autism spectrum disorder may or may not be apparent in infancy (18 to 24 months), but usually become obvious during early childhood (24 months to 6 years).

As part of a well-baby/well-child visit, a child's doctor should do a "developmental screening" asking specific questions about the baby's progress. The National Institute of Child Health and Human Development (NICHD) lists five specific and initial behaviors that signal further evaluation is warranted:

- Does not babble or coo by 12 months
- Does not gesture (point, wave, grasp) by 12 months
- Does not say single words by 16 months
- Does not say two-word phrases on his or her own by 24 months
- Has any loss of any language or social skill at any age

Having any of these five "red flags" does not mean your child has autism. But because the characteristics of the disorder vary so much, a child showing these behaviors should have further evaluations by a multidisciplinary team. This team should include a neurologist, developmental pediatrician, speech/language therapist, learning consultant, or other professionals knowledgeable about autism.

There is no known single cause for autism, but it is generally accepted that it is caused by abnormalities in brain structure or function. Brain scans show differences in the shape and structure of the brain in autistic versus non-autistic children. Researchers are investigating a number of theories, including the link between heredity, genetics and medical problems. In many families, there appears to be a pattern of autism or related disabilities, further supporting a genetic basis to the disorder. While no one gene has been identified as causing autism, researchers are searching for irregular segments of genetic code that autistic children may have inherited. It also appears that some children are born with a susceptibility to autism, but researchers have not yet identified a single "trigger" that causes autism to develop.

Other researchers are investigating the possibility that under certain conditions, a cluster of unstable genes may interfere with brain development resulting in autism. Still other researchers are investigating problems during pregnancy or delivery as well as environmental factors such as viral infections, metabolic imbalances, and exposure to environmental chemicals.

Autism tends to occur more frequently than expected among individuals who have certain medical conditions, including Fragile X syndrome, tuberous sclerosis, congenital rubella syndrome, and untreated phenylketonuria (PKU). Some harmful substances ingested during pregnancy also have been associated with an increased risk of autism. Early in 2002, The Agency for Toxic Substances and Disease Registry (ATSDR) prepared a literature review of hazardous chemical exposures and autism and found no compelling evidence for an association; however, there was very limited research and more needs to be done.

Whatever the cause, it is clear that children with autism are born with the disorder or born with the potential to develop it. It is not caused by bad parenting. Autism is not a mental illness. Children with autism are not unruly kids who choose not to behave. Furthermore, no known psychological factors in the development of the child have been shown to cause autism.

Two-thirds of those with classic autism are severely to mildly handicapped in intellect. Most people with Asperger's Syndrome have average to above average intelligence. Around 10% of those with autism have some type of distinct ability (above their typical performance levels). This may be in art, music, memory, etc. They are referred to as autistic savants. A child may appear closed off or rigid in thinking. An infant may avoid eye contact, seem deaf, unaware of surroundings, become suddenly aggressive, or become fixated on single activities.

Write out two areas of new learning that took place in this section (for your own knowledge):

General Autism Characteristics

- Problems with non-verbal communication
- Lack of eye contact
- Lack of facial expression development
- No interest in peer to peer activity or sharing
- Difficulty making friends
- Lack of empathy for others
- Delay in speech development or inability to talk
- Echoes phrases continually
- Repetitive behavior
- Tendency to be too literal
- Fixation on particular activities or objects
- Craves routine
- Gets upset at the unexpected with frequent tantrums for minor issues
- Repetitive body movements
- Extremely impulsive
- Sensitivity to light and sound

Understanding Asperger's Syndrome

A neurobiological disorder (named after Hans Asperger). Though first mentioned in 1944, it wasn't until 1994 that it was added to the Diagnostic and Statistical Manual (DSM-IV) and only in recent years that it has been recognized as part of an Autism spectrum disorder. It has characteristics of PDD-NOS. Some children originally diagnosed with ADD/ ADHD are now being re-diagnosed with Asperger's syndrome.

Though this is no longer a part of the DSM V-TR (DSM-5 text revised), many individuals have this current recognized diagnosis. As educators, we should worry less about diagnosis and more about the characteristics and interventions.

Like children with autism, children with Asperger's syndrome have difficulty in social interaction and communication, and have a narrow range of interests. However, children with Asperger's have average or above average intelligence, and develop normally in the areas of language and cognition (the mental processes related to thinking and learning). However, they often have a difficult time concentrating and may have poor coordination.

Asperger's syndrome symptoms may include:

- Engaging in one-sided, long winded conversations, without noticing if the listener is listening or trying to change the subject
- Displaying unusual nonverbal communication, such as lack of eye contact, few facial expressions, or awkward body postures and gestures
- Showing an intense obsession with one or two specific, narrow subjects, such as baseball statistics, cars, animals, weather, etc.
- Appearing not to understand, empathize with or be sensitive to another's feelings
- Having a hard time "reading" other people or understanding humor
- Speaking in a voice that is monotonous, rigid, or unusually fast
- Moving clumsily, with poor coordination
- Strong verbal skills but unable to relate to feelings, humor, or experiences
- Difficulty in developing relationships and successful social interactions
- May be bothered by loud noises, lights, or specific textures
- Difficulty processing incoming information
- Better visual processing skills than auditory skills (misunderstands discussions, directions, and verbal input)
- May appear quiet, withdrawn, unresponsive
- Difficulties with social rules
- May have fine sense of humor but shows inappropriate laughter or joking
- Do not read social cues and nonverbal cues effectively
- Difficulties identifying varying emotional states

- Wide range of emotional swings in given situations
- Highly articulate
- Can generally engage in routine discussions and interactions
- Impairment of social imagination, flexible thinking, and imaginative play
- Absence of cognitive and language delay

The *DSM-IV-TR* specified the following diagnostic criteria for Asperger's Syndrome:

- The child's social interactions are impaired in at least two of the following ways: markedly limited use of nonverbal communication (facial expressions, for example); lack of age-appropriate peer relationships; failure to share enjoyment, interests, or accomplishment with others; lack of reciprocity (turn-taking) in social interactions.
- The child's behavior, interests, and activities are characterized by repetitive or rigid patterns, such as an abnormal preoccupation with one or two topics, or with parts of objects; repetitive physical movements; or rigid insistence on certain routines and rituals.
- The patient's social, occupational, or educational functioning is significantly impaired.
- The child has normal age-appropriate language skills.
- The child has normal age-appropriate cognitive skills, self-help abilities, and curiosity about the environment.
- The child does not meet criteria for another specific PDD or schizophrenia.

To establish the diagnosis, the child psychiatrist or psychologist would observe the child, and would interview parents, possibly teachers, and the affected child (depending on the child's age), and would gather a comprehensive medical and social history.

Autism vs. Asperger's: Onset is usually later for Asperger's and prognosis more positive. Social and communication deficits are less severe. Contrary to autism, the verbal IQ is higher than performance IQ. Neurological disorders are less common and the family history is frequently more positive.

MYTHS ABOUT AUTISM

In this section, I will present common myths or claims about autism that have little research support. While someone may have found success or concerns about a particular area, without effective studies and research to show a generalized basis for belief, it will not pass the "myth test." I encourage each one of you to do your own research in these areas.

1. Autism is caused by "cold mothering." This idea was presented by Bruno Bettelheim in the early 1950's. The phrase "refrigerator mother" was coined from his experiences during WWII in a concentration camp. He felt that a lack of warmth and caring interactions created autistic-like tendencies. His belief system was not research based, but experience based. He opened up a counseling practice and worked with families. He stated that parents of children with special needs were cold and detached in his office. Though he led many to believe he was a psychiatrist, his background was actually in the construction business.

It is this type of idea and opinion that has created many other fads, crazes, and "the latest and greatest approach" for autism. We must be careful when we hear about a solution, quick fix, or answer to complicated issues. Especially, when the cost of such answers are often great (financially, emotionally, or health wise).

2. Autism is caused by vaccines. Over 20 independent studies in over 10 countries have found no connection between vaccines and autism. This idea arose from false claims by a London gastrointestinal doctor about a hypothesized link between vaccines and autism. I have put the Associated Press article (1/11) about this issue in the pages following this section. However, once again, we have many families that refused to vaccinate their children thus opening up the door to possible illnesses and disease that could be avoided by vaccines. I have concern regarding people raising a flag of "the cause of autism" without proper research and support.

3. There is an autism epidemic. This is a tough one. It appears that the number of children being given a diagnosis of autism is much higher every year. Doesn't this mean there must be something in the water, the paint, the medicine, our diet, or something that is causing this? It now appears that autism has always been much more common than was recognized before modern diagnostic procedures were developed in the 1990's. Part of the issue is the way people are qualified for services from state to state, school to school, or even region to region. It also has been influenced by the number of qualified psychologist and medical personnel who conduct the diagnosis. For example, within Los Angeles, autism is 250% more common in affluent Santa Monica than in adjacent Compton, a largely economically distressed inner city community. Evaluations are much more available in Santa Monica.

On the other hand, in my experience, autism is on the rise and researchers are examining a variety of causes including genetics, problems during pregnancy or birth, drug/alcohol issues, and general prenatal care.

In addition to these factors, autism is very different today than years ago. When I first began working with autism (in the early 1980's-I was only six at the time 😊 -anyway, I was a state trainer in autism. We primarily worked with children and adults that fell within the classical autism range. Asperger's was not on the radar for autism. So, our "spectrum" is much wider and therefore we have a lot more autism. This is not to say that there may be an increase in characteristics of autism due to various factors. We do need to continue the research and study in the area.

4. There is no effective treatment for autism. Many published studies support that early intervention is always a key for learning. Children that have exposure to Applied Behavioral Analysis strategies on a consistent basis show much greater growth in behavior, social skills, and cognitive development as oppose to children without or minimal exposure. One set of studies (25 independent ones) within a peer reviewed journal found that children exposed to intensive behavioral therapy (or an ABA format) for 25 to 30 hours per week over a 2 to 4 year period functioned at age level or within a couple of years after this period of time.

While I am not ready to jump on the "teach the child for 4 hrs. per day for 4 years and he/she will be healed" bandwagon, it is clear that consistent effective approaches improve skills. These may be presented throughout a school day or in the home. When you add up the hours, it may be 2 to 3 hours (or more) that the child was presented solid intervention approaches. We must work together and be as consistent as possible.

5. Children with autism need a combination of various therapies to prosper developmentally. There is no evidence that children who receive numerous therapies, such as a combination of ABA, Sensory Integration, Feeding Therapy, Floortime, Physical/Occupational Therapy, Speech Therapy, Early Childhood Education, Relationship Development Intervention, make greater gains than children who receive more focused therapy (such as only ABA and Speech). There is some evidence that suggests that families over-involved in therapy sessions have less energy to devote the family functioning. Naturally, a child may need multiple therapeutic approaches in his/her life including physical, speech, and behavior therapy. However, it is common to think that "more is better" and in the case of autism, this may not be true.

6. Removal of heavy metals from a child's blood reduces their autism

symptoms. There is no credible evidence from studies that support this notion. However, as a precaution, many pediatricians often test for lead in the bloodstream of young children with autism who put toys and things in their mouths ... typically finding no elevated levels.

7. Physicians don't support or believe in alternative biomedical autism

treatments. It is not an issue of "belief" but more a matter of being ethically bound to recommend only treatments that have undergone clinical testing and trials. Without controlled studies, physicians (i.e. MD's) are not able to stand behind certain treatments (even if someone knows a person who has found it successful). Some physicians may recommend over the counter supplements such as melatonin for sleep or a fiber supplement for constipation. But without proper research and support, a physician puts him/herself in a legal and ethical bind if recommending certain techniques (i.e. megavitamin supplements, special diets, chelation, to name a few).

8. Special diet programs. A "popular" diet has been the gluten (found in wheat products) and casein (found in milk protein) free diets for autism. While I have worked with families that say they have noticed a behavior change in their child, the research has clearly discounted any generalized impact upon the autism population. In other words, while a few children may find some positive impact, the vast majority of children will not. It is an expensive, time consuming, and often frustrating (for the child) diet that can actually increase behavior problems, food aggression, and oppositional behaviors. For those children who do benefit, it is often due to a stomach or bowel concern that is affected by the diet change. (This will be discussed more in the co-morbidity section).

9. Within each child with autism is an entirely typical child waiting to emerge.

This would be wonderful and exciting, but has no basis in fact. This is an old concept made popular by certain fictional movies in the 50's and 60's. In reality, autism is a neurodevelopmental disability in which some parts of the child's brain do not function typically. While many children with autism may learn to function closer to typically developing peers, there will be some residual symptoms for life.

January, 2011 Associated Press

LONDON - The first study to link a childhood vaccine to autism was based on doctored information about the children involved, according to a new report on the widely discredited research.

The conclusions of the 1998 paper by Andrew Wakefield and colleagues were renounced by 10 of its 13 authors and later retracted by the medical journal Lancet, where it was published. Still, the suggestion the MMR shot was connected to autism spooked parents worldwide and immunization rates for measles, mumps and rubella have never fully recovered. A new examination found, by comparing the reported diagnoses in the paper to hospital records, that Wakefield and colleagues altered facts about patients in their study.

The analysis, by British journalist Brian Deer, found that despite the claim in Wakefield's paper that the 12 children studied were normal until they had the MMR shot, five had previously documented developmental problems. Deer also found that all the cases were somehow misrepresented when he compared data from medical records and the children's parents.

Called 'an elaborate fraud'

Wakefield could not be reached for comment despite repeated calls and requests to the publisher of his recent book, which claims there is a connection between vaccines and autism that has been ignored by the medical establishment. Wakefield now lives in the U.S. where he enjoys a vocal following including celebrity supporters like Jenny McCarthy. Deer's article was paid for by the Sunday Times of London and Britain's Channel 4 television network. It was published online Thursday in the medical journal, BMJ.

In an accompanying editorial, BMJ editor Fiona Godlee and colleagues called Wakefield's study "an elaborate fraud." They said Wakefield's work in other journals should be examined to see if it should be retracted.

Last May, Wakefield was stripped of his right to practice medicine in Britain. Many other published studies have shown no connection between the MMR vaccination and autism. But measles has surged since Wakefield's paper was published and there are sporadic outbreaks in Europe and the U.S. In 2008, measles was deemed endemic in England and Wales.

**INTERVENTION
IDEAS FOR
WORKING WITH
SPECIAL NEEDS
CHILDREN**

Intervention Approaches, Part I (assignment at end)

1. Training for staff- help staff to understand the aspects of disabilities and how to interpret responses and behaviors. Recognizing characteristics and intervention approaches is a key to change. Education in these areas should be done throughout the entire building. Too often, we see this as a "special education" issue and the majority of the educators (teachers, para-professionals, classified staff, bus drivers, etc.) in the building do not have a clear understanding of autism and various disorders. Use of handouts (such as the ones within this manual), web sites, articles, and parent input can be especially informational to people.

2. Pre-teaching or priming- carefully prepare the student for upcoming events. Using a systematic step-by-step explanation is also effective. Explain the event prior to it occurring. Walk the child through the situation in his/her mind incorporating potential problems and difficulties. This may be done through role play and practice (see next approach). Using an entire class to go over situations will help put it within the actual context. The more prepared the child is for the event, the less anxiety he/she will feel from the experience. For example, practice lining up, walking down the hallway, and going to the lunchroom. You may want to practice eating in the lunchroom before it occurs. Children with autism are ritual and routine oriented. If you can develop a new ritual for them that is successful, they will more than likely follow it effectively.

3. Practice- this can be role play, but also much more. Have the child show you how it can be done. Do cooperative approaches in order to model success. This allows the child to actually participate in the future event on a success level. This may include walking to other classrooms, being successful opening lockers, going to the office, etc. It is said that it takes up to 21 days to develop a new habit. Are you practicing enough with your children? Has it become a habit for them? Children with autism have certain patterns of doing things often called "scripts." It is their way of dealing with the day to day. We also see an obsessive component to these scripts and behaviors. New behavior patterns may take some time before the child begins to implement them regularly and effectively.

4. Peer partners/buddies- allow other students to work with the child. It may be useful to share strategies with certain students in order to help them be effective. Utilizing other students is an excellent way to model appropriate skills. "Peer models" may need some guidance when working with other children. This may be

done in short, compartmentalized time frames. For example, a student may help another to read a book, color a picture, get materials ready, etc.

5. Cross-age tutors/support- this may be very effective in all school settings where there is a population of students older than the child of focus. For example, we may use a 5th grade student to assist a 2nd grade student or an 11th grader in high school to assist an 8th grader or 9th grader. The goal is to have an older student work with a designated student in areas of academic support or social skills. Often, children will respond to other students, especially those older than themselves. When I taught 6th grade, my class went twice a week to the Kindergarten classroom (10 to 15 minute blocks). My students did activities with the younger students including art, math, social skills, going out to recess and having them practice appropriate interactions, etc. This was positive for all students. I also had designated students go to the Learning Center (special education resource room) or a classroom and work with certain children. My students wanted to do this and were not forced to participate (even with the Kindergarten classroom). However, I had very few over the years who opted out.

6. Use of cue cards- use of pictures along with words will help the child to make a connection to the expected behavior or situation. Use as many different modes of communication as possible. Cards are paired with verbal speech. This may be done by taking pictures of events or actions of the child. Then, show the child the expected results when asking them to do something. An example might be having the child clear off the desk. Show a picture of the child with a clean desk and say, "Tom, clear off your desk so it looks like the picture." You may also obtain pictures on-line that will assist you. One resource is www.usevisualstrategies.com. Another way to use picture cards is in a sequence of pictures as a communication card. If helping the child to learn to wash his/her hands, put a picture of the child turning on the water on a strip of paper. Next to that picture, put a picture of the child washing hands with soap, then a picture of turning off water, then a picture of drying the hands. This is just an example as you may want to break down a task differently or with more/less steps. The child can learn to follow one step at a time and sequence the task.

7. Use of calendars or charts- this will help the child to see what is expected, the time frames, and will aid in emotional/mental preparation. This visual strategy gives a semblance of routines to the child. They know what to expect and when it will occur. As mentioned above in the area of "pre-teaching", this format may be used to assist the child in knowing what is expected. I encourage each child to have a calendar at their home that is just their calendar. Depending on their level

of cognitive understanding, items such as birthdays, holidays, weekend activities, non-school days, etc. may be written on it (or a picture used instead of writing). I have found this very helpful to assist the child to know when there is a school holiday or when the child may be visiting a relative or a care provider is coming that day. The more we use supplemental communication with children showing characteristics of autism, the more successful they will be in life. For further resources for charts, go to www.latitudes.org and look under behavior charts.

8. Small, incremental opportunities for success-let them be successful in short time frames and then stop. Five minutes of recess success may be all they get for the day. Increase it as they show consistency. Less is better. Allow for success in short increments and build up from there. However, have a plan for increasing time and avoid getting locked into short blocks of success. It is okay to treat children differently, based on their needs. While one person may be able to sit and work for 15 minute blocks of time, another may be able to only sit for 5 minutes. Help the child with a shorter attention span build up and become more successful. Use of periodic reinforcement and rewards will be more positive than punitive approaches and loss of privileges.

9. Show videos and pictures of expected behaviors- point out the behavior you are looking for when seeing other people achieve it. Using another media source may allow the child to see what is expected from him/her. The more the child sees the expected behavior, the more the likelihood that their internal script will change. Use of picture books and stories are another way to assist the child in their understanding.

Choose one of the areas discussed above and implement it in the classroom, at home, or in another setting. If possible, focus on a child with special needs.

Write a **1-2 page summary** of your implementation and perspective of the intervention.

Increasing Successful Interactions With Others

The following are ideas and skills that should be taught in an effort to assist children in effective interactions with others. Naturally, these ideas may be used with all children, not just those showing characteristics of autism.

1. How to start, maintain, and end play times

This skill will help social interactions and prevent children from interrupting games, walking away inappropriately, and forcing themselves into a play situation. Teaching the child how to ask to be involved as well as how to say, "I'm done" is critical for social success.

2. Flexibility, cooperation, and sharing

Children need to understand what sharing means and how to allow others to be a part of their world. Flexibility is difficult for children with autism as they want routines. The best way to help the child is by practicing different routines. While they may crave patterns, consistency, and routines, the world does not operate that way. The more experience they get at being flexible the better.

3. How to appropriately avoid social play

What if a person doesn't want to play? Is that okay? Give the child the skills to say "no" without becoming aggressive, angry, or rude. Practice saying "no" or saying, "no thanks." Again, unless they get to practice these skills, their chances of them using them are slim. For those that are nonverbal, the use of a picture or cue card may be of assistance.

4. Explain errors in social interaction

Be sure to give replacement skills. If a child is told to not do something, what should they do instead? Clearly explain what went wrong and how it can be corrected. Role play is a good way for the child to gain skills. Using other children will replicate a real life situation better than the adult always being involved. Also, ask the child what they could do differently and how they would handle a situation.

5. Use of other children to teach social cues

Observing other students, having peer models, and support buddies can help success. Have a child go out to recess and observe how others play. This may be a positive role model or negative one. Either way, the child can see real life situations. Use of books or movies can also teach these skills. It is often easier to learn when watching others than yourself.

6. Teach cooperative games

What types of games teach cooperation, working together, turn taking, and social interactions? Card games are a great way to learn sharing, turn taking, etc. Recess is always a difficult time to teach skills as it is hectic and over-stimulating. Teach these skills in a more controlled setting before going out to recess and attempting to learn the skills.

7. Increase supervision

When working on social skills, children need additional supervision to increase the chance of success. This means an extra set of eyes may be necessary when the child attempts to implement the new skill. Ongoing feedback and guidance is helpful.

8. Allow the child to teach the adult

Many children enjoy getting a chance to show or teach the adult. Role-reversal is a great way for the child to learn new strategies. It doesn't have to be with you. Let the child choose who they want to teach ... it might be another adult or even a child.

Intervention Approaches, Part II

The following strategies are used regularly when working with special needs individuals, especially those showing characteristics of autism. Please excuse the basic and limited explanations that I give in each section. My goal is to educate you to the basics of each area and then you can do further studying on your own. I have given you additional resources under each category to help you research more about each topic.

1. PECS (picture exchange communication system)- use of pictures for supporting communication is critical. PECS (Bondy and Frost) allow a child to choose a picture and "exchange it" for the activity it represents. This term "PECS" is often used interchangeably with terms like picture cards or cue cards. However, the PECS concept is specific to a process and is a special format toward learning. While picture based communication is easy to learn and supplies readily available, the actual PECS process is a trademarked program. The adult goes through a training program to learn the specific process. It is a form of augmentative and alternative communication for people. When first learning the use of PECS, the child is given a set of pictures of his/her favorite food or toys. When the child wants one of these, he/she takes the picture of the object and gives it to the adult. This person then "exchanges" the picture for the actual item. The food or toy is the reinforcement for the child. There are six phases to the PECS process. Schools, group homes, agencies, and families have found positive results from the PECS program.

2. Social Stories (Carol Gray)- utilizes stories about the child as a way to integrate him/her into the social situations. Gray has specific guidelines and strategies that she believes increase the likelihood of success. Social stories are used to teach social skills to children with autism. A social story is a simple description of an everyday social situation, written from the child's perspective. They can help a child prepare for an upcoming routine change, learn appropriate social interactions, or to reduce anxiety in specific situations. Each social story uses several types of sentences: Descriptive, Directive, Perspective, Control, Affirmative, and Cooperative. It is written in the first person, in the present tense, and from the child's

viewpoint. It is not a lecture format or meant to tell the child what to do or not do. Research has found that social stories may reduce behavior issues, increase social awareness, and teach new skills. Books may be purchased for a reasonable amount that allows one to learn the process quickly. For further information on Social Stories, go to www.carolgraysocialstories.com

3. Applied Behavior Analysis (ABA)- a variety of behavioral approaches are combined to help teach the child effective responses to his/her environment. Applied Behavior Analysis teaches social, motor, and verbal behaviors as well as reasoning skills through a variety of methods. Through behavioral observations and reinforcement procedures, children with autism may be taught many new skills. Undesirable behaviors, or those that interfere with learning, are watched closely. The goal is to reduce unwanted behaviors and skills and replace them with more appropriate actions. Many established teaching tools are used to assist the parent, counselor, staff member, or behavior specialist. The key to success is often finding appropriate and desired reinforcements for the child. Below are several strategies used within ABA. As you will see, they are often used in conjunction with one another:

a) Chaining-task analyzing specific events and teaching them one step at a time. This may be done from the beginning to end or from the end to the beginning. This strategy is critical when teaching new skills, especially those that have many steps to them. For example, washing your hands includes turning on water, getting hands wet, putting soap on hands, rubbing hands together, washing off the soap, turning off the water, and drying your hands. The chaining process may teach only one of the steps at a time, then "chain" them together for success.

b) Shaping-helping the child to gain close approximation in their behavior. The goal is to get them closer and closer to the desired behavior by reinforcing successful attempts. For example, if you want a child to play with a toy, we may begin with shaping behavior toward the toy: look at the toy, move toward the toy, touch the toy, pick up the toy, hold the toy, then play with the toy. Each step may take time to achieve (minutes, hours, days...) depending on the behavior being taught. Reinforcement is used at each level to encourage successful completion of the directions. In addition, the use of a "prompt" may be used to assist the learner. This might be verbal, nonverbal, or physical assistance.

c) Differential Reinforcement Programs- a strategy used that delivers reinforcement after a specific target behavior is exhibited. (There are many different types of DR programs, but DRO (differential reinforcement of other behaviors) is most commonly used. The intent is to decrease problematic behaviors by reinforcing other behaviors, especially appropriate ones. Target behaviors are identified, reinforcements are selected, and a schedule for delivery of rewards is developed. Other types of differential reinforcement programs are DRL (differential reinforcement of lower rates of behavior). For example, a student is out of his seat 20 times in a day. We reinforce the child for only being out of seat 15 times, then 10 times, etc. We "shape" the behavior through the reinforcement. The opposite of DRL is DRH (higher rates of behavior). A child that we are encouraging to raise the hand will be reinforced when she raises it 2 times in an hour, then three time, etc.

d) Discrete Trial Format-this involves breaking down skills into smaller components and teaching those small sub-skills individually. Repeated practice of skills is conducted and physical/ verbal prompts may be integrated into the teaching aspects. It is a single cycle of instructions that may be repeated several time until a skill is mastered. Correct responses are followed by reinforcement procedures. There are five main parts of each trial. Here is an example using the skill of "touching your nose."

1. An initial instruction - "Touch your nose."
2. A prompt or cue- Teacher touches his/her nose to show student.
3. A response given by child - Child touches nose.
4. An appropriate consequence-receiving of a reward "nice job of touching nose" or giving of a sticker.
5. A pause between trials - wait 2-5 seconds before starting next trial... "touch your nose."

e) Fading-this is a key aspect when utilizing any type of teaching approach that involves reinforcement, prompting, or giving cues. How will you fade out the reward? This process should be done gradually and discussed prior to implementing any plan. One concept of fading involves changing the prompt or reinforcement to a less powerful one. Continue to pull back and use less of a cue or reinforcement. For example, instead of reinforcing every 30 minutes, it becomes 45 minutes, 60 minutes, etc. Or, instead of using a full "hand over hand" prompt, changing it to a light touch on the hand, or a guide on the elbow. The important part it to "fade"

out the involvement of other components so the child may be successful on his / her own.

There are many other areas of ABA, but these are a few of the basic ones that are used. I have included books on the bibliography that will give you more information about each of these areas and more.

4. Re-Direction- a strategy to help the child move from one activity to the next with minimal disruption. It is not an attempt to distract the child, but to help with a smooth transition. Further explanation is found on the next worksheet page in this manual titled "Effective Use Of Re-Direction."

5. Schedules- written plan for the child of what to expect over the coming moments, hours, or days. Helps to organize the routine for each child. One way of doing this is to have a picture of the activity that the child can see. For example, when they come home from school, a parent might show them a picture of: the back pack hung up, then a picture of a snack, then a picture of a television. The child knows the sequence of activities. As opposed to PECS, there is no intent to take the picture and exchange it for anything. These are simply visual cues for the child. It may also be used to teach a skill. This would be similar to the "cue card" concept.

For further information on schedules, go to www.centerforautism.com

6. Floortime- is an approach to play that focuses on personal interaction rather than behavior. The system was developed by Dr. Stanley Greenspan, who focuses on making play activities rewarding experiences for children with autism. Greenspan's Floortime is a process that helps children with autism and related pervasive developmental disorders interact with others while engaging in their favorite activities. It starts with observing a toy, parallel playing, using words to describe, then joining together for play. Greenspan discussed developmental needs, milestones, and strategies that incorporate play into these learning stages. It does require a significant time commitment-one that many families are unable to make.

7. Relationship Development Intervention-Like other therapies described within this manual, RDI is a system of behavior modification through positive reinforcement. RDI was developed by Dr. Steven Gutstein as a parent-based treatment using dynamic intelligence. The goal of RDI is to improve the individual's quality of life by helping them improve their social skills, adaptability and self-awareness. It helps to lay missing pathways to the brain. Dr Gutstein discusses six deficits that all people with autism have and strategies to shore up those deficits.

8. Pivotal Response Therapy (or Training)-Pivotal response treatment seeks to improve developmental areas such as a child's motivation, how they respond to specific cues, their ability to manage themselves and their behavior choices, as well as initiating social contacts and connections. Drs. Lynn and Robert Koegel believed that focusing on improving developmental deficits in these areas, rather than targeting specific behaviors, would result in greater overall improvements, including eliminating problematic behaviors. Through the use of reinforcement, shaping, and distinct trial settings, children learn to respond to their environment more effectively.

9. Sensory Integration (SI)-this is a therapeutic approach (developed by Dr. Jean Ayres) that incorporates the sensory systems of touch, sight, smell, taste, and hearing. Information is taken in by the vestibular system (movement and balance), the proprioceptive system (how hard and soft we are manipulating objects in environment), and the tactile system (ability to detect the quality of an object). Children diagnosed with autism often have difficulties with sensory integration. It may be low arousal levels, decreased sensitivity to visual or auditory input, hypersensitivity, to name a few. Occupational, Physical, or Speech/Language therapists may use sensory integration as a way to assist children in understanding their environment more effectively. For further information on Sensory Integration, go to www.comeunity.com/disability/sensory_integration

EFFECTIVE USE OF RE-DIRECTION

Re-Direction is one of the major strategies to use when working with children and adults with special needs. It allows for a non-confrontive approach that will often allow the other person to make an effective behavior choice. However, re-direction may be ineffective if specific guidelines and approaches are not followed. Often times, re-direction is used when a child is perseverating (repetition of a specific action over and over again) in their focus or behavior.

There are three basic methods of re-direction when a child is perseverating. The first involves an abrupt re-direction. The adult introduces an entirely new thought or action in an attempt to break the flow of activity. For example, a child is asking about dinner (over and over) and the adult says, "Tonight your favorite show is on television. Are we going to watch it together?" The second involves a more gentle approach in which the adult joins the child in the action and slowly modifies or shapes the behavior. For example, if a child is rocking back and forth, the adult may do the same. "I'm riding a horse. Are you? My horse is white. What color is your horse?" The third involves using an unrelated object or sign to pull the child out of perseveration. The adult might put a ball in the child's hand as a cue that "we are done."

The following are basic principles to remember when using re-direction.

1. **Re-direction is not distraction.** It is a specific strategy used to help the person move from one activity to another with the least amount of resistance. Be sure to choose a preferred activity or statement when re-directing a person.
2. **Tell the person what they will be doing, don't ask them if they want to do something.** Avoid "do you want to go outside for a walk?" This type of approach may allow for a person to maintain an attitude of refusal. Instead, be specific and clear with the instructions. "Let's go outside for a walk and watch for birds. It is nice outside." It is also possible to use choices when presenting re-direction. "Would you like to go outside for a walk or go outside and shoot baskets?" This will allow the person to make choices, but still move toward re-direction.
3. **Use of agreement will minimize the arguing process.** For example: "Let's go outside and play (adult)." "I don't want to go outside (child)." "I know

you don't. Where would be a good place to go, the backyard or a park?"
Using an agreement approach reduces arguing and allows for another re-direction comment.

4. **Use motion to get the person walking toward the new activity.** Once the re-direction is used, the person should begin to walk toward the suggested area. Movement will encourage the child to proceed toward the destination. If you wait for the child to start moving, it might be a long time.
5. **When possible, use tangible items for re-direction.** Having a child play with an instrument, kick a ball, squeeze clay, listen to music, etc. will be more captivating than "let's sit and relax." (Though you may feel like taking a nap after dealing with the behavior)

Over the next few days, find a time to use re-direction in the school or home setting. Attempt several different approaches and see what works best for you. Share your results with another person.

Warning: Avoid attempting to re-direct your spouse or significant other if they are asking you to do a chore. If your spouse asks "Will you help me for a minute?" it should not be followed with "Hey, what do you think about the weather? Pretty awesome, right?"

Autism Treatments Current Interventions in Autism--a brief overview

	Lovaas	TEACCH	PECS
Background	also known as Discrete Trial (DT), Intensive Behavior Intervention (IBI), Applied Behavior Analysis (ABA); DT was earliest form of behavior modification; initial research reported in 1987; initial intent to achieve inclusive kindergarten readiness; has "morphed" into IBI and ABA.	stands for Treatment and Education of Autistic and related Communication-handicapped Children; over 32 years empirical data on efficacy of TEACCH approach exists; includes parents as co-therapists; recognizes need for supports from early childhood through adulthood; main focus is on autism rather than behavior.	stands for Picture Exchange Communication System; derived from need to differentiate between <i>talking</i> and <i>communicating</i> ; combines in-depth knowledge of speech therapy with understanding of communication where student does not typically attach meaning to words and lack of understanding of communication exists; high compatibility with TEACCH.
Goals	teach child <i>how to learn</i> by focusing on developing skills in attending, imitation, receptive/ expressive language, pre-academics, and self-help.	provide strategies that support person throughout lifespan; facilitate autonomy at all levels of functioning; can be accommodated to individual needs.	help child <i>spontaneously</i> initiate communicative interaction; help child understand the <i>function</i> of communication; develop communicative competency.
How Implemented	uses ABC model; every trial or task given to the child consists of: antecedent - a directive or request for child to perform an action, behavior - a response from the child that may include successful performance, non-compliance, no response, consequence - a reaction from the therapist, including a range of responses from strong positive reinforcement to faint praise to a negative "No!", pause - to separate trials from one another (intertrial interval).	clearly organized, structured, modified environments and activities; emphasis on visual learning modalities; uses functional contexts for teaching concepts; curriculum is individualized based on individual assessment; uses structure and predictability to promote spontaneous communication.	recognizes that young children with autism are not strongly influenced by social rewards; training begins with functional acts that bring child into contact with rewards; begins with physically assisted exchanges and proceeds through a hierarchy of eight phases; requires initial ratio of 2:1.
Reported Outcomes	first replications of initial research reporting gains in IQ, language comprehension and expression, adaptive and social skills.	gains in function and development; improved adaptation and increase in functional skills; learned skills generalized to other environments; North Carolina reports lowest parental stress rates and rate of requests for out-of-home placement, and highest successful employment rates.	Pyramid Educational Consultants report incoming empirical data supporting: increased communicative competency among users (children understanding the <i>function</i> of communication); increasing reports of emerging spontaneous <i>speech</i> .
Advantages of Approach	recognizes need for 1:1 instruction; utilizes repetitions of learned responses until firmly imbedded; tends to keep child engaged for increasing periods of time; effective at eliciting verbal production in select children: is a "jump start" for many children, with best outcomes for those in mild-to-moderate range.	dynamic model that takes advantage of and incorporates research from multiple fields; model does not remain static; anticipates and supports inclusive strategies; compatible with PECS, Floor Time, OT, PT, selected therapies; addresses sub-types of autism, using individualized assessment and approach; identifies emerging skills, with highest probability of success; modifiable to reduce stress on child and / or family.	helps to get language started; addresses both the communicative and social deficits of autism; well-suited for pre-verbal and non-verbal children AND children with a higher Performance IQ than Verbal IQ; semantics of PECS more like spoken language than signing.
Concerns with Approach	heavily promoted as THE approach for autism in absence of any comparative research to support claim; no differentiation for subtypes when creating curriculum; emphasizes compliance training, prompt dependence; heavy focus on behavioral approach may ignore underlying neurological aspects of autism, including issues of executive function and attention switching; may overstress child and/ or family; costs reported as high as \$50,000 per child per year; prohibits equal access.	belief that TEACCH "gives in" to autism rather than fighting it; seen by some as an exclusionary approach that segregates children with autism; does not place enough emphasis on communication and social development; independent work centers may isolate when there is a need to be with other children to develop social skills.	may suppress spoken language (evidence is to the contrary).
Errors to Avoid	creating dependency on 1:1; oversteering child or family; interpreting all behaviors as willful rather than neurological manifestations of syndrome; ignoring sensory issues or processing difficulties; failing to recognize when it is time to move to another approach.	failing to offer sufficient training, consultancy, and follow-up training to teachers for program to be properly implemented; treating TEACCH as a single classroom approach rather than a comprehensive continuum of supports and strategies; expecting minimally trained teacher to inform and train all other personnel in TEACCH approach; failing work collaboratively with parents.	failing to strictly adhere to the teaching principals in Phase I; tendency to rush through Phase I or to use only one trainer; providing inadequate support or follow-up for teacher after attending two-day training; training only one person in approach rather than all classroom personnel; inconsistently implementing in classroom.

Autism Treatments

	Greenspan	Inclusion	Social Stories
Background	also known as "Floor Tune," OIR (Developmental Individual-Difference, Relationship-Based) Model; targets emotional development following developmental model; depends on informed and acute observations of child to determine current level of functioning; has child-centered focus; builds from the child; "Floor Time" is only one piece of a three-part model that also includes spontaneity along with semi-structured play, and motor and sensory play.	initially intended for children with mental retardation and disabilities other than autism; sociological, educational, and political mandates in contrast to psychology as root source for other approaches; inclusion defined in three federal laws - PL 94-142, REI, and IDEA	also known as Social Scripts; developed by Carol Gray in 1991 initially to help student with autism understand rules of a game; was further developed to address understanding subtle social rules of "neurotypical" culture; addresses "Theory of Mind" deficits (the ability to take the perspective of another person).
Goals	targets personal interactions to facilitate mastery of developmental skills; helps professionals see child as functionally integrated and connected; does not treat in separate pieces for speech development, motor development, etc.	educate children with disabilities with NT children to the maximum extent possible; educate children with disabilities in the chronological setting they would be in if they had no disability and they lived at home; does not apply separate educational channels except under specific circumstances.	clarify social expectations for students with ASO; address issues from the student's perspective; redefine social misinterpretations; provide a guide for conduct or self-management in specific social situations.
How Implemented	teaches in interactive contexts; addresses developmental delays in <i>sensory modulation, motor planning and sequencing, and perceptual processing</i> ; usually done in 20-minute segments followed by 20-minute breaks, each segment addressing one each of above-identified delays.	children with autism typically placed in inclusive settings with 1:1 aide; curriculum modified to accommodate to specific learning strengths and deficits; requires team approach to planning; approach may be selective inclusion (by subject matter or class), partial inclusion (1/2 day included, 1/2 day separate instruction), or full, radical inclusion with no exceptions.	stories or scripts are specific to the person, addressing situations which are problematic for that individual; Social Stories typically comprised of three types of sentences: perspective, descriptive, and directive; types of sentences follow a ratio for frequency of inclusion in the Social Story; Social Story can be read TO or BY the person with autism; introduced far enough in advance of situation to allow multiple readings, but especially <i>just before</i> the situation is to occur.
Reported Outcomes	teaches parents how to engage child in happier, more relaxed ways; hypothetically lays stronger framework for future neurological! cognitive development.	in <i>certain circumstances</i> , some children with autism can survive and even become more social in classrooms with NT peers; benefits children who cognitively match classmates.	stabilization of behavior specific to the situation being addressed; reduction in frustration and anxiety of students; improved behavior when approach is <i>consistently</i> implemented.
Advantages of Approach	addresses emotional development in contrast to other approaches, which tend to focus on cognitive development; avoids drilling in deficit areas, which feeds child's frustrations and highlights inadequacies; is a non-threatening approach; helps to turn child's actions into interactions.	more opportunities for role modeling and social interaction; greater exposure to verbal communication; opportunities for peers to gain greater understanding of and tolerance for differences; greater opportunities for friendships with typically developing peers.	developed specifically to address autistic social deficits; tailored to individual and specific needs; is time and cost efficient/flexible.
Concerns with Approach	does not focus on specific areas for competency; no research to support efficacy for children with autism; approach based on hypotheses, not research; is a more passive approach.	<i>automatic</i> inclusion violates spirit and letter of IDEA; opportunities for successful inclusion begin to plateau by end of third grade as work becomes more abstract and faster paced; increasing use of language-based instruction puts students with autism at great disadvantage; sensory and processing difficulties tend to be insufficiently accommodated; regular education setting not necessarily best learning environment for students with autism; teachers and students in inclusion classrooms are typically ill prepared to receive student.	supportive data is anecdotal rather than empirical; benefit depends on skill of writer and writer's understanding of autism, as well as writer's ability to take an autistic perspective.
Errors to Avoid	attempting to implement approach without training or professional oversight; taking the lead, trying to get the child to do what YOU think he should do; allowing inadequate time; attempting to implement in midst of ongoing activities for other children.	providing insufficient training, preparation, information, and support to personnel; placing student in settings where level of auditory and visual stimulation is typically too intense; assigning student work in which cognitive demands exceed student's ability to comprehend; depending on support of 1:1 aide; maintaining placement in face of frequent or severe disruptive behaviors; focusing on academics to detriment or exclusion of functional competencies; not offering multiple opportunities to apply functional skills.	including too many directive sentences in proportion to perspective and descriptive sentences; stating directive sentences in inflexible terms (e.g., "I will do . ." rather than "I will try to _"); writing above the person's cognitive developmental age; using complex language; not being specific enough in describing either the situation or the desired behavioral response.

**ADDITIONAL
CONCEPTS AND
INFORMATION**

COMORBIDITY AND AUTISM

The core signs of autism cannot be erased or cured. However, most people with autism have symptoms far beyond the general issues of communication and social interactions. This means that other disorders, diagnoses, and symptoms are common to those with autism spectrum disorder. One recent study (2010) done at a Pediatric research hospital in Boston, MA. found that over 95% of people with ASD had 3 or more comorbid disorders and 74% had 5 or more. While these figures may seem outrageous and extreme, other studies concur that the majority of those within the ASD range suffer from other disorders. Below are some of the more common and familiar disorders that impact ASD.

1. **Sensory Problems-** most people with autism have sensory issues. They may over respond to noise, light, or touch. They may crave deep pressure or physical sensation. Either way, be it hyper or hyposensitivity, everyday activities may be a challenge to these individuals. Sensory integration approaches may be used to reduce the symptoms, but a modification of the environment is usually necessary to assist the person with effective assimilation into each individual setting.
2. **Anxiety and Depression-** Many people with autism have diagnosable problems with anxiety, depression, and anger. The issues seem to be more common among people with higher functioning autism and Asperger's. This may be due to the fact that those with higher functioning levels are aware of their differences and more likely to react to being ostracized by peers, an inability to function at typically developing levels, and show a frustration with their own limitations. Studies have shown that over 50% of those diagnosed with Asperger's Disorder suffer from anxiety and depression.
3. **Gastrointestinal Problems-** children with autism are 50% more likely to suffer from stomach and bowel issues than other children. This is one reason that a physician or family may look at a dietary change. It is believed by some that the reduction of gluten and casein in a diet may reduce some stomach concerns. Once again, this approach has found little success in the general autism population.
4. **Seizure Disorders-** One in four children with autism suffers from a seizure disorder. This may range from a full scale convulsion to black outs to staring spells. The array of symptoms may make it difficult to spot without an EEG (electroencephalogram) being performed by a physician. The use of anticonvulsant medication will often control or reduce seizure activity.
5. **Bipolar disorder, Obsessive-Compulsive disorder, Oppositional Defiance Disorder-** these disorders are common among many conditions including autism. It can be difficult to tell the difference

between perseveration (repetitive patterns in sounds, words, actions) which is fairly common in autism, and obsessive-compulsive behaviors. Likewise, it is difficult to distinguish between mood disorders and bipolar disorder, schizophrenia, and autistic behaviors.

6. Attention Deficit/Hyperactivity Disorder- it is surprising that attention deficit and difficulty with focus are not included in the diagnostic criteria for autism. It is very common for children with characteristics of autism to also have an ADD or ADHD diagnoses.
7. Mental Retardation- somewhere between 25% to 50% of individuals with autism meet the criteria for mental retardation. The wide variation is due to the difficulty in assessing autistic intelligence in many children. Fragile X Syndrome is the most inherited form of mental retardation among those with ASD. One part of the X chromosome has a defective piece that appears pinched and fragile. It impacts about 5 percent of the population with autism.

These are a sampling of possible accompanying disorders within autism. Naturally, there are many others that you may come across or have personally experienced with a student, friend, or family member.

ASSIGNMENT: Do further research on the topic of 'comorbidity in autism' to gain further knowledge. Write a **1-2 page paper** on a specific chosen topic within comorbidity.

MEDICATION AND AUTISM

There are no current medications that influence the actual aspects of autism. However, various medications are utilized to reduce the impact and aspects of the disorders that accompany autism. Below are a list of the more common medication used by physicians. This is not an exhaustive list, nor an endorsement of these products. Prior to utilizing any medications, it is important to understand the potential side effects as well as the benefits each product.

Remember that while all medications do have side effects (even aspirin, anti-biotic, etc.), the support and gain found from medication management may outweigh the other issues. I also encourage frequent monitoring of the medication by the physician as well as ongoing feedback from educators, relatives, and others who have contact with the person on medication.

Please note that while certain medications may be initially listed or used for one disorder, the medical community may have found other uses for these medications through research and trials.

- **Stimulant Medications**-used for ADD/ADHD. Generic names in parentheses.

Adderall (amphetamine), Concerta (methylphenidate), Focalin (dexamethylphenidate), Ritalin (methylphenidate).

- **Non-stimulant Medications**-used for ADHD

Strattera (atomoxetine)

- **Anti-depressant and Anti-anxiety Medications**

BuSpar (buspirone); Effexor (venlafaxine); Paxil (paroxetine); Prozac (fluoxetine); Sinequan (doxepin); Ativan (lorazepam)

The following anti-depressant and anti-anxiety medications are also used for other symptoms:

Anafranil (clomipramine) for obsessive-compulsive disorder (OCD); Luvox (fluvoxamine) for OCD; Tofranil (imipramine) for bedwetting; Zoloft (sertraline) for OCD.

- **Anti-psychotic Medications**

Abilify (Aripiprazole); Seroquel (quetiapine); Zyprexa (olanzapine)

Risperdal (risperidone) has been approved by the U.S. Food and Drug Administration as a medication to treat irritability in children and adults with autism. It may also be used for aggression, deliberate self-injury, and temper tantrums.

- **Mood Stabilizing Medications**

Depakote (valproic acid) also used for seizures; Tegretol (carbamazepine) also used for seizures

- **Risperdal** (an antipsychotic medication) has been approved as a medication to treat irritability in children and adults with autism. It may also be used to treat aggression, deliberate self-injury and temper tantrums.

Once again, I want to reiterate the importance of having qualified medical personnel, a clinical psychologist, or mental health professional involved in medication issues. While I do believe that medication management may be very helpful and necessary for some people, I have also seen it create more problems through a lack of monitoring and careful oversight.

Autism Spectrum Disorder (assignment at end)

A Parent's Guide to Symptoms and Diagnosis on the Autism Spectrum

Note from instructor: this article is somewhat a review of what you have learned, but is geared toward assisting families understand ASD. You may find this as a valuable resource in your school or agency.

Autism is a spectrum disorder, meaning that there is a wide degree of variation in the way it affects people. Every child on the autism spectrum has unique abilities, symptoms, and challenges.

Learning about the different autism spectrum disorders will help you better understand your own child. It will also help you get a handle on what all the different autism terms mean. Once you've mastered autism's vocabulary, it will be easier to communicate with the doctors, teachers, and therapists who are trying to help your child.

Understanding autism spectrum disorders

Autism is not a single disorder, but a spectrum of closely-related disorders with a shared core of symptoms. Every individual on the autism spectrum has problems to some degree with social skills, empathy, communication, and flexible behavior. But the level of disability and the combination of symptoms varies tremendously from person to person. In fact, two kids with the same diagnosis may look very different when it comes to their behaviors and abilities.

If you're a parent dealing with a child on the autism spectrum, you may hear many different terms including *high-functioning autism*, *atypical autism*, *autism spectrum disorder*, and *pervasive developmental disorder*. These terms can be confusing, not only because there are so many, but because doctors, therapists, and other parents may use them in dissimilar ways.

But no matter what doctors, teachers, and other specialists call the autism spectrum disorder, it's your child's unique needs that are truly important. No diagnostic label can tell you exactly what problems your child will have. Finding treatment that addresses your child's needs, rather than focusing on what to call the problem, is the most helpful thing you can do. You don't need a diagnosis to start getting help for your child's symptoms.

Sometimes "autism" really means "autism spectrum disorder"

When people use the term autism, it can mean one of two things. They may actually be referring to autistic disorder, or classical autism. But autism is often used in a more general sense to refer to all autism spectrum disorders. So if someone is talking about your child's autism, don't assume that he or she is implying that your child has autistic disorder, rather than another autism spectrum disorder. If you're unsure what is meant, don't be afraid to ask.

Where does your child fall on the autism spectrum?

The three autism spectrum disorders share many of the same symptoms, but they differ in their severity and impact. Classic autism, or autistic disorder, is the most severe of the autism spectrum disorders. Milder variants are Asperger's Syndrome, sometimes called high-functioning autism, and PDD-NOS, or atypical autism. According to the Autism Spectrum Resource Center, only 20% of people on the autism spectrum have classic autism. The overwhelming majority fall somewhere on the milder range of the spectrum.

Since the autism spectrum disorders share many similar symptoms, it can be difficult to distinguish one from the other, particularly in the early stages. If your child is developmentally delayed or exhibits other autism-like behaviors, you will need to visit a medical professional for a thorough evaluation. Your doctor can help you figure out where, or even if, your child fits on the autistic spectrum.

Signs and symptoms of autism spectrum disorders

In both children and adults, the signs and symptoms of the autism spectrum disorders include problems with social skills, speech and language, and restricted activities and interests. However, there are enormous differences when it comes to the severity of the symptoms, their combinations, and the patterns of behavior.

Keep in mind that just because your child has a few autism-like symptoms, it doesn't mean he or she has an autism spectrum disorder. The autism spectrum disorders are diagnosed based on the presence of multiple symptoms that disrupt your child's ability to communicate, form relationships, explore, play, and learn.

Signs and symptoms of autism spectrum disorders: Social skills

Basic social interaction can be difficult for children with autism spectrum disorders. Symptoms may include:

1. Unusual or inappropriate body language, gestures, and facial expressions (e.g. avoiding eye contact or using facial expressions that don't match what he or she is saying).
2. Lack of interest in other people or in sharing interests or achievements (e.g. showing you a drawing, pointing to a bird).
3. Unlikely to approach others or to pursue social interaction; comes across as aloof and detached; prefers to be alone.
4. Difficulty understanding other people's feelings, reactions, and nonverbal cues.
5. Resistance to being touched.
6. Difficulty or failure to make friends with children the same age.

Signs and symptoms of autism spectrum disorders: Speech and language

Problems with speech and language comprehension are a telltale sign of the autism spectrum disorders. Symptoms may include:

- Delay in learning how to speak (after the age of 2) or doesn't talk at all.
- Speaking in an abnormal tone of voice, or with an odd rhythm or pitch.
- Repeating words or phrases over and over without communicative intent.
- Trouble starting a conversation or keeping it going.
- Difficulty communicating needs or desires.
- Doesn't understand simple statements or questions.
- Taking what is said too literally, missing humor, irony, and sarcasm.

Signs and symptoms of autism spectrum disorders: Restricted behavior and play

Children with autism spectrum disorders are often restricted, rigid, and even obsessive in their behaviors, activities, and interests. Symptoms may include:

- Repetitive body movements (hand flapping, rocking, spinning); moving constantly.
- Obsessive attachment to unusual objects (rubber bands, keys, light switches).
- Preoccupation with a specific topic of interest, often involving numbers or symbols (maps, license plates, sports statistics).
- A strong need for sameness, order, and routines (e.g. lines up toys, follows a rigid schedule). Gets upset by change in their routine or environment.
- Clumsiness, abnormal posture, or odd ways of moving.
- Fascinated by spinning objects, moving pieces, or parts of toys (e.g. spinning the wheels on a race car, instead of playing with the whole car).

How children with autism spectrum disorders play

Children with autism spectrum disorders tend to be less spontaneous than other kids. Unlike a typical curious little kid pointing to things that catch his or her eye, autistic children often appear disinterested or unaware of what's going on around them. They also show differences in the way they play. They may have trouble with functional play, or using toys that have a basic intended use, such as toy tools or cooking set. They usually don't "play make-believe," engage in group games, imitate others, or use their toys in creative ways.

Related signs and symptoms of autism spectrum disorders

While not part of autism's official diagnostic criteria, children with autism spectrum disorders often suffer from one or more of the following problems:

- **Sensory problems** - Many children with autism spectrum disorder either under-react or overreact to sensory stimuli. At times they may ignore people speaking to them, even to the point of appearing deaf. However, at other times they may be disturbed by even the

softest sounds. Sudden noises such as a ringing telephone can be upsetting, and they may respond by covering their ears and making repetitive noises to drown out the offending sound. Children on the autism spectrum also tend to be highly sensitive to touch and to texture. They may cringe at a pat on the back or the feel of certain fabric against their skin.

- **Emotional difficulties** - Children with autism spectrum disorders may have difficulty regulating their emotions or expressing them appropriately. For instance, your child may start to yell, cry, or laugh hysterically for no apparent reason. When stressed, he or she may exhibit disruptive or even aggressive behavior (breaking things, hitting others, or harming him or herself). The National Dissemination Center for Children with Disabilities also notes that autistic kids may be unfazed by real dangers like moving vehicles or heights, yet be terrified of harmless objects such as a stuffed animal.
- **Uneven cognitive abilities** - The autism spectrum disorders occur at all intelligence levels. However, even kids with normal to high intelligence often have unevenly developed cognitive skills. Not surprisingly, verbal skills tend to be weaker than nonverbal skills. In addition, children with Autism spectrum disorders typically do well on tasks involving immediate memory or visual skills, while tasks involving symbolic or abstract thinking are more difficult.

Savant skills in autism spectrum disorders

Approximately 10% of people with autism spectrum disorders have special "savant" skills, such as Dustin Hoffman portrayed in the film *Rain Man*. The most common savant skills involve mathematical calculations, artistic and musical abilities, and feats of memory. For example, an autistic savant might be able to multiply large numbers in his or her head, play a piano concerto after hearing it once, or quickly memorize complex maps.

Getting an autism spectrum disorder diagnosis

The road to an autism diagnosis can be difficult and time-consuming. In fact, it is often 2 to 3 years after the first symptoms of autism are recognized before an official diagnosis is made. This is due in large part to concerns about labeling or incorrectly diagnosing the child. However, an autism diagnosis can also be delayed if the doctor doesn't take a parent's concerns seriously or if the family isn't referred to health care professionals who specialize in developmental disorders.

If you're worried that your child has autism, it's important to seek out a medical diagnosis. **But don't wait for that diagnosis to get your child into treatment.** Early intervention during the preschool years will improve your child's chances for overcoming his or her developmental delays. So look into treatment options and try not to worry if you're still waiting on a definitive diagnosis. Putting a potential label on your kid's problem is far outweighed by the need to treat the symptoms.

Diagnosing autism spectrum disorders

In order to determine whether your child has autism, a related autism spectrum disorder, or another developmental condition, clinicians look carefully at the way your child socializes, communicates, and behaves. Diagnosis is based on the patterns of behavior that are revealed.

If you are concerned that your child has an autism spectrum disorder and developmental screening confirms the risk, ask your family doctor or pediatrician to refer you immediately to an autism specialist or team of specialists for a comprehensive evaluation. Since the diagnosis of an autism spectrum disorder is complicated, it is essential that you meet with experts who have training and experience in this highly-specialized area.

The team of specialists involved in diagnosing your child may include:

- Child psychologists
- Child psychiatrists
- Speech pathologists
- Developmental pediatricians
- Pediatric neurologists
- Audiologists
- Physical therapists
- Special education teachers

Getting Evaluated for Autism Spectrum Disorder

Diagnosing an autism spectrum disorder is not a brief process. There is no single medical test that can diagnose it definitively; instead, in order to accurately pinpoint your child's problem, multiple evaluations and tests are necessary.

- Parent interview** In the first phase of the diagnostic evaluation, you will give your doctor background information about your child's medical, developmental, and behavioral history. If you have been keeping a journal, or taking notes on anything that concerned you, turn over that information. The doctor will also want to know about your family's medical and mental health history.
- Medical exam** The medical evaluation includes a general physical, a neurological exam, lab tests, and genetic testing. Your child will undergo this full screening to determine the cause of his or her developmental problems and to identify any co-existing conditions.
- Hearing test** Since hearing problems can result in social and language delays, they need to be excluded before an autism spectrum disorder can be diagnosed. Your child will undergo a formal audiological assessment where he or she is tested for any hearing impairments, as well as any other hearing issues or sound sensitivities that sometimes co-occur with autism.
- Observation** Developmental specialists will observe your child in a variety of settings to look for unusual behavior associated with the autism spectrum disorders. They may watch your child playing or interacting with other people.

Getting Evaluated for an Autism Spectrum Disorder Lead screening

Because lead poisoning can cause autistic-like symptoms, the National Center for Environmental Health recommends that all children with developmental delays be screened for lead poisoning.

Depending on your child's & symptoms and their severity, the diagnostic assessment may also include speech, intelligence, social, sensory processing, and motor skills testing. These tests can be helpful not only in diagnosing autism, but also for determining what type of treatment your child needs:

- **Speech and language evaluation** - A speech pathologist will evaluate your child's speech and communication abilities for signs of autism, as well as looking for any indicators of specific language impairments or disorders.
- **Cognitive testing** - Your child may be given a standardized intelligence test or an informal cognitive assessment. Cognitive testing can help differentiate autism from other disabilities.
- **Adaptive functioning assessment** - Your child may be evaluated for their ability to function, problem-solve, and adapt in real life situations. This may include testing social, nonverbal, and verbal skills, as well as the ability to perform daily tasks such as dressing and feeding him or herself.
- **Sensory-motor evaluation** - Since sensory integration dysfunction often co-occurs with autism, and can even be confused with it, a physical therapist or occupational therapist may assess your child's fine motor, gross motor, and sensory processing skills.

Write a **2 page response/summary** of this article.

AUTISM BIBLIOGRAPHY

You may choose a book from this list or one of your own choosing that is compatible to this course. Please let the instructor know if you choose a book that is not on this list.

Brown, Thomas. *ADHD and Asperger Syndrome in Smart Kids and Adults.* Routledge, 2021. Explores the complexities of ADHD and Asperger's. (P-12). www.routledge.com

Crowder, Amanda and Weed Phifer, Lisa. *CBT Toolbox for Children and Teens Bundle.* PESI Publishing, 2019. <https://publishing.pesi.com> Worksheets and activities to help students work through emotions (grades 3-12).

Grandin, Temple and Richard Panek. *The Autistic Brain.* Boston, MA.: Houghton Mifflin Harcourt, 2014. 800.225.5425. www.hmhco.com An explanation of the brain, genetics and causes of Autism along with treatment suggestions.

Grandin, Temple. *Visual Thinking.* Riverhead Books, 2023. Opening up the world of visual thinking. (P-12). www.riverhed-books.com

Higashida, Naoki. *The Reason I Jump: The inner voice of a 13 year old boy with autism.* Random House Publishing, 2016. Explains Autism from a personal perspective. (P-12). www.randomhousebooks.com

Magro, Kerry. *Supporting Your Autism Journey.* Independently Published, 2024. Helping individuals understand ASD. (P-12) www.amazon.com

Miller, Kelli. *Thriving With ADHD Workbook For Teens.* Rockridge Press, 2020 Activities to help students regulate. (6-12 grade). www.amazon.com

Price, Devon. *Unmasking Autism.* Harmony Publishing, 2022. Understanding neurodiversity and ASD. (P-12) www.randomhousebooks.com

Prizant, Barry. *Uniquely Human.* New York, NY: Simon and Schuster, 2022. A common sense book with strategies for interventions and stories to assist in understanding. www.simonandschuster.com

Tompkins, Michael. *Social Anxiety Relief For Teens.* Instant Help, 2021. A simple 5 step process to help reduce anxiety and fears. (P-12). www.newharbinger.com

The following two books are written by your instructor and contain a faith based perspective and biblical references. These are available on line or through bookstores. Both books are available in CD format as audio books.

What To Do When Words Get Ugly. Michael Sedler. Revell Books, 2016 (edited/revised edition). Examines the topic of gossip and how it impacts people. (Adult) www.bakerbooks.com 1-800-877-2665

When to Speak Up and When to Shut Up. Michael Sedler. Revell Books, 2006. Communication book discussing conflict and encouragement. (Adult) www.bakerbooks.com 1-800-877-2665 (over 400,000 copies sold).