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Art and Autism

A Guide for Educators

“If you’ve met one person with Autism...you’ve met one person with Autism.” - Dr. Stephen Shore



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Autism

What is Autism?

Autism spectrum disorder (ASD) is a general term that engages a group of complex disorders of neurological development. These disorders are characterized, in varying degrees, by deficits in social-emotional reciprocity, in nonverbal communicative behaviors used for social interaction, and in developing, maintaining, and understanding relationships.

Causes:

Scientists are not certain what the exact cause of autism is, but there is an increasing understanding that both genetics and environment likely play a role. Studies suggest that ASD could result from the disruption of normal brain development early in fetal development caused by defects in genes that control brain growth and that regulate how brain cells communicate with each other, possibly due to the influence of environmental factors on gene function, but all studies are preliminary and require further study.

Signs and Symptoms:

General Symptoms

- Hyperactivity
- Impulsivity
- Short attention span
- Aggression
- Causing self injury
- Temper tantrums
- Unusual eating and sleeping habits
- Unusual mood or emotional reactions
- Lack of fear or more fear than expected
- Hypersensitivity to sensory input



Photo Courtesy of Gigi's Joy blog

Early Indicators

- No babbling or pointing by age 1
- No single words by 16 months or two-word phrases by age 2
- No response to name
- Loss of language or social skills
- Poor eye contact
- Excessive lining up of toys or objects
- No smiling or social responsiveness.

Later indicators

- Impaired ability to make friends with peers
- Impaired ability to initiate or sustain a conversation with others
- Absence or impairment of imaginative and social play
- Stereotyped, repetitive, or unusual use of language
- restricted patterns of interest that are abnormal in intensity or focus
- Preoccupation with certain objects or subjects
- Inflexible adherence to specific routines or rituals.

Autism Continued...

Statistics

- Autism spectrum disorder (ASD) now affects 1 in 68 children and 1 in 42 boys
- Boys are nearly five times more likely than girls to have ASD
- There is no current medical detection or cure for autism
- About 1 percent of the world population has autism spectrum disorder.
- More than 3.5 million Americans live with an autism spectrum disorder.
- Prevalence of autism in U.S. children increased by 119.4 percent from 2000 (1 in 150) to 2010 (1 in 68). Autism is the fastest-growing developmental disability.
- Prevalence has increased by 6-15 percent each year from 2002 to 2010. (Based on biennial numbers from the [CDC](#))
- Autism services cost U.S. citizens \$236-262 billion annually.
- A majority of costs in the U.S. are in adult services – \$175-196 billion, compared to \$61-66 billion for children.
- In 10 years, the annual cost will be \$200-400 billion.
- The U.S. cost of autism over the lifespan is about \$2.4 million for a person with an intellectual disability, or \$1.4 million for a person without intellectual disability.
- 35 percent of young adults (ages 19-23) with autism have not had a job or received postgraduate education after leaving high school.
- It costs more than \$8,600 extra per year to educate a student with autism. (The average cost of educating a student is about \$12,000)

Myths	Truths
<i>All individuals with autism have savant abilities</i>	Approximately 1 in 10 may exhibit savant skills
<i>The diagnosis of autism is relatively new</i>	Autism was first diagnosed in 1908
<i>Autism is a mental health disorder</i>	Autism is a neurological disorder
<i>Autism is caused by vaccines</i>	Such evidence has been refuted
<i>Autism is caused by poor parenting</i>	Both genetics and environment likely play a role
<i>Autism is caused solely by environmental factors</i>	Both genetics and environment likely play a role
<i>Individuals with autism are unable to form meaningful social relationships</i>	The diagnosis of autism does not explicitly determine one's level of social ability
<i>People with autism are cold and lack empathetic feelings</i>	The diagnosis of autism does not explicitly determine one's level of empathy
<i>Therapies and programs for individuals with autism work across the board</i>	Therapies and programs may work differently per individual
<i>People who are not diagnosed with autism will never exhibit characteristics similar to the characteristics of those who have been diagnosed</i>	People who are not diagnosed with autism can exhibit characteristics similar to those diagnosed with autism

History

1952

In the first edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM), autistic-like symptoms are classified under childhood schizophrenia.

1975

The Developmentally Disabled Assistance and Bill of Rights Act (The DD Act), revises the definition of "developmental disability" to include autism.

1993

The "neurodiversity" movement is started by Jim Sinclair, an autistic adult, when he gives a speech titled "Don't Mourn for Us" at the International Conference on Autism.

2013

With the release of the fifth edition of the DSM, subtypes of autism spectrum disorder (Asperger's and Rett's) are eliminated. Individuals are now diagnosed as having an autism spectrum disorder (ASD) with varying levels of severity.

1908

Swiss psychiatrist Eugen Bleuler first uses the term "autistic" to describe a form of schizophrenia that is characterized by withdrawal.

1971

The first major scientific journal dedicated to autism research - The Journal of Autism and Developmental Disorders - is established. In the same year, Israel Kolvin's research begins to show differences between autism and schizophrenia.

1980

In the third edition of the DSM, autism receives a separate diagnostic category for the first time.

1994

The fourth edition of the DSM adds several subtypes to the "autism spectrum," including Asperger's (50 years after it is identified), Rett's Disorder, Childhood Disintegrative Disorder, and Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS).

2015

The Centers for Disease Control & Prevention's Autism and Developmental Disabilities Monitoring (ADDM) Network estimates that 1 in 68 children are diagnosed with Autism Spectrum Disorder (ASD) every year.

Formal Education Settings

How Autism Can Affect the Student:

Challenges may include...

- Sustained attention
- Visually-based reasoning skills
- Goal-orientation, planning, and self-monitoring (executive dysfunction)
- Imitation skills that involve sequences of movements and symbolic movements
- Understanding others' intentions, mental states, speech, perspectives, language and social skills
- Learning complex fine motor skills
- Understanding abstract concepts
- Processing and regulating sensory input
- Organizing information and routines.
- Raised levels of anxiety
- Regulating emotions

Preferences may include:

- Visual directions and instructions (lists, icons)
- Answering choice-based questions instead of open-ended questions
- One question at a time that requires a concrete answer
- Repetition
- Cues for transitioning from one activity to the next.
- Prompts for answering questions
- Incorporating a preferred special interest
- Structure and sameness



Photo Courtesy of New Albany K-1 Elementary

How Art Can Impact a Student with Autism:

The arts provide independence and collaboration, demonstrate a process of self-expression, imagination and creativity, and create a way to understand difficult abstractions.

The impact of visual arts includes:

- Assisting with the development of cognition
- Developing meaningful self-expression
- Increasing imagination and abstract thinking
- Improving visual-spatial discrepancies
- Improving fine motor skills
- Increasing communication and social interaction
- Improving coping
- Developing self-management and organizational abilities

The impact of performing arts (Dance, Music, Theatre) includes...

- Developing HOT (higher order thinking) skills like analysis, synthesis, evaluation and problem solving
- Enhanced ability to focus and interact with others
- Developing communication skills (expression, auditory awareness, rhythmic speaking)
- Stimulating the transmission of information in the brain
- Reorganization of the brain by utilizing both hemispheres.
- Encouraging collaboration
- Developing social skills (responding to others, taking turns, sharing ideas)
- Developing fine motor skills (rhythm, instruments)



Photo Courtesy of New Albany K-1 Elementary

Formal Education Settings Continued...

How Autism Can Affect the Educator:

Educators should...

- Use visuals
- Maintain clear structure in the classroom
- Capitalize on the student's interests and determine what motivates the student
- Teach relaxation techniques
- Provide choices to open-ended questions
- Apply rules consistently
- Prepare student for transitions
- Communicate with team members
- Explore why a behavior happens and develop a specific strategy
- Use clear, direct instruction with precise language
- Provide visual steps and schedules
- Use imitation ("I do, you do")
- Use visuals and hands-on activities
- Focus on strategies that enable a student to complete a task independently
- Look at problems through the eyes of the student
- Demonstrate and model expected skills
- Make eye contact
- Use proximity and verbal reminders
- Reinforce a non-preferred activity with a preferred activity
- Consider modifications if needed (number of items to complete, extra time, varying the response mode, location of desk/materials, sensory materials to increase engagement)

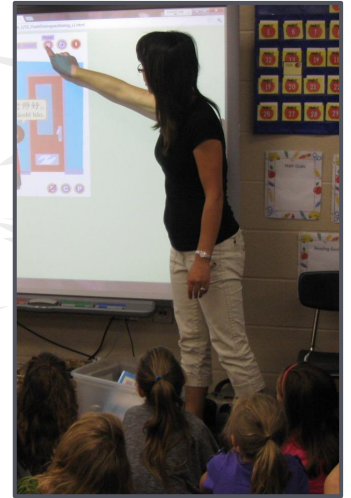


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How Autism Can Affect the Classroom:

In the classroom...

- Carefully consider what materials to use to meet that individual's needs
- Limit the supplies that are out and available
- Be aware of noise, especially background noise
- Use proximity and prepare ahead with a seating chart
- Post classroom rules
- Teach in front of a blank background (wall charts and posters can be distracting)
- Store unnecessary equipment and supplies in cabinets
- Keep materials for students to access in a labeled, accessible, consistent location
- Define personal space and leave room between desks and tables
- Avoid changing the classroom after it is set-up
- Provide a quiet space free of visual distractions
- Avoid air fresheners and perfumes

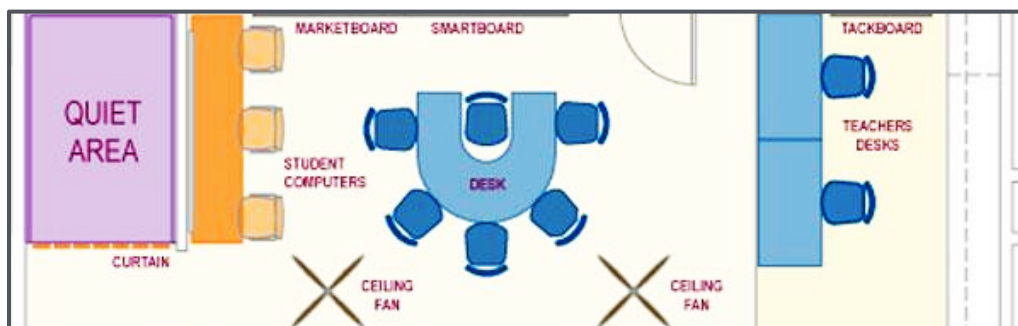


Image Aquired From www.dewberry.com

Informal Education Settings

(Including museums, community centers, non-profit orgs, etc.)

How Autism Can Affect the Student:

Challenges may include...

- Less structured environment can be overwhelming
- Issues with the “classroom” space
 - Too much space
 - Acoustics/sound
- With less structure, social impairment may be more pronounced

Advantages may include...

- Less structured environment can give students more freedom
- Presents alternative social opportunities for communication and expression
- Informal setting implies voluntary participation, which can lead to intrinsic motivation to participate
- Less outcomes based, more student centered



Photo Courtesy of Sutter Park Preschool

How Art Can Impact a Student with Autism:

Informal and community arts education programs:

- Provide a medium for expression and communication
- Facilitate social interactions and acceptance of “typical” peers
- Inspire motivation to learn and to create
- Help children with Autism to self-soothe
- Provide hands-on experiences to help children learn through non-traditional experiences

Evidence shows that students with autism who participated in a museum education program:

- Decreased internalizing behaviors
- Decreased hyperactivity
- Increased “acceptable” socialization behaviors
- Improved self-esteem

How Autism Can Affect the Educator:

Effects are similar to formal education, but differences in environment present additional issues:

- Often teachers have less control of the classroom space, so it is important to find other ways to adapt
- Often, teachers see smaller groups of students, so can provide more one-on-one attention
- Encourage students that there are no wrong answers
- Plan a consistent schedule as much as possible - routine is important
- Break down activities into smaller steps to prevent overstimulation
- Gradually introduce new materials or activities
- Include the family
- Start small
- Use tokens or a reward system to encourage participation
- Preview activities before diving in
- Be prepared and well-informed about Autism and potential challenges



Photo Courtesy of Sutter Park Preschool

Resources for Educators

Advocacy Groups



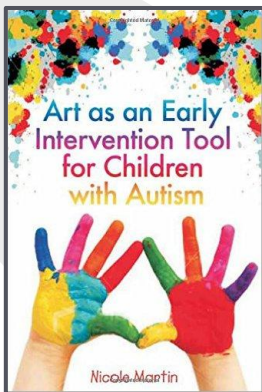
The Autism Society of Ohio

Autism Speaks

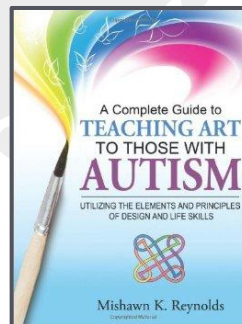
VSA Ohio

Ohio Center for Autism and Low Incidence (OCALI)

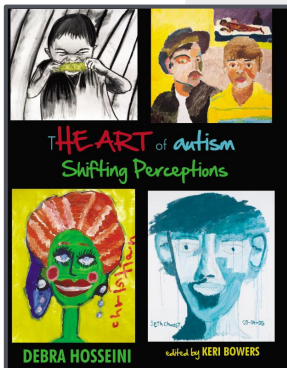
Books



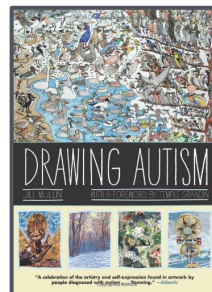
Art as an Early Intervention Tool for Children with Autism (2009)
by Nicole Martin



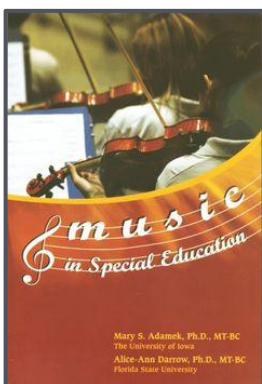
A Complete Guide to Teaching Art to Those with Autism: Utilizing the Elements and Principles of Design and Life Skills (2011) by Mishawn K. Reynolds



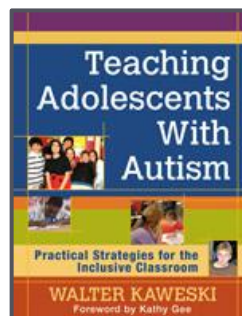
The Art of Autism: Shifting Perceptions (2012) by Debra Hosseini



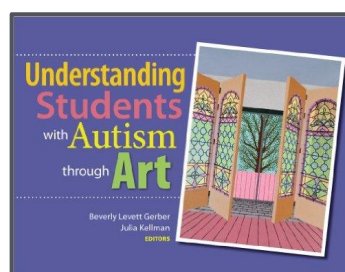
Drawing Autism (2014)
by Jill Mullin



Music in Special Education (2010) by Mary S. Adamek



Teaching Adolescents with Autism: Practical Strategies for the Inclusive Classroom (2011) by Walter G. Kaweski



Understanding Students with Autism through Art (2010) by Beverly Levett Gerber and Julia Kellman

Resources for Educators continued...

Websites

Autism Classroom: On this site you will find information about teaching children with autism and developmental disabilities, running a successful autism classroom, setting up spaces in the home and community for a child with autism, locate books and apps helpful in educating children with autism and find training options.

www.autismclassroom.com

Autism in the Museum: A clearinghouse of best practices, models, ideas, resources and research about making museums, zoos, aquariums and other informal educational settings both welcoming and inclusive for people with autism and their families.

<http://www.autisminthemuseum.org/>

The Autism Society: The Autism Society, the nation's leading grassroots autism organization, exists to improve the lives of all affected by autism. We do this by increasing public awareness about the day-to-day issues faced by people on the spectrum, advocating for appropriate services for individuals across the lifespan, and providing the latest information regarding treatment, education, research and advocacy.

<http://www.autism-society.org/>

Autism Speaks: School Community Toolkit: The purpose of this kit is to provide helpful information about students with autism and tools and strategies to achieve positive interactions and increase learning for all members of the school community.

www.autismspeaks.org/school

Educate Autism: Educational resources and teaching materials.

www.educateautism.com

National Autism Network: The National Autism Network is the largest online resource for the autism community providing a social network, nationwide provider directory, events calendar, discussion forums, autism news, expert written content and thousands of resources.

<http://nationalautismnetwork.com/index.html>

National Autism Resources: National Autism Resources Inc. is a global leader in providing cost effective, research based therapeutic tools that meet the needs of people on the autism spectrum across their lifespan since 2008. www.nationalautismresources.com

National Education Association Autism Resources for Teachers: Includes links to information on autism, instructional methods, helpful techniques, activities and materials.

<http://www.nea.org/home/15151.htm>

USC Rossier Online: Teacher's Toolkit for Autism Awareness Month: <http://rossieronline.usc.edu/teachers-toolkit-autism-awareness-month/>

VSA Ohio: VSA Ohio is a community that connects inspired artists with their passion, service providers with resources, and all citizens with creative opportunities. By bridging arts and disability, our programs and services constantly evolve to provide inclusive environments and accessible opportunities for people with disabilities to celebrate life through the arts.

<http://www.vsao.org/>

Glossary

ABA (Applied Behavioral Analysis): A common therapy used to help kids with autism learn to behave more typically using a system of rewards.

Asperger Syndrome: A developmental disorder related to autism and characterized by higher than average intellectual ability coupled with impaired social skills and restrictive, repetitive patterns of interest and activities.

Autism: a mental condition, present from early childhood, characterized by difficulty in communicating and forming relationships with other people and in using language and abstract concepts.

Autism Spectrum Disorder (ASD): Is a general term that engages a group of complex disorders of neurological development. These disorders are characterized, in varying degrees, by deficits in social-emotional reciprocity, in nonverbal communicative behaviors used for social interaction, and in developing, maintaining, and understanding relationships.

Differentiated Instruction: Is the way in which a teacher anticipates and responds to a variety of student needs in the classroom. To meet student needs, teachers differentiate by modifying the content (what is being taught), the process (how it is taught) and the product (how students demonstrate their learning).

Formal Education: Is classroom-based, provided by trained teachers.

Higher Order Thinking (HOT) Skills: A concept of education reform based on learning taxonomies (such as Bloom's Taxonomy). Higher order thinking skills include critical, logical, reflective, metacognitive, and creative thinking.

IEP (Individualized Education Plan): Is a plan or program developed to ensure that a child who has a disability identified under the law and is attending an elementary or secondary educational institution receives specialized instruction and related services.

Informal Education: Educational experiences that take place outside of the formalized educational system (i. e. community arts organizations, voluntary and amateur arts organizations, museums, etc.)

PDD-NOS: PDD-NOS stands for Pervasive Developmental Disorder Not Otherwise Specified. PDD-NOS became the diagnosis applied to children or adults who are on the autism spectrum but do not fully meet the criteria for another ASD

Perseveration: Repetitive use of language, such as repeating the same phrase over and over or repeatedly bringing up the same topic

Sensory Dysfunction/Sensory Integration: Children with autism experience light, sound, smells and tastes more or less intensely than other people. As a result, they may be very easily overwhelmed by bright lights or loud noises; alternatively, they may crave lots of crashing, jumping and strong tastes.

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Notes



Special Thanks to our Conference Partners!

Bittersweet Farms - <http://www.bittersweetfarms.org>

VSA Ohio - Erin Hoppe @ ehoppe@vsao.org

Autism Network - Nationwide Children's Hospital, Amy Hess @ Amy.Hess@nationwidechildrens.org

Autism Society of Ohio - <http://www.autismohio.org>

Sondra Williams and OCALI (also runs a camp called **SPEAK**)

Food for Good Thought - <http://foodforgoodthought.com/>

Audrey Todd, PhD - todd@foodforgoodthought.com



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