

Autism Spectrum Disorders in Virginia

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Notes

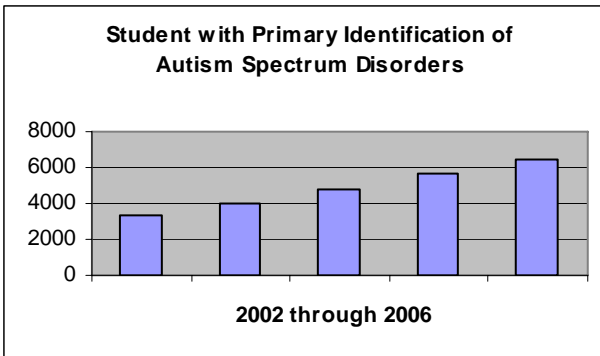
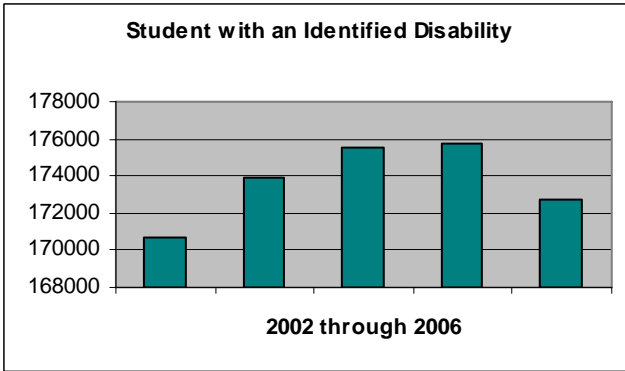
Data for Virginia

Students with Autism Spectrum Disorders have increased from 2% (2002) to 4% (2007) of the total special education population.

Statewide, 70.58% of students with ASD passed the state assessment in English.

Statewide, 70.57% of students with ASD passed the state assessment in Math.

Statewide, 62% of students with ASD are white, 24% are Black, 6% are Asian, and 5% are Hispanic.



Students with Primary ID of ASD					
2002	2003	2004	2005	2006	2007
3,350	3,966	4,751	5,674	6,452	7,580

To Review Individual Division Data

1. Go to www.doe.virginia.gov/VDOE/Publications/
2. Special Education Child Count
3. Select year

State totals and division data are provided

Students are tallied by age



Student Data Trends

What is driving the increase?

- ❑ Better Diagnosis
- ❑ More Awareness
- ❑ Diagnostic Substitution—People are now diagnosed with ASD were previously diagnosed with other disabilities

From 2001 to 2006:

Mental retardation decreased from 13,314 to 10,988

Autism increased from 2,702 to 6,452

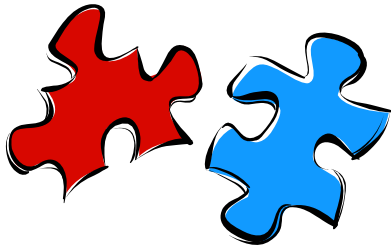
- ❑ Widening the Spectrum
- ❑ Added Asperger's Syndrome in 1994
- ❑ More Autism

Wide Range of Presentation

Autism is multidimensional

Continuums of:

- ❑ Communication
- ❑ Social
- ❑ Behavior
- ❑ Intellectual Functioning
- ❑ Family and community support



Defining Autism

The *Diagnostic and Statistical Manual of Mental Disorders Fourth Edition Text Revision* (DSM IV-TR) is a respected referenced that outlines criteria for Pervasive Developmental Disorders including:

- ✓ Autistic Disorder
- ✓ Rett's Disorder
- ✓ Childhood Disintegrative Disorder
- ✓ Asperger's Disorder
- ✓ Pervasive Developmental Delay– Not Otherwise Specified

DSM IV-TR Diagnostic Criteria for 'Autistic Disorder'

A. A total of six (or more) items from (1), (2), and (3), with at least two from (1), and one each from (2) and (3)

(1) qualitative impairment in social interaction, as manifested by at least two of the following:

- (a) marked impairment in the use of multiple nonverbal behaviors such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction
- (b) failure to develop peer relationships appropriate to developmental level
- (c) a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by a lack of showing, bringing, or pointing out objects of interest)
- (d) lack of social or emotional reciprocity

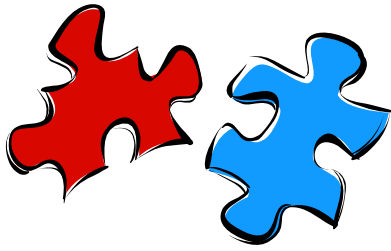
(2) qualitative impairments in communication as manifested by at least one of the following:

- (a) delay in, or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime)
- (b) in individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others
- (c) stereotyped and repetitive use of language or idiosyncratic language
- (d) lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level

(3) restricted repetitive and stereotyped patterns of behavior, interests and activities, as manifested by at least two of the following:

- (a) encompassing preoccupation with one or more stereotyped and restricted patterns of interest that is abnormal either in intensity or focus
- (b) apparently inflexible adherence to specific, nonfunctional routines or rituals
- (c) stereotyped and repetitive motor mannerisms (e.g., hand or finger flapping or twisting, or complex whole-body movements)
- (d) persistent preoccupation with parts of objects

B. Delays or abnormal functioning in at least one of the following areas, with onset prior to age 3 years: (1) social interaction, (2) language as used in social communication, or (3) symbolic or imaginative play



Examining the Features

Communication

Have you ever used a favorite line from a movie in conversation before?

Issues may be a result of a:

1. Deficit
2. Difference

Behavior

You see someone on school property who is screaming, yelling, and kicking wildly. That person is:

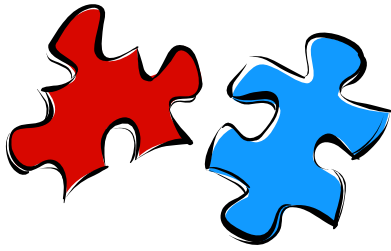
- A. Behaving appropriately
- B. In need of an office referral

The person who is screaming, yelling, and kicking wildly is:

- A. A 3 year old having a temper tantrum
- B. A woman being mugged at night
- C. A teacher who just won the lottery

Consider interpreting behavior using a lens of:

1. Context
2. Communication



Examining the Features

Social

- Vary in presentation & intensity
- May depend on expectations and culture
- Impacts education and future employment

Sensory

- Use of strategies to attain and maintain an appropriate state of alertness.
- Hyper or hyposensitivity to touch, movement, taste, smell, or visual stimuli
- May benefit from a “sensory diet” or sensory training

Everyone uses strategies to attain and maintain an appropriate state of alertness. Mark the items that you use to increase (↑) or decrease (↓) your mental state.

Oral Motor Input

- Drink a milkshake or cold soda
- Drink hot tea or coffee
- Chew on a pencil or pen
- Chew gum
- Smoke
- Eat crunchy chips, ice, or hard candy
- Bite nails

Tactile Input

- Twist hair
- Pet dog or cat
- Tap or drum fingers
- Shower: hot or cold
- Scratch
- Use a fan
- Fidget with:
 - Pen
 - Buttons
 - Earrings
 - Phone cords

Vestibular Input

- ‘doodle’ while listening
- Push chair back on 2 legs
- Bounce leg or tap foot
- Roll head/neck
- Shift or squirm in chair
- Tap pencil or pen

Visual or Olfactory Input

- Open/close windows or blinds
- Adjust lights
- Watch fish
- Watch campfire or fireplace
- Watch ‘oil & water’ toys
- Watch _____
- Use scented candles
- Use perfume of aftershave
- Use scented soap or lotions



Supporting Autism Programs

Using a 3 Prong Approach

1. Staff
2. Comprehensive Evidenced Based Program/Practices
3. Data

If the only tool you have is a hammer,
you tend to see every problem as a nail.

~Abraham H. Maslow

Staff should have:

Knowledge of unique and critical features of autism *

Ongoing professional development

The ability to discuss

Individual student progress

Program features

Instruction and data

**Competencies for Professionals and Paraprofessionals Supporting Individuals with Autism Across the Lifespan in Virginia*, published by the Virginia Autism Council, 2005 visit www.autismtrainingva.org to download a copy of this resource.



Evidenced Based Programs

No single programs serves all children

Programs should be comprehensive are address all features of ASD

- Communication
- Behavioral
- Social
- Sensory

Programs should have comprehensive implementation across all levels

- Division
- School
- Class
- Student

Utilize Guidelines for Evaluating Approaches (Freedman, 1997)

- ✓ Approach any new treatment with hopeful skepticism. Remember the goal of any treatment should be to help the person with autism become a fully functioning member of society.
- ✓ Beware of any program or technique that is touted as effective or desirable for every person with autism.
- ✓ Beware of any program that thwarts individualization and potentially results in harmful program decisions.
- ✓ Be aware that any treatment represents one of several options for a person with autism.
- ✓ Be aware that treatment should always depend on individual assessment information that points to it as an appropriate choice for a particular child.
- ✓ Be aware that no new treatment should be implemented until its proponents can specify assessment procedures necessary to determine whether it will be appropriate for an individual with autism.
- ✓ Be aware that debate over the use of various techniques are often reduced to superficial arguments over who is right, moral, and ethical and who is a true advocate for the children. This can lead to results that are directly opposite to those intended, including impediments to maximizing programs.
- ✓ Be aware that often, new treatments have not been validated scientifically.
- ✓ Remember: The efficacy of some interventions for autism remains questionable.

EDUCATIONAL PROGRAMS FOR AUTISM SPECTRUM DISORDERS EFFECTIVE IMPLEMENTATION AND SUPPORT

These questions, adapted from the form titled *Effective Implementation and Support of Illinois Educational Program for Autism* examine the status of support and need for improvement in the: (a) school-wide systems, (b) non-classroom systems (e.g., cafeteria, hallway, playground), (c) classroom systems, and (d) systems for individual students

SCHOOL-WIDE SYSTEMS

School-wide is defined as involving all students, all staff and all settings.

- There is agreement school-wide on strategies and practices involving students with autism spectrum disorders (ASD).
- Resources are available for materials and curriculum.
- School staff have had an opportunity to attend workshops on many aspects of educating children with ASD.
- Staff have opportunities to participate in on-going training in and out of school.
- Parents are a formal part of the planning, evaluation and support process.
- A team and system exists for behavior support planning and problem-solving.
- All staff are involved directly or indirectly in supporting students with ASD.

NON-CLASSROOM SETTING SYSTEMS

Non-classroom settings are defined as particular times or places where supervision is emphasized (e.g. hallways, cafeteria, playground, bus).

- Strategies and supports for students with ASD are utilized in non-classroom settings.
- Supports are utilized to assist students with ASD in transitioning from place to place.
- Behavior plans are in place and generalized to non-classroom settings.
- Typical students in non-classroom settings have received training on how to interact with students with ASD in non-classroom settings.
- Physical features are modified to limit a) unsupervised settings b) unclear boundaries and traffic patterns c) ability for students with ASD to inappropriately leave school or non-classroom settings.
- Scheduling of student movement is designed to increase consistency and reduce problems with high noise, confusion, crowding and other occurrences that could be problematic for students with ASD.

CLASSROOM SYSTEMS

Classroom settings are defined as instructional settings in which teacher(s) supervise and teach groups of students.

- Specific classroom areas are clearly defined.
- Classroom expectations and routines are clearly defined.
- Classroom expectations and routines are taught directly.
- Expected student behaviors are clearly defined.
- Expected student behaviors are taught directly.
- Students with ASD receive direct instruction in math, reading, and written language.
- Students with ASD receive direct instruction on social skills and communication.
- Classroom teachers fully participate in planning for support and in assisting with accommodations for students with ASD.

CLASSROOM SYSTEMS - CONTINUED

- Related service personnel work closely with classroom staff at all levels of support.
- Structured reinforcement is built into classroom schedule.
- Instruction for students with ASD uses grade level curriculum.
- Learned skills are being practiced to maintain skill.
- Instruction for students with ASD is designed to allow for maximum interaction with typical students.

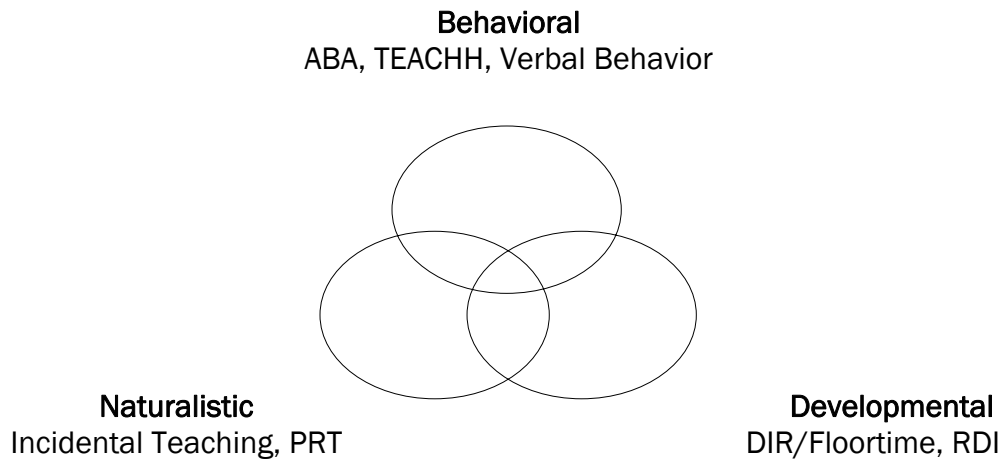
INDIVIDUAL STUDENT SYSTEMS

Individual student systems are defined as specific supports designed for the individual student with ASD.

- Student has individual workspace designed according his/her needs.
- Student has an individual daily schedule placed for use throughout day.
- Changes in student's schedule are planned for and on schedule prior to the change.
- Student's instruction includes grade level instruction with modifications and supports individually designed.
- Student can access sensory supports and breaks as needed.
- Student has a reinforcement system that is used and understood by student, other students and all staff.
- Student's communication system is available at all times.
- Student's communication system is understood and used by all staff and other students.
- Task organizers are used to maximize understanding throughout day.
- Assessments are conducted regularly to identify problem behaviors.
- Behavior Support Team includes an individual skilled at conducting functional behavior assessments for students with ASD.
- Family members and/or community members are involved with planning, evaluation and support.
- School includes formal opportunities for families to receive training on behavioral support and home strategies.

Adapted from Effective Implementation and Support of Illinois Educational Program for Autism (Adapted from EBS Self-Assessment Survey version 2.0 Sugai, Horner, Todd, Educational and Community Support, University of Oregon)

Continuum of Approaches



Common Features of Excellent Behavioral Programs

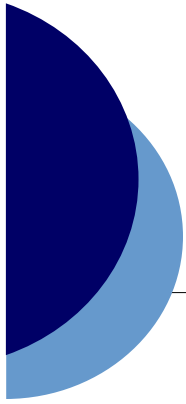
- ◆ Rich ratio of adults to children
- ◆ Sophisticated knowledge of behavioral approaches
- ◆ Well-trained and well-supervised staff
- ◆ Well-developed curriculum
- ◆ Support for family involvement
- ◆ Systematic transition to new settings
- ◆ Provision for interaction with typical peers

Common Features of Contemporary/Behavioral Naturalistic Methods

- Rich ratio of adults to children, varies based on setting
- Provision for interaction with typical peers is critical and the basis for intervention
- Occurs in natural settings
- Uses naturally occurring, child chosen materials

Common Features of Social/Pragmatic Based Approaches

- Use methods to 'mentor' child into interaction and relationship
- Use natural environment
- Develop structure
- Not applied in school settings in research literature



Autism Spectrum Disorders: Interventions and Treatments for Children and Youth

Simpson, R. L., (2005).

Scientifically Based Practice	Promising Practice		Practice with Limited Supporting Information		Not Recommended
<ul style="list-style-type: none"> • Applied Behavior Analysis • Discrete Trial Training • Pivotal Response Training • Learning Experiences: An Alternative Program for Preschoolers and Parents (LEAP) 	<ul style="list-style-type: none"> • Cognitive Behavioral Modification • Cognitive Learning Strategies • Social Decision Making • Social Stories • Psychopharmacology • Sensory Integration 	<ul style="list-style-type: none"> • Play Oriented Strategies • Alternative and Augmentative Communication • Incidental Teaching • Joint Action Routines • Picture Exchange Communication System • TEACCH 	<ul style="list-style-type: none"> • Gentle Teaching • Son-Rise • Floortime • Pet/Music/Art Therapy • Relationship Development Intervention • Van Dijk Curricular Approach • Fast For Word 	<ul style="list-style-type: none"> • Cognitive Scripts • Cartooning • Power Cards • Scotopic Sensitivity Syndrome, Irlen Lenses • Auditory Integration Training • Megavitamin Therapy • Diets 	<ul style="list-style-type: none"> • Holding Therapy • Facilitated Communication

Categories are defined as:

- Scientifically Based Practice - Significant and convincingly empirical efficacy and support
- Promising Practice - Efficacy and utility with individuals with ASD
- Practice with Limited Supporting Information - Lacking objective and convincing supporting evidence, but had undecided, possible, or potential utility and efficacy
- Not Recommended - Lack efficacy and might have the potential to be harmful

Individuals are encouraged to consult current research. Additional research or data may be available since this 2005 publication.

Use caution when interpreting categories.

Newer techniques may have a limited number of studies with significant results.



Data & Decision Making

Types of Data

Division	School
Teacher	Student

Uses of Data

- ✓ Show progress
- ✓ Plan and adjust instruction
- ✓ Develop new IEPs
- ✓ Determine staffing needs
- ✓ Document efforts or defend division

Complaints

Due process

Court cases