



CHAPTER 9: Learners with Autism Spectrum Disorders

***Exceptional Learners: An Introduction to Special
Education***

Thirteenth Edition

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Topics

- Historical origins
- Definition of autism spectrum disorders
- Prevalence of autism spectrum disorders
- Causes of autism spectrum disorders
- Identification of autism spectrum disorders
- Psychological and behavioral characteristics
- Educational considerations
- Assessment of progress
- Early intervention and transition

Historical Context

- Kanner's paper (1943)
 - Autism different from schizophrenia
 - Never made social connections
 - Unique language patterns
 - No deterioration over time
- Asperger's paper (1944)
 - Autistic psychopathy: Asperger's syndrome
 - Average intelligence, normal language
 - Obsessive preoccupation in narrow pursuits

Definition of Autism Spectrum Disorders

- Continuum from relatively mild to severe
- APA identifies two domains:
 - Social communication impairments
 - Repetitive/restricted behaviors
- Begins in early childhood

Prevalence

- 0.59% students aged 6-21 with ASD
- 5 times higher for boys than girls
- Occurs in all groups
- Just as high, or higher, on other continents
- Reasons for prevalence:
 - Widening of criteria used
 - Greater awareness of condition
 - Diagnostic substitution (intellectual disability)
 - Possibility of toxins, other factors

Causes

- Early causal theories
 - Asperger posited a biological and hereditary basis
 - Psychoanalytic ideas (Bettelheim's "refrigerator mothers")
- Today's causal theories
 - Neurological basis
 - Neuronal underconnectivity
 - Theories of hormones affecting brain development
 - Genetic basis

Identification

- Psychiatrists use criteria of American Psychiatric Association
 - Communication skills
 - Social interactions
 - Repetitive and stereotyped behaviors
- Behavioral observation and checklists
- Physician screenings should begin as early as 9 months
- Autistic regression in about 1 in 3 cases

Psychological and Behavioral Characteristics

- Impaired social communication
 - Communicative intent
 - Joint attention
 - Pragmatics
 - Hidden curriculum
- Repetitive/restricted behaviors
 - Stereotyped motor or verbal behaviors
 - Hyper- and hypo-sensitivity
 - Synaesthesia

Attempts to Construct a Unified Theory of ASD

- Executive functions
 - Working memory
 - Inhibitory control or behavioral inhibition
 - Mental flexibility
- Central coherence
 - Bringing order and meaning to information
- Theory of mind
 - Taking the perspective of other people
 - Reading of social cues

Educational Programming Principles

- Direct instruction of skills
 - Applied behavior analysis
- Instruction in natural settings
- Behavior management
 - Functional behavioral assessment
 - positive behavioral support
 - Consequences
 - Antecedents
 - Setting events

Examples of Educational Programs

- Picture exchange communication system (PECS)
 - Using pictures to initiate and maintain functional communication
- Treatment and education of autistic and related handicapped children (TEACCH)
 - Emphasis on structure (schedules, organization, routines)
- Pivotal response teaching (PRT)
 - Focus on essential skills, like initiations and responding to multiple cues

Service Delivery Models

Even when intensive instruction is offered in specialized settings, state-of-the-art teaching emphasizes the most natural possible human interactions.

- Preschool: natural interactions with peers in general education classrooms
- Elementary: increased use of cooperative learning groups

Assessment of Progress

- Monitoring progress in language development
 - Natural language samples from various contexts
 - Parent reports (questionnaires and interviews)
 - MacArthur Bates Communicative Development Inventories
- Monitoring progress in social/adaptive behavior
 - PDD Behavior Inventory Screening Version
 - Social Responsiveness Scale
 - Autism Social Skills Profile
 - Childhood Autism Rating Scale

Early Intervention

- National Research Council identified essential features:
 - Entry in programs as early as possible
 - Intensive instructional programming
 - Repeated teaching in brief periods, one-on-one and small group instruction
 - Inclusion of family component, parent training
 - Low student/teacher ratios
 - Ongoing progress monitoring
- Early intensive behavioral intervention program (EIBI)

Transition to Adulthood

Fewer than 50% of young adults with ASD are employed

Internships in work environments using applied behavior analysis can help

Programming for those with severe ASD:

- Person-centered planning
- Community residential facilities, supported living
- Competitive or supported competitive employment

Programming for less severe ASD:

- Social interaction training