The Colorado Manual for Working with Children with Autism Spectrum Disorders

For Teachers, Service Providers, and Parents

Developed by the Colorado Task Force June 2000

Section 1: Introduction to the Autism Manual

Guiding Principles for the Development of Educational Services for Children with Autism

The Colorado Autism Task Force has adopted several guiding principles that are reflected in this document. The Task Force strongly recommends and advocates that::

- There be collaboration between family and educational systems for the benefit of the child.
- The child's (and parents') culture(s) be recognized and respected.
- Services and supports for the child be individualized.
- Services and supports be based on experience and research that meet recognized scientific and academic standards (i.e., academic peer review).
- Each child be taught with a curriculum that is age-appropriate, individually appropriate and culturally appropriate.

Introduction to the Colorado Autism Task Force

The Colorado Autism Task Force is composed of individuals representing the Colorado Department Education, school administrators and teachers, academic professionals, service providers, parents children with autism, advocates for children with autism and individuals who have autism. The goal of the Task Force is to establish guidelines for the education of people with autism in the state of Colorado.

The first meeting of the Task Force was held in October of 1998, at which time the following goals were established. The goals were to:

- Establish greater public awareness of autism in general.
- Establish the foundation for a network of statewide resources regarding autism.
- Provide information about services to parents and service providers.
- Identify guidelines for measurable educational and instructional goals that can be used by members of the education community for serving children with autism.
- Establish a set of guiding principles for serving children with autism.
- Establish a set of guiding principles for the training of educational service providers and parents.

This manual was developed to provide a range of resources and choices for educators, parents and/or advocates of students who have autism. The information in this manual was compiled with input from many individuals who parent, teach and work with children with autism; their assistance and :sights were invaluable.

It should be noted that the Colorado Department of Education does not endorse any one strategy or methodology that is included in this manual

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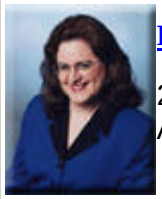

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Section 2: Introduction to Autism

M-IV 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 items 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 the developmental level

3. restricted repetitive and stereotyped patterns of behavior, interests and activities, as manifested by at least one 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.

Source: Diagnostic and Statistical Manual of Mental Disorders, DSM-IV. American Psychiatric Association, 1994.

Introduction to Autism Spectrum Disorder

Colorado Autism Task Force has adopted an operational definition of autism for the purpose of creating guiding principles for serving children with autism. The *Diagnostic and Statistics Manual of Mental Disorders* (DSM-IV) includes five subcategories of autism:

- Autistic Disorder
- Pervasive Development Disorder
- Asperser's Disorder
- Rett's Disorder
- Childhood Disintegrative Disorder

Based on the DSM-IV, the term "autism" is broadly used in this manual to refer to the spectrum of autism, which includes the following general characteristics:

- Difficulties in social interaction,
- Difficulties in communication, and
- Restricted repetitive and stereotyped patterns of behavior, interest and activities.

The Federal Definition of Autism

Individuals with Disabilities Education Act (IDEA) defines autism as "A developmental disability significantly affecting verbal and non-verbal communication and social interaction, generally evident before age three, that adversely affects a child's educational performance."

Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movement, resistance to environmental change or change in daily routine and unusual responses to sensory experiences. The term autism does not apply if a child's educational performance is adversely affected primarily because the child has an emotional disturbance.

Colorado Eligibility Criteria for Autism

School districts in Colorado may use the IDEA educational eligibility criteria to determine a child's eligibility for special education services. The disability "autism" is a subcategory of "physical disability" in Colorado.

School district personnel who suspect that a child may have autism are responsible for informing the Id's parent(s) of the suspected disability. Observations that led the assessment team to this conclusion should be discussed. The school district should also inform the parents of their choice to k a medical evaluation. However, a medical evaluation is not required for determining educational eligibility for special education services.

Possible Early Indicators of Autism

Possible early indicators of autism are listed here. The young child who has autism:

1. May appear to be deaf. Does not have typical startle response. Does not turn when you come into the room. Seems unaware of sounds in the room, etc.
2. May be an extremely "good" baby - seldom cries, is not demanding, seems very content to be alone OR is a very fussy, colicky baby - cries a lot, has sleep problems, is not easily comforted.
3. May "hand-gaze," look at lights through fingers, or have other self-stimulatory behavior.
4. May be a fussy eater.
5. Does not have anticipatory response. Does not extend his/her arms to be picked up. Does not seem to want to be held.
6. Seems to avoid actively looking at people.
7. Seems to "tune out" a lot. Is not aware of what is happening around him/her.
8. Wants things to "stay the same." May have difficulty adapting to winter coat or boots. Wants to wear the same clothes. Does not want furniture or toys to be "out of place."
9. Does not begin to talk or use words in a communicative way at the appropriate age. Fails to develop language or uses echolalic speech without really understanding the meaning of the words.
10. Often seems to be a perfectionist. Wants everything to be "just right." If he/she tries to make something work and it does not, he/she gets upset and will quit, or will get angry and refuse to try the activity again.
11. Often has "splinter skills" in areas like music, or can do puzzles extremely well, or has excellent gross motor skills, or is very interested in numbers and letters.
12. May have very high tolerance for pain. May get hurt but not come to an adult for comfort.
13. May become very upset by changes in routine.
14. May not spontaneously imitate the play of other children.
15. May have difficulty applying information from one setting to another.
16. May experience extreme sensory sensitivity.

Source: Minnesota Autism Network

Section 3: National and State Autism Resources

Recommended Training Components for Service Providers and Families

Written by the Colorado Autism Task Force's Training and Strategies Subcommittee. Members are: Eileen Balcerak, Robin Brewer, Tesa Bunsen, Rosemary Cullain, Kathryn Daniels, Laura Douglas, Barbara Malone, Cynthia Rose, Pat Rydell, Marietta Sears and Phil Strain.

Purpose

The purpose of this document is to create a set of guidelines for identifiable educational strategies that should be familiar to administrators, teachers, service providers, parents, physicians and other agency personnel who provide services to children with autism. These guidelines are viewed by the Colorado Autism Task Force as appropriate outcomes for an educational program for a child who has autism.

It is hoped that these guidelines will assist school district personnel as they develop training for regular and special education teachers, paraprofessionals and related service-providers.

Guiding Principles for Training Service-Delivery Providers and Parents

(Note: In order to implement the following guiding principles effectively, the Colorado Autism Task Force believes that a state-level action plan is necessary to delivery and monitor services.)

Training for service-providers and parents should be comprehensive and should:

- Utilize a variety of educational, instructional approaches.
- Involve all individuals who are part of the educational program for the child, including - but not necessarily limited to - school district personnel, administrators, teachers, academic professionals, service providers, parents, advocates, etc.
- Use a variety of training strategies to reach people with different learning styles. • Contain designs to incorporate different levels of expertise.
- Be implemented in a responsive and timely manner. • Include a team approach to training.
- Include ongoing training and support.
- Be monitored for effectiveness through periodic evaluations.

The Meaning of "Training and Strategies" and "Learner Outcomes"

The term "training," as used in this document, refers in general to the various ways of imparting information to educate individuals so that they can help educate others. All forms of media may be used for this purpose. More specifically, such media may include (but is not limited to) the following strategies for the training of "learners."

It is understood that any and all "learner outcomes" may involve using as few as one, or as many of all, of the following training media:

1. Model demonstration projects – case
2. Teacher - teacher model
3. Consultant "expert" model
4. 1-800 number for problem-solving
5. Distance learning
6. Audiotapes and videotapes
7. Internet access
8. Literature and written materials
9. Resource library
10. Lectures and workshops
11. On-site demonstrations
12. Mentoring
13. Conferences
14. Role-playing
15. Parent interviews
16. Hands-on direct instruction
17. Group instruction
18. "Training of trainers" model

The term "strategies" in this document refers in general to the different approaches available in educating any individual or group of individuals. More specifically, the term reflects particular approaches used to teach children with autism, such as structured teaching, facilitated play, peer-mediated learning, discrete trial training and so on.

The term "learner" refers in general to any individual receiving instruction with a particular outcome mind. More specifically, the term reflects any and all individuals involved in the education of children with autism spectrum disorders. This may include parents, teachers, paraprofessionals, related service-providers, consultants, etc.

The term "outcome," as used in this document, refers in general to the goals and objectives of instruction. More specifically, the term reflects particular goals and objectives associated with the education of children who have autism spectrum disorders.

Assessment and Planning Strategies

This section suggests "learner outcomes" that would enable a learner to gather information about a child suspected of having autism, and to plan an individual educational program to meet the child's needs.

1. **Use child profiles that look at strengths, interests and needs**
   The learner will be able to integrate information from comprehensive child profiles in order to make informed decisions regarding the content of curricula and intervention practices appropriate to each child.
2. **Incorporate family input in the IEP/IFSP process**
   The learner will be able to arrange processes that reflect a broad range of family priorities in designing the goals and objectives of the child's IEP or IFSP.
3. **Determine the child's motivational interests and needs**
   The learner will be able to reliably assess a child's reinforcer preferences and any sensory-related preferences that may influence choice of teaching strategies.
4. **Establish clear goals**
   The learner will be able to utilize assessment data and IEP/IFSP team input to assist in developing clear goals and measurable objectives for a child's educational program.
5. **Design meaningful curriculum**
   The learner will be able to design a curriculum for a child that is individualized functional, measurable and directly referenced to the IEP. On any given day or intervention period the teaching goals should be clearly evident from observing teacher child interactions.
6. **Practice authentic assessment**
   The learner will be able to design and implement assessment processes to identify children with autism and develop an IEP/IFSP for each child. The learner will also be able to design and implement ongoing monitoring that focuses on real world environments, typical interaction patterns among peers and between adults and children, and skills that directly affect the child's level of independence.
7. **Employ formal and informal assessments**
   The learner will be able to select and implement a variety of assessment strategies ranging from standardized and non-standardized testing strategies to play-based assessment to direct observation.
8. **Use choice of learning styles**
   The learner will be able to design and implement brief teaching assessment situations that help the team pinpoint particular intervention strategies (for example, using visual cues) that facilitate learning for a particular child.
9. **Develop the IEP/IFSP goals and objectives**
   The learner will be able to: a) directly translate assessment information into goals and objectives; b) write goals and objectives that are measurable; c) write goals and objectives that are functional; d) imbed goals and objectives across all

relevant environments; and e) monitor goals and objectives, and revise instruction accordingly.

10. **Write transition plans**
    The learner will be able to design and implement transition plans that: a) allow families the time and resources to explore and select next environments; b) allow future service providers to see effective practices in action; c) seek to develop a seamless organization of services; and d) assure the maintenance of effective practices for the individual child
11. **Employ strategies for evaluation of IEP goals and objectives**
    The learner will be able to design and implement a variety of strategies for evaluating IEP goals and objectives, including: a) rating scales; b) observations based on frequency, duration or amplitude of behaviors; c) observations based on correct responding, errors and adult prompts; d) observations based on level of independent performance; and e) interviews with key informants (families, teachers, and peers.)
12. **Understand issues related to identification**
    The learner will be aware of ethical implications and obligations of identifying a child suspected of having autism. The learner will be aware of the process for helping families gain access to community resources and supports.

Environmental and Classroom Arrangements

This section suggests learner outcomes for utilizing environmental/ classroom modifications to enhance a child's progress within the classroom, home, and other environments.

1. **Employ visual strategies**
   The learner will have an understanding of how to employ visual strategies in the classroom that would allow him/her to: a) establish consistent and predictable routines; b) facilitate effective transitions between tasks and activities; c) teach receptive and expressive language more efficiently; and d) establish clear classroom and expectations.
2. **Use techniques of structured teaching**
   The learner will utilize techniques of structured teaching: a) with a clear beginning, middle, and end; b) that is designed with visual clarity; c0 that is designed with a clear visual organization; and d) that modifies teaching strategies based on task analysis and functional assessments.
3. **Use consistency in designing the learning environment**
   The learner will also benefit from the designs of a learning environment that provides: a) predictability of expectations across person, places, and circumstances; b) consistency of curriculum and content; and c) consistency of instructional strategies.

4. Monitor and modify environmental stimuli

The learner will be able to systematically evaluate and modify the learning environment to monitor and reduce environmental stimuli leading to sensory overload in visual, tactile, auditory, and the domains of proximity, and interpersonal space.

Data Collection, Analysis, and Program Changes

This section suggests "learner outcomes" that are related to measurement of student performance according to specific educational programs. The process involves measurement of behavior (i.e., data collection), the interpretation of measured behavior (i.e., data analysis), and modification of previously measured behavior (i.e., program changes).

1. Design student progress measurement systems

The learner will be knowledgeable about systems of data-collection appropriate to particular educational programs for a child with autism.

The learner will demonstrate familiarity, competence and accountability in recording program appropriate data, including qualitative (e.g., "field notes" for interactive play sessions) and quantitative (e.g., "discrete trial") data-recording methods.

2. Conduct assessment and evaluation

The learner will be familiar with basic data "sampling" techniques, and with the meaning of "validity" and "reliability" as those terms apply to gathering specific data for each program.

The learner will be able to interpret the data gathered in any particular program for a child with autism.

The learner will be familiar with the language (i.e., terms) of assessment and evaluation.

The learner will be able to converse using program-specific language to express the nature of current performance issues, particular assessments and evaluations.

The learner will be able to recognize changes in performance based on gathered data, and make clear whether or not program changes are called for (for example, recognizing a "stagnating" program where no progress is being made).

The learner will demonstrate knowledge of a variety of standardized and non-standardized testing tools, will be able to explain when and why such specific tools are appropriate for each child, and will know what such assessment tools may indicate.

3. Use data-based decision-making

The learner will be able to make informed and effective decisions regarding an educational program for a child with autism by comparing and contrasting that program data with other data previously gathered for that child in same or similar programs.

The learner will be able to interpret and use data gathered in programs for a child with autism to effectively manage the child's curriculum on a day-to-day basis, and thus make timely, informed and effective program changes as required.

Collaborative Systems Education

This section suggests "learner outcomes" that are related to the understanding of the importance of working with multiple systems, professionals and family members to achieve optimum decision-making and communication regarding services and interventions for individuals with autism.

1. **Proactive home-school communication: communication across home community, school, and environment**

   The learner will be proficient in building positive relationships with parents and family members, using communication strategies that encourage positive interactions such as raising questions for reflection, using reflective listening techniques, offering alternatives and participating in decisions, generating strategies to achieve goals addressing parents' concerns, exploring all options including other programs and agencies, and involving parents in establishing a home school communication system.

2. **Collaborative working relationships with all providers: skills in working with other professionals and parents:**

   The learner will have effective communication skills for working on an interdisciplinary team. The learner will also have knowledge: of the team processes and team development, of all options including other programs and agencies, of roles and responsibilities of team members, of the roles of other agencies, and of community fiscal resources and how to access them. In addition, the learner will have consultation skills that will enable him/her to provide information and support to other professionals and parents.

3. **Active family participation**

   The learner will be proficient in building on the strengths that families bring to the process, establishing prioritized goals with families; identifying family strengths, capabilities and styles; utilizing strategies such as home visits, parent training, flexible scheduling, social events and consultation to support the family at home and in the community; and including families in initial and ongoing program development.

4. **Flexibility and openness to new ideas**

   The learner will become proficient in understanding and using a problem-solving process that fosters optimism, alternates between divergent and convergent thinking, defers and engages evaluation of ideas at different stages in the process, and requires the team to act upon their ideas (to be used to make on-going decisions by the education team to address curriculum modification and standards). This goal is to be evaluated by the instructor through a variety of assignments w products.

5. **Proactive medical support**

   The learner will be knowledgeable about the role and responsibility of medical professionals, educators and related service providers, and should be familiar with

medical concerns (diagnosis health, nutrition and pharmacological treatments, etc.), and effective collaboration strategies.

The learner will learn how to assess the child's needs and know how to disseminate information to the medical community.

Generic Instructional Strategies

This section suggests "learner outcomes" that are related to intervention strategies needed by teacher parents and other persons working with individuals with autism. The learner's proficiency for all outcomes will be evaluated by the instructor through a variety of assignments and products.

1. **Sensory Integration Strategies:**

   The learner will be proficient in understanding the definition of sensory integration development and delays, will understand fine and gross motor development and interventions, and will have knowledge of sensory input and how to effectively use sensory integration activities in the classroom and routines.

2. **One-on-one teaching:**

   The learner will be proficient in child observation skills and appropriate use of professionals in t classroom. The learner will also be skilled at adapting curriculum and materials for individual children, writing individualized goals and objectives, and using effective measurement and date collection methods to document progress.

3. **Information and skills to address needs**

   The learner will be able to access resources for maintaining and improving skills, (i.e., periodicals, workshops, conferences, internet resources, videos, etc.).

4. **Functional skills imbedded within routines: teaching within natural settings: incidental teaching**

   The learner will be proficient in child observation skills, able to utilize the concept of teachable moments, and knowledgeable about constructing environments that are conductive to functional skills training throughout every aspect of the child's schedule.

5. **Curricular adaptation and modification**

   The learner will be proficient in using a variety of techniques, strategies and materials to make necessary accommodations for individual children, in using assistive technology when appropriate for augmentative communication (including high- and low-tech methods), and in adapting materials as needed to meet the specific needs of children.

6. **Normal development**

   The learner will be proficient in understanding child behavior based on knowledge of sequential patterns of development across domains (i.e. communication, motor, cognitive, social and adaptive) and knowledgeable about the interaction between domains in the development of your, children.

7. **Build on strengths**

The learner will be proficient in recognizing the strengths that children bring to the learning situation, utilizing these strengths to reinforce and maintain previously learned skills, and to butt on these strengths when teaching new skills.

8. **Positive behavioral approaches for difficult behavior**

The learner will be proficient in understanding and implementing a variety of positive behavioral approaches that represent current behavioral practices, including but not limited to functional analysis of behavior, behavior as communication, knowledge and use of prevention strategies, knowledge and use of teaching replacement behavior, incentives to encourage positive behaviors and logical and natural consequences.

9. **Differential instruction to meet individual needs**

The learner will demonstrate knowledge regarding the principles of differentiated instruction and how learning is impacted by variables including but not limited to: grouping practices (individual small group and whole group instruction), independence, variety of materials and resources, task analysis, frequency and degree of teacher support, learning styles and choice-making.

10. **Intentional teaching to increase flexibility and independence for learners**

The learner will demonstrate knowledge of a variety of strategies that encourage independence a flexibility through the use of environmental supports such as predictable and consistent routines individual student and classroom picture schedules, transition markers/objects (visual and auditory), physical structure of the classroom, and varying routines.

11. **Blend best practices with behavioral intervention and standards**

The learner will be familiar with behavioral/social standards and will be able to address the standards through the IEP process.

12. **Employ strategies for evaluation of IEP goals and objectives**

The learner will be able to design and implement a variety of strategies for evaluating IEP goals and objectives, including: a) rating scales; b) observations based on frequency, duration or amplitude of behaviors; c) observations based on correct responding, errors and adult prompts; c observations based on level of independent performance; and e) interviews with key informants (families, teachers, peers).

13. **Understand issues related to identification**

The learner will be aware of ethical implications and obligations of identifying a child suspected having autism. The learner will be aware of the process for helping families gain access to community resources and supports.

14. **Discrete trial training**

The learner will demonstrate the ability to teach discrete skills using an antecedent (what the instructor will say and/or do), behavior (the student's response) and consequence (the adult's response) format.

15. Task Analysis

The learner will demonstrate the ability to breakdown, sequence and teach (using strategies such as shaping, prompting and chaining) the component steps and skills of a task based on task demands and student performance.

16. Errorless learning

The learner will demonstrate the ability to teach a skill by using errorless learning techniques, which structure tasks for student success and reinforce successive approximations toward the target behavior (shaping).

17. Cooperative groups

The learner will demonstrate the ability to structure learning experiences using the principles of cooperative learning groups.

18. Social skills training

The learner will demonstrate the ability to assess a child's behavioral deficits and excesses that negatively influences his/her social interaction with peers. Based on this assessment information, the learner will be able to design an individualized social skills program that results in an increase in positive peer interactions, friendships and connections with other children.

19. Positive behavioral support plans

The learner will demonstrate the ability to utilize both interview and observational methods to determining the function or purpose underlying children's challenging behavior. Based upon an understanding of specific functions, the learner will be able to design an intervention strategy that permits the child to have his/her needs met through socially acceptable alternative behaviors.

20. Assistive technology and augmentative communication

The learner will demonstrate the ability to make appropriate referrals to the augmentative communication team and assist in the evaluation of students who may benefit from assistive technology. The learner will become familiar with a variety of low-tech strategies and high-tech devices and be able to incorporate the use of augmentative communication in the daily tasks of the student with autism.

21. Futures/individualized planning

The learner will demonstrate the ability to facilitate a broad group of individuals to articulate the long-range vision that describes critical outcomes in adulthood (for example, where the person lives, where and how the person will work, with whom he/she will interact, etc.)

22. Applied behavior analysis

The learner will demonstrate the ability to systematically use small, measurable units of behavior, to teach the individual with autism by employing behavior modification techniques. The learner will demonstrate the ability to collect comprehensive data collection according to specific, objective definitions and review. The learner will also demonstrate understanding of the behavioral and neurology basis for autism, and will be able to utilize a specific, carefully

programmed approach that initially focuses on constructive interactions in a one-to-one environment, and later focuses on less structured situations.

23. **Facilitated play**

The learner will demonstrate the ability to assess all aspects of child development through the medium of play and recognize the neurodevelopmental differences specific to autism (e.g., social-communication, attention, cognitive, imitation, sensory integration and fine and gross motor abilities) that often interfere with play activities. The learner will be able to support child with autism in the promotion of play skills.

Transition Outcomes

This section suggests "learner outcomes" related to developing and organizing a transitional program for a child with autism.

1. **Workplace competencies**

   The learner will demonstrate the ability to infuse workplace competencies into the academic content areas and the transition planning process to develop the work-related skills of students

2. **Knowledge of community resources and referral procedures**

   The learner will demonstrate knowledge of community agency resources and the referral procedures required to link students with community supports.

3. **Vocational assessment strategies**

   The learner will demonstrate the ability to utilize vocational assessment strategies in the transition planning process to develop goals and strategies appropriate for the student.

4. **Community-based learning experiences**

   The learner will demonstrate the ability to develop and utilize community-based learning experiences for students to facilitate the development of vocational and life skills.

Intervention Approaches to Autism Spectrum Disorder

The following descriptions are not exhaustive, but represent approaches used in Colorado.

Activity Based Intervention

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The Activity Based Intervention (ABI) approach suggests that interventions should be grounded within normal child development and be provided systematically within both naturalistic and structured learning settings. Assessments and interventions are provided using a multidisciplinary team approach. Program content, goals, instructional strategies and intensity of programming as based on individualized assessments of developmental level, strengths/learning style, and child/family needs within a balance of adult- and child-initiated interactions.

ABI intervention is primarily provided within naturally occurring environments, incorporating continuum of settings from one-on-one small groups to large group interventions. Emphasis is normal peer-mediated interactions. Skills are taught and maintained across persons, places and circumstances, with a focus on providing intrinsically motivating and naturally occurring reinforcements and contingencies. Structured learning opportunities are incorporated throughout the day to assist in the development of skills that are directly related to, and infused within, the child's natural routines during other parts of the day.

Challenging behaviors are addressed using a functional assessment approach by a) attempting to understand the intent of the unconventional behaviors, with b) subsequent replacement of more conventional means of interaction, and c) the adaptation of the extrinsic or environmental variable to lead to more successful interactions. Programming incorporates systematic data collection throughout the day and across multiple settings to determine course and direction of programming and to assess outcomes. Parents are fully involved within all aspects of assessment, program development and administration.

Denver Model of Intensive Therapy for Young Children with Autism

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The main goals of treatment for young children in the Denver Model are: (1) bringing the child into coordinated, interactive social relations for most of his/her waking hours, so that imitation and both symbolic and interpersonal (nonverbal, affective, pragmatic) communication can be established and the transmission of social knowledge and social experience can occur; and (2) intensive teaching to "fill in" the learning deficits that have

resulted from the child's past lack of access to the social world due to the effects of autism.

The main tools for accomplishing these two major treatment goals include teaching imitation, developing awareness of social interactions and reciprocity, teaching the power of communication, teaching a symbolic communication system, and making the social world as understandable as the world of objects, so that the child with autism comes into the rich learning environment of social exchange. Just as typically developing toddlers and preschoolers spend virtually all their waking hours engaged in the social milieu and learning from it, the young chi] with autism needs to be drawn back into the social milieu - a carefully prepared and planned milieu that the child can understand, predict and participate in.

Developmental Individual Based Model

Functional Profile Approach Model
Stanley Greenspan, Ph.D.
4938 Hampden Lane, Suite 229
Bethesda, MD 20814
301-657-2348

Dr. Greenspan's approach to children with special needs focuses on creating developmentally appropriate practices and tailoring the strategies to the needs of the child based on functional behavior (intentional-affective abilities), processing abilities (biological differences) and care giver styles. He considers three categories of experiences:

- Spontaneous floor time experiences, in which the adults follows the *child's* leads, thereby mobilizing the child's interest;
- Structured experiences, where work with the child consists of creating *highly* motivating challenges that must be solved and have affective value; and
- Motor-sensory and spatial-play experiences such as running, jumping, spinning and hiding things, using verbal and visual cues.

Geneva Centre Model

Geneva Centre for Autism
200-250 Davisville Avenue
Toronto, Ontario Canada M4S 1H2
416-322-7877
www.autism.net

The Geneva Centre model of service is based on 10 principles that form the foundation of the Centre's approaches:

1. Of foremost importance is the provision of current and comprehensive information about autism and all forms of intervention.

2. A comprehensive training program is necessary to assist parents and professionals in becoming effective interveners and advocates for individuals with autism/PDD.
3. Skill-building is viewed as the central aim of the Geneva Centre model. Neither the family n the child with autism/PDD is typically in need of "therapy", but both are in need of assistance to build the skills necessary to enhance progress.
4. Interactions with an individual with autism/PDD are based on an assumption of competence. Each individual is approached with respect appropriate to his or her age.
5. Interventions are planned to address all areas of difficulty outlined by the diagnosis, including communication, behavior and social skills.
6. Goals are determined individually for each child and the family is the center of intervention planning. The interventions themselves must be flexible and adapt to the needs and strengths o. the interveners.
7. While achieving independence is a desirable goal for individuals with autism, interdependent is equally valued. The ability to perform a skill in cooperation with - and with assistance from - others is a valuable skill in itself.
8. Community integration is a key factor in providing the individual with autism/PDD with learning opportunities in a variety of natural environments.
9. The Geneva Centre has an important role in providing support to community partners to ensure that individuals with autism/PDD can obtain services they need in the communities where they live.
10. The Geneva Centre is committed to maintaining information, training and skills in techniques that constitute the "cutting edge" of intervention practices for individuals with autism.

Incidental Teaching Model

Gail McGee
Emory University School of Medicine 718
Gatewood Road
Atlanta, Georgia 404-
727-8350

McGee and her colleagues (1999) present an intervention model that exemplifies the overlap that frequently exists between approaches based on different intervention traditions such as applied behavior analysis (ABA) and developmental models. Although grounded in ABA principles of learning, the incidental teaching approach and curriculum is more similar to developmental approaches than to traditional ABA. The model provides opportunities to intervene within the context of ongoing activities in a typical early childhood setting with a peer group, as well as in the family environment. Thus, generalization of language and social skills can be actively promoted. A major emphasis of this approach is on establishing and maintaining engagement to support social development.

LEAP Outreach Project

Phil Strain, Project Director
University of Colorado at Denver
P.O. Box 173364
Denver, CO 80217-3364
303-556-2771

The Learning Experiences, an Alternative Approach (LEAP) Preschool is a comprehensive interdisciplinary model of service delivery for preschool-age children with autism and their families. LEAP's approach includes the following components:

1. Systematic teaching for typical children that results in their daily social and communicative engagement of peers with autism;
2. Functional analysis of problem behaviors and communication-based strategies to replace the behaviors with more adaptive skills;
3. Systematic, daily data collection on IEP objectives and follow-up decision-making strategies regarding ongoing intervention;
4. Programmed generalization promotion strategies that are built into initial skill acquisition tactics;
5. Planning strategies to embed multiple response opportunities within naturally occurring, activities that are fun for all children;
6. Staffing to support family and child skill acquisition in home, school, community settings; an
7. A competency-based approach to behaviors skill-training for families.

Picture Exchange Communication System

Pyramid Education Consultants
5 Westbury Drive
Cherry Hill, NJ 08003
1-888-PECS-INC http://www.PECS.com

Picture Exchange Communication System (PECS) is a unique augmentative alternative training package that allows children and adults with autism and other communication deficits to initiate communication. It teaches a student/child to exchange a picture of a desired item with a teacher/parent, who immediately honors the request. The system goes on to teach discrimination of symbols and then puts them all together into simple "sentences." Children are also taught to comment and answer direct questions. The PECS approach helps many preschoolers to begin to develop speech, and it has been successful with adolescents and adults who have a wide array of communicative, cognitive and physical difficulties.

Preschool Education Programs for Children with Autism,
by Sandra Harris and Jan Handleman. Pro-Ed, Austin, TX, revised 2000.

This publication provides in-depth descriptions of 10 programs for children with autism. The descriptions are written by the directors of the various programs, who address their own philosophies and strategies as well as issues regarding teaching children with autism.

Prizant-Weatherby Language Development Therapy

Center for the Study of Human Development
Brown University
www.barryprizant.com

According to this approach, the most significant goal for working with young children is to help them participate as successful partners in social-communicative exchange with peers and family members, and to experience these interactions as emotionally fulfilling. The development of trusting and secure relationships is a foundation for success in social-communication with other: which in turn provides the motivation to problem-solve and learn in a social context. Development of these interactive skills occurs within transactions between a child and his or her communicative partners (e.g., caregivers, peers, and clinicians). Thus, this approach is a comprehensive intervention that recognizes how an individual child's profile of strengths and weaknesses have an impact on the social communicative transactions and how caregivers and peers contribute to developmental gains within the context of a broad social network.

Social Stories

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Jenison, MI 49428

Social Stories Unlimited is an approach to teaching social skills through improved social understanding and the extensive use of visual materials. It is designed to help parents and professionals understand the perspective of the student, while at the same time providing the student with information regarding what is occurring in a given situation, and why. There are two primary interventions: *Social Stories* (Gray & Garland, 1993, Gray, 1993: Gray & Jonker, 199[4] and *Comic Strip Conversations* (Gray, 1994).

These two interventions have been found to be an effective tool for teaching social and communication skills to a wide variety of students in a wide variety of situations. They were originally developed for students with autism, but are also applicable to other students with spec needs, including students with learning, emotional or cognitive disorders. It has also resulted in significant decreases in stuttering in young children. In addition, "social stories" are rapidly becoming part of many preschool and elementary school programs. A "social story" is a short story that describes a situation in terms of relevant social cues and common

responses, providing a student with accurate and specific information regarding what occurs in a situation and why. "Comic strip conversations" identify what people say and do, and emphasize what people may t thinking.

TEACCH

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(919) 966-2174 www.unc.edu/depts/teacch/aboutus.htm

The TEACCH approach includes a focus on the person with autism and the development of a program around the person's skills, interests and needs. The major priorities include centering the individual, understanding autism, adopting appropriate adaptation, and using a broadly base intervention strategy that builds on existing skills and interests. TEACCH emphasizes individualized assessment to understand the individual and the "culture of autism."

Structured teaching is an important priority because of the TEACH research and experience, which show that structure fits the "culture of autism" effectively. Organizing the physical environment, developing schedules and work systems, making expectations clear and explicit, and using visual materials have been effective ways of developing skills and allowing people with autism to use these skills independent of direct adult prompting and cueing. Cultivating strengths and interests (rather than drilling solely on deficits) is another important priority. The TEACCH approach is broad-based, taking into account all aspects of the lives of people with autism and their families.

Young Autism Program

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310-825-2319 www.lovass.com

The Lovaas approach suggests the following constitutes an appropriate therapeutic intervention:

1. A behavioral emphasis: This involves not only imposing structure and rewarding appropriate behaviors when they occur, but also applying more technical interventions, such as conducting discrete trials.

2. Family participation: Parents and other family members should participate actively in treating their child. Without such participation, gains made in professional settings such as special education programs, clinics or hospitals rarely lead to improve functioning in the home.

3. One-to-one instruction: For approximately the first six months of treatment, instruction should be one-to-one rather than in a group because at this stage children with autism learn only in one- to-one situations. This training need not be administered by degreed professionals, but can be j of as effective if delivered by people who have been thoroughly trained in the behavioral treatment autistic children, such as undergraduate students or family members.

4. Integration: When a child is ready to enter a group situation, the group should be as "normal" or "average" as possible. Autistic children perform better when integrated with normal children than when placed with other autistic children. Autistic children require explicit instruction from trained tutors on how to interact with their peers.

5. Comprehensiveness: Autistic children initially need to be taught virtually everything. They have few appropriate behaviors, and new behaviors have to be taught one by one.

6. Intensity: An intervention requires a very large number of hours, about 40 hours a week, the majority of which should consist of remediating speech and language deficits. Later, this time may be divided between promoting peer integration and continuing to remediate speech and language deficits.

Colorado Autism Resources

Autism Society of America, Colorado Chapter
5031 West Quarles Drive
Littleton, CO 80128 303-987-1440

Autism Society of the Pikes Peak Region
Alison Seyler
918 Crown Ridge Drive
Colorado Springs, CO 80904 719-630-7072

On-Line Resources

An on-line "NetFind" search by the Colorado Autism Task Force has found thousands of matches the term "autism." The following site offer a good "beginning browser" overview, and most of the sites offer additional links to even more information.

The Autism Society of America (ASA) http://www.autism-society.org

Autism Biomedial Information Network http://wwwautism-biomed.org

Autism Research Institute http://wwwautism.com

Center for the Study of Autism (Autism.com) http://www-info.com

Autism Resources http://autism-info.com

CAN - The Cure Autism Now Foundation http://wwwcanfoundation.org

CSAAC (Community Services for Autistic Adults and Children) http://www.caaac.org

Families for Early Autism Treatment (FEAT) http://www.feat.org

"Links-Go" Autism Page(s) http://www.links2go.com/topiclautism

Division TEACCH - Autism Information (UNC-CH)" http://www.unc.edu/depts/teach

New York DOH Autism Page http://www.albany.edu/psy/autism/autism. html

Books and Literature

The following books, articles and/or publications are listed alphabetically. The order does not reflect any preference or order of importance.

Behavioral Intervention for Young Children with Autism, by Catherine Maurice, Gina Green and Stephen Luce. Pro-Ed, Austin, TX, 1996.

The Child with Special Needs, by Stanley Greenspan and Serena Wieder. Merloyd Lawrence Books/Addison-Wesley, Reading, MA, 1998.

Individualized Assessment and Treatment for Autistic and Developmentally Disabled Children: Teaching Strategies for Parents and Professionals, Vol. 2, by Eric Shopler, Robert Jay Reichler and Margaret Lansing. Pro-Ed, Austin, Texas, 1980.

Let Me Hear Your Voice: A Family's Triumph Over Autism, Catherine Maurice. Fawcett Columbine/Ballantine Books, NY, 1993.

Positive Behavioral Support, by Lynn Kern Koegel, Robert L. Koegel and Glen Dunlap. Paul H. Brookes Publishing, Baltimore, MD, 1996.

Right From the Start - Behavioral Intervention for Young Children with Autism: A Guide for Parents and Professionals, by Sandra L. Harris and Mary Jane Weiss. Woodbine House, *Bethesda, MD, 1998.*

Targeting Autism, by Shirley Cohen. University of California Press, Berkeley, CA, 1998.

Teaching Children with Autism: Strategies for Initiating Positive Interactions and Improving Learning Opportunities, by Robert L. Koegel and Lynn Kern Koegel. Paul H. Brookes Publishing, Baltimore, MD, 1996.

Teaching Children with Autism: Strategies to Enhance Communication and Socialization, by Kathleen Ann Quill (Ed.). Delmar Publications, 1995.

Visual Strategies for Improving Communication: Practical Supports for School and Home, Vol. I, by Linda A. Hogdon. QuirkRoberts Publishing, Troy, NO, 1995.

You, Your Child and "Special" Education: A Guide to Making the System Work, by Barbara Coyne Cutler. Paul H. Brookes Publishing, Baltimore, Maryland, 1993.

Publications by People With Autism

Emergence: Labeled Autistic, by Temple Grandin and Margaret M. Scariano. Warner Books~ 1996.

Nobody Nowhere: The Extraordinary Autobiography of an Autistic, by Donna William. Avon Books, 1994.

Somebody Somewhere: Breaking Free from the World of Autism, by Donna Williams. Times Book, 1995.

Thinking in Pictures: And Other Reports from My Life with Autism, by Temple Grandin and Oliver W. Sacks. Vintage Books, 1966.

Glossary of Terms

The following list of terms and acronyms has been adapted, with permission from the "List of Terms" of the Autis d Society of America (http://www.autism-society.org/packages/glossary.httnl, website maintained by Ben Dorman and Jennifer Lefever).

AAP: American Academy of Pediatrics
ABA: Applied Behavior Analysis
ADA: Americans with Disabilities Act of 1990
ADD: Administration of Developmental Disabilities
ADD: Attention Deficit Disorder
AD/HD: Attention-Deficit/Hyperactivity Disorder
AIT: Auditory Integration Training *(sometimes called AT for Auditory Training)*
AMA: American Medical Association
ARC: Association for Retarded Citizens
ARI: Autism Research Institute
ASA: Autism Society of America
ASAF: Autism Society of America Foundation *(formed in 1996 to advance research that will yield new information about autism)*
ASD: Autism Spectrum Disorders
ATP: Autism Tissue Program
Aversive: Controversial behavior-reduction approach
Behavior Modification: Techniques used to change behavior through reinforcement
BD: Behavior Disorder
CAN: Cure Autism Now
CAP: Client Assistance Program *(administered by the Office of Special Education and Rehabilitative Service provides information and assistance individuals seeking services under the Rehabilitation Act)*
CARS: Childhood Autism Rating Scale *(a diagnostic tool)*
Continuum: Used to describe a full range
DAN! Defeat Autism Now!
DD: Developmental Disabilities
DEC: Division of Early Childhood of the Council for Exceptional Children
DMG: Dimethylglycine (a food substance resembling a vitamin)
DSM: Diagnostic Statistical Manual *(produced by the American Psychiatric Association and now in its fourth edition, 1994)*
DTT: Discrete Trial Teaching
Echolalia: The repetition or parroting of words or phrases
ED: Emotional Disorder
ED: Education Department
EDGAR: Education Department General Administrative Regulations
EHA: Education of All Handicapped Children Act *(now named Individuals with Disabilities Education Act, or IDEA; reauthorized and amended in June of 1997)*
Epidemiology: The distribution of diseases or disorders through the population
ERIC: Education Resources Information Center *(a computer database of educational information run by the Council of Exceptional Children)*
ESY: Extended School Year
Etiology: The cause of a disorder
FAPE: Free Appropriate Public Education
FERPA: Family Education Rights and Privacy Act *(governs the privacy of a student's school records)*
FC: Facilitated Communication
Fragile X: Refers to the X chromosome; a genetic condition affecting cognitive, physical and sensory development
HCBS: Home- and Community-Based Services
I&R: Information and Referral service
IBI: Intensive Behavioral Intervention
IDEA: Individuals with Disabilities Education Act of 1990 *(P.L. 102-119), amended by the IDEA of 1997 (previously called EHA - see earlier listing)*
IEP: Individualized Education Program *(document that describes the agreed upon services to be provided by the school to a child with a disability; covers ages 3-21)*
IFSP: Individualized Family Service Plan *(similar to the IFSP but for ages birth3 years)*
IHP: Individualized Habilitation Program *(often similar to an IEP for adults with disabilities)*
IPP: Individual Program Plan
IRCA: Indiana Resource Center for Autism
ITP: Individual Transition Plan *(for ages 16-21)*
Inclusion: Placement of a child with a disability with non-disabled peers
JADD: Journal of Autism and Developmental Disorders

Glossary of Terms

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LKS: Landau-Kleffner Syndrome *(a rare disorder marked by sudden loss of language between the ages of 3-7 after a period of normal development. Individuals with LKS are also characterized by an abnormal EEG.)*

LD: Learning Disability LEA: Local Education Agency IRE: Least Restrictive Environment

LEA: Local Education Agency

LRE: Least Restrictive Environment

MAAP: A newsletter for families of more advanced individuals with autism, Asperger's Syndrome and Pervasive Developmental Disorders

Mainstreaming: Placement of a child in a classroom with non-disabled peers *(versus a separate classroom)*

MH: Mental Health

MR: Mental Retardation

NAAR: National Alliance for Autism Research

NAPAS: National Association of Protection and Advocacy Systems

NASDSE: National Association of State Directors of Special Education

NBD: Neurobiological Disorders

NECTAS: National Early Childhood Technical Assistance System

NICHCY: National Information Center for Children and Youth with Disabilities

NICHD: National Institute of Child Health and Human Development

NIDCD: National Institute of Deafness and Other Communication Disorders

NIH: National Institutes of Health

NIMH: National Institutes of Mental Health

NINDS: National Institute of Neurological Disorders and Stroke

NSAC: National Society for Autistic Children *(previous name of the Autism Society of America)*

OCD: Obsessive Compulsive Disorder

OCR: Office of Civil Rights

OSEP: Office of Special Education Programs

OSERS: Office of Special Education and Rehabilitative Services

OT: Occupational Therapy

P&A: Protection and Advocacy Agency *(designed to protect individuals with disabilities; every state has one)*

Part B: Part B of IDEA *(addresses special education services, ages 3 through 21)*

Part C: Part C of IDEA *(addresses early intervention services for children birth to 3)*

PASS: Plan for Achieving Self-Support *(employment program for adults with disabilities)*

PTI: Parent Training Information Center

Perseveration: The practice of repeating a behavior over and over, or the habit of pursuing a topic relentlessly

PDD: Pervasive Developmental Disorder

P.L. 94-142: Public Law 94-142, the Education for All Handicapped Children Act *(amended in 1990 to become the IDEA)*

PT: Physical Therapy

Respite: Periodic- and temporary care provide for parents to have time away from children with- special needs

Rett's Disorder: A progressive disorder in girls marked by a period of normal development and then loss of previously acquired skills

SEA: State Education Agency SED: Serious Emotional Disorder SI: Speech Impairment

SED: Serious Emotional Disorder

SI: Sensory Integration

SIB: Self-Injurious Behavior

SLP. Speech-Language Pathologist

SSA: Social Security Administration

Slimming: The informal term for self stimulation

SSI. Supplemental Security Income

SSDI: Social Security Disability Insurance

STOMP: Specialized Training of Military Personnel

TEACCH: The Division for the Treatment a Education of Autistic and Related Communication Handicapped Children *(a North Carolina organization)*

UAP: University Affiliated Program

VOC-ED: Vocational Education