

**ADVANCED TOPICS IN INTERVENTION FOR STUDENTS WITH AUTISM
SPECTRUM DISORDER:
TEACCH INTERVENTION**

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Abstract

According to research by the American Psychiatric Association (2009), over a half million people in the United States today have autism or some form of pervasive developmental disorder. Its prevalence rate makes autism one of the most common developmental disabilities. Yet most of the public, including many professionals in the medical, educational, and vocational fields, are still unaware of how autism affects people and how they can effectively work with individuals with autism. Autism is a life-long developmental disability that prevents people from understanding what they see, hear, and otherwise sense. This results in severe problems with social relationships, communication, and behavior. It is a complex neurological disorder that affects the functioning of the brain.

This research paper will predominantly focus on the intervention approach called TEACCH founded by Eric Schopler in the early 1970's which established the foundation for structured teaching by demonstrating that people with autism process visual information more easily than verbal information. Other interventions will be discussed such as: (a) applied behavior analysis focusing on discrete trial and teacher directed approaches; (b) applied behavior analysis focusing on incidental teaching; (c) applied behavior analysis focusing on verbal behavior; (d) natural language paradigm; (e) developmental approaches; (f) medical dietary interventions; and (g) SCERTS model.

Introduction

According to research by the American Psychiatric Association (1994), over on half million people in the United States today have autism or some form of pervasive developmental disorder. Its prevalence rate makes autism one of the most common developmental disabilities. Yet most of the public, including many professionals in the medical, educational, and vocational fields, are still unaware of how autism affects people and how they can effectively work with individuals with autism (Luiselli, Russo, Christian, & Wilczynski, 2008). Autism is a life-long developmental disability that prevents people from understanding what they see, hear, and

otherwise sense. This results in severe problems with social relationships, communication, and behavior (Heflin, & Alaimo, 2007). It is a complex neurological disorder that affects the functioning of the brain (Bijou, Birnbrauer, Kidder, & Tague, 2001).

Autism symptoms can be present in a variety of combinations and may accompany other disabilities. Some people with autism have normal levels of intelligence, while most people with autism have some level of intellectual disability, ranging from mild to severe. This range is often referred to as high-functioning autism to low functioning autism (Bryson, 1996). There may be a range of difficulties in expressive and receptive language and communication. Research suggests that up to 50% of people with autism do not develop functional speech. For those who do, speech may have unusual qualities and have limited communicative functions ((Bristol, Cohen, et al., 1996).

Individuals with autism have difficulties with social interaction and behavior, but the extent and type of difficulty may vary. Some individuals may be very withdrawn, while others may be overly active and approach people in peculiar ways. They have problems with inattention and resistance to change (Bregman, 2001). In addition, they often respond to sensory stimuli in an atypical manner and may exhibit odd behaviors such as hand flapping, spinning, or rocking. They may also demonstrate unusual uses of objects and attachments to objects (Luiselli, Russo, Christian, & Wilczynski, 2008).

Autism is a complex developmental disability that typically appears during the first three years of life. The result of a neurological disorder that affects the functioning of the brain, autism and its associated behaviors have been estimated to occur in as many as 1 in 500 individuals (Centers for Disease Control and Prevention, 1997). Moreover, autism is four times more prevalent in boys than girls. Autism has nothing to do with racial, ethnic, or social boundaries.

Although autism manifests itself at an early age, it does not worsen as a child ages (Seip, 2002). Individuals with autism may experience sensitivities in the five senses of sight, hearing, touch, smell, and taste. However, autism is not a condition a child will grow out of, and is not caused by inadequate parenting (Luiselli, et al., 2008). The causes are unknown; however, much is being done in research to find answers to the unknown (U.S. Department of Education, 2001).

Researchers from all over the world are devoting considerable time and energy in finding the answer to the critical question, what causes autism? Medical researchers are exploring different explanations for the various forms of autism. Although a single specific cause of autism is not known, current research links autism to biological or neurological differences in the brain (Seip, 2002). Autism is not a mental illness, it is not from bad parenting, and there is no medical testing for diagnosing autism. An accurate diagnosis must be based on observation of the individual's communication, behavior, and developmental levels. Since the characteristics of the disorder vary so much, a child should be evaluated by a multidisciplinary team which may include a neurologist, psychologist, developmental pediatrician, speech/language therapist, learning consultant, or another professional knowledgeable about autism (Sigman, Dissanayake, Arbelle, & Ruskin, 1997).

According to research by the U.S. Department of Education (2009), people with autism share some common features and no two individuals are the same. The pattern and extent of difficulties may change with development. The common characteristics help us to understand general needs associated with autism, but it is important to combine this information with knowledge of the specific interests, abilities, and personality of each student (Minshew, 1998).

No single method for teaching students with autism is successful for all students. In addition, students' needs change over time, making it necessary for teachers to try other

approaches such as, instructional approaches, strategies for classroom management, strategies for communication development, strategies for teaching social skills, and teaching functional skills (Cohen & Volkmar, 1997).

This research paper will predominantly focus on the intervention approach called TEACCH (Treatment and Education of Autistic and Related Communication Handicapped Children) founded by Eric Schopler in the early 1970s which established the foundation for Structured Teaching by demonstrating that people with autism process visual information more easily than verbal information. Other interventions will be discussed such as: (a) applied behavior analysis focusing on discrete trial and teacher directed approaches; (b) applied behavior analysis focusing on incidental teaching; (c) applied behavior analysis focusing on verbal behavior; (d) natural language paradigm; (e) developmental approaches; (f) medical dietary interventions; and (g) SCERTS (Social Communication and Emotional Regulation, and Implementing Transactional Supports) model.

TEACCH

Review of Literature

TEACCH is an effective Structured Teaching system that focuses on the person with autism and the development of a program around the person's skills, interests, and needs. It is based on the idea that the environment should be adapted to the individual with autism, not the child to the environment, as is the case in many educational approaches such as Applied Behavior Analysis (ABA). This approach is also different from other educational approaches in that there is no standard or normal behavior that all people should fit, and individuality is emphasized (Division TEACCH, 2006) which promotes effectiveness. The TEACCH program was developed by Eric Schopler in the late 1970s and is administered through the University of

North Carolina at Chapel Hill. The principles of TEACCH's Structured Teaching include: (a) understanding the culture of autism; (b) developing an individual person and family centered plan for each student, rather than using a standard curriculum; (c) structuring the physical environment in a way that will assist student with autism to understand meaning; (d) using visual supports to make the sequence of daily activities predictable and understandable; and, (e) using visual supports to make individual tasks understandable (Mesibov, Shea, & Schopler, 2005).

TEACCH provides accessibility to grade levels of pre-school, elementary, middle, high school, and adults that establish its population to serve. The verbal skills can exist at the levels of nonverbal, mixed, or verbal. Cognitive levels can exist as classic or high functioning. In addition, the areas addressed by TEACCH are pre-academic, cognitive, adaptive behavior, daily living, communication, speech and language, social skills, and emotional stability. All of these areas mentioned have been effective and continue to be widespread with positive results (Watson, Lord, Schaffer, & Schopler, 1989).

TEACCH aims to educate the individual and allow them to understand the world around them as well as other people's behaviors for effectiveness. For instance, some children with autism throw tantrums when they are frustrated or upset. The TEACCH approach would search for the cause of the tantrums and teach the individual how to signal such frustration through communication skills. The TEACCH approach allows the individual with autism to understand how to use communication to signal their needs and wants and by discovering the underlying reasons for behavior problems (Sugai, Horner, et al., 1999). The child's learning abilities are assessed using the Psycho-Educational Profile (PEP) and teaching strategies are subsequently designed to improve communication skills, social skills, and coping skills. Such skills allow individuals with autism to be as independent as possible. TEACCH employs Structured Teaching

in every classroom to assist students in developing independent work skills. Individuals in such classrooms learn how to follow a schedule and complete independent work in a highly Structured Teaching environment (Description TEACCH, 2005).

Structured Teaching Using TEACCH

Structured Teaching is an intervention philosophy developed by the University of North Carolina, Division TEACCH. Structured Teaching is an approach in instructing children with autism. It allows for implementation of a variety of instructional methods, such as: (a) visual support strategies, (b) picture exchange communication system (PECS), (c) sensory integration strategies, (d) discrete trial, (e) music/rhythm intervention strategies, and (f) Greenspan's Floortime (TEACCH Staff, n.d.).

TEACCH is one of the many approaches in working with children with autism. Structured Teaching is based upon an understanding of the unique features and characteristics associated with the nature of autism. It describes the conditions under which a person should be taught rather than "where" or "what." Structured Teaching is a system for organizing the environment for students, developing appropriate activities, and helping people with autism understand what is expected of them (Stokes, 2005). In addition, through Structured Teaching the utilization of visual cues help children with autism to focus on the relevant information which can, at times, be difficult for the person with autism to distinguish from the non-relevant information. Structured Teaching has proven to be an effective approach as a part of TEACCH. Moreover, Structured Teaching addresses challenging behaviors in a proactive manner by creating appropriate and meaningful environments that reduce the stress, anxiety and frustration which may be experienced by children with autism. Challenging behaviors may occur due to language comprehension difficulties, expressive language difficulties, social relations

difficulties, resistance to change, organizational difficulties, distractibility, and sensory processing difficulties (Stokes, 2005).

Autistic students respond well to structure, and this has been established. Eric Schopler, in his doctoral dissertation, established the foundation for Structured Teaching by demonstrating that people with autism processed visual information more easily than verbal information. Following this study and related observations of children with autism in the 1960's, Structured Teaching was developed as a program for working with children with autism (Mesibov, Schopler, & Hearsey, 1994). According to division TEACCH, Structured Teaching helps people with autism by organizing their environments providing clear, concrete, and meaningful visual information. An early study by Bristol and Schopler (1983) demonstrated the effectiveness of Structured Teaching by altering the degree of structure in a teaching program for students with autism. The investigators found improved effective attending, relatedness, affect, and general behavior in the structured learning situation. Other investigators have reported similar success with Structured Teaching approaches to be effective (Lockyer & Rutter, 1969). Marcus, Lansing, Andrews, and Schopler (1978) showed that parents could be trained to use Structured Teaching principles with their children. Using pre and post videotaped observations of parent/child interactions to assess the impact of six to eight hours of parent training; they demonstrated improved effectiveness in the parents' use of Structured Teaching techniques. The parent/child interaction was assessed as more positive and enjoyable. Also, there were increase in child cooperation and positive behaviors. TEACCH also require increased organization in the learning environment on a student's level of understanding which can help to alleviate or moderate challenges. The environment should be modified for physical functioning, scheduling, work system areas, task completion for final outcomes and effectiveness (Division TEACCH, 2006).

Modifying the Environment

The principle of modifying the environment to accommodate the needs of students with autism is the foundation for Structured Teaching (Schopler, Mesibov, & Hearsey, 1995). There are four main components connected to this process: physical organization, scheduling, work system, and task organization.

Physical Organization. The physical organization has to do with the layout of the classroom in reference to teaching. The physical organization helps or hinders a student's independent functioning and his recognition of compliance with rules and limits. The student becomes familiar with visual information to direct their activities in an organized manner. The arrangement of classroom furniture can help or hinder a student's independent functioning and his recognition and compliance with rules and limits. Many children with autism have organizational problems, not knowing where to be and how to get there by the most direct route. Because of receptive language difficulties, they will often not understand directions or rules. Structuring the environment will give them visual cues to help them understand. Teachers need to structure the environment so it is not as distracting. As a teacher plans the physical structure of the classroom it is important to remember to consider individual needs of students. As students learn to function more independently, the physical structure can be lessened gradually. Teachers must consider distractible settings, consistent work areas, accessibility, exits, leisure areas, boundaries, free time, marked areas, shelves, and other furniture; also, age appropriate must have the highest consideration (TEACCH Staff, n.d.).

Scheduling. Students with autism have problems with sequential order of memory and organization of time, and they do need schedules. This enhances a student's functioning knowing what is going to take place and in what sequence. Their schedule lets them know where they

should go next. Also, students with low initiative may be more motivated to complete a difficult or dreaded task if they see on their schedule that it will be followed by as more enjoyable tasks or activity. The student must understand the overall class schedule, and his/her own schedule. The overall classroom schedule outlines the events of the day. It does not specify work activities for students but does show general work times, break times, and other pertaining information. This helps to provide less anxiety and aggression (Schopler, Mesibov, & Hearsey, 1995).

Work System. Work systems tell the student about activities, when they should be completed in independent work areas, and visually specifying what and how much work must be done for each task to be completed (Schopler, Mesibov, & Hearsey, 1995). The work system informs the students about individual and group work. The teacher should have visual access to the work areas, and there should be designated places for students to put finished work. There should be boundaries and observation areas in the room for an effective work system (TEACCH Staff, n.d.).

Task Organization. The student learns what task to do independently, what needs to be done within a task, and how many items must be completed to derive at the final outcomes (Schopler, Mesibov, & Hearsey, 1995). In addition, task must be presented in an organized manner. Also, does the teacher have the student's attention before directions of the task are given? Is the verbal language used specific to a student's level of understanding and are gestures paired with verbal instructions to help a student understand when he/she is having difficulty comprehending? Task organization is essential for presentation and communication (TEACCH Staff, n.d.).

TEACCH is an effective approach for individuals with autism. It continues to provide services to people with autism and their families in the United States and all over the world while

revolutionizing concepts and approaches. Grounded in a strong scientific and educational tradition, Structured Teaching has evolved and expanded through the day-to-day clinical activities of the program. Division TEACCH is a vibrant example of how science and education are so effective. Both can contribute to society and society can inspire the evolution of science and education connecting the two cooperatively with shared goals. There have been studies and much research to support the effectiveness of the TEACCH approach to students with autism (Division TEACCH, 2006).

Ten Research Studies to Support TEACCH

First, several outcome studies have examined parent reports of the effectiveness of Structured Teaching and the TEACCH intervention programs. Schopler, Mesibov, and Hearsey, (1995) received completed questionnaires from 348 families who had participated in the TEACCH program. Parents consistently and with overwhelming motivation and enthusiasm, reported that their relationships with Division TEACCH were positive, productive, and enriching. Most of the parents were impressed with the high percentage of their adolescent and adult children with autism who were still functioning in community-based programs. Of the families with older children among the respondents, 96% reported that their children were still living in their local communities. This response compared favorably with concurrent follow up studies showing that between 39% and 74% of autistic adolescents and adults were generally in large residential programs outside of their local communities (DeMyer, et al., 2003). The number of clients successfully working in the TEACCH Supported Employment Program is another important outcome measure of effectiveness. Perhaps even the most important because it represents the culmination of TEACCH many intervention activities, early identification, parent training, education, social and leisure skill development, communication training, and vocational

preparation. These clients earned money while learning, and receiving minimum wages for at least 15 to 28 hours a week (Schopler, Mesibov, & Hearsey, 1995).

Second, Bristol and Schopler (1983) have reported on the relationship between family stress and support networks among consecutive referrals to the TEACCH program. Parents reported that TEACCH was the most helpful between both their formal and informal support systems in reducing stress. TEACCH had developed the skills necessary for children and adults to function independently outside the classroom. Training, intervention activities, skill development for various jobs, and cognitive learning enhanced preparation. Division TEACCH used three models to support networking which were individual competitive placement, dispersed enclaves, and mobile crews. Parents and young adults felt important and motivated concerning society (Bristol & Schopler, 1983).

Third, according to Tsang, Shek, Lam, Tang, and Cheung (2007), a longitudinal study was conducted with 34 children with autism to evaluate the usefulness of the TEACCH program for Chinese preschool children in Hong Kong. Eighteen children received full-time, center-based TEACCH training. The control group included 16 children who received different types of individualized or group training, but not TEACCH training. Children in the TEACCH group showed better outcomes at post-test. The research study provided initial support for the effectiveness of using the TEACCH program with Chinese children (Tsang, Shek, Lam, Tang, & Cheung, 2007).

Fourth, a research study of the use of a Structured Teaching approach in adults with autism was used in a residential home in Greece. According to Siaperas, & Beadle-Brown (2006), using interview questionnaires and systematic naturalistic observations, this study explored the effectiveness of Structured Teaching for 12 adolescents and adults with autism who

had never received any other intervention or training. The categories evaluated were personal independence, social abilities, and functional communication. After a period of six months, the adolescents and adults showed significant progress in these three areas.

Fifth, according to Panerai, Ferrante, and Zingale (2002), who conducted a research study on the benefits of the TEACCH program as compared with a non-specific approach. The two educational treatments were compared, the TEACCH program and the integration program for individuals with disabilities. Two groups of eight subjects were matched by gender, chronological and mental age. The TEACCH program was applied to the experimental group, while the control group was integrated in regular schools with a support teacher. The PEP-Revised and the Vineland Adaptive Behavior Scale were administered twice with a one-year interval between assessments. The scores of the experimental group increased more than those of the control group. Statistically significant differences were obtained in both groups because of the differences in the two approaches. The TEACCH program was the most effective with huge differences.

Sixth, a research study was done on the use of Structured Teaching for treatment of children with autism and severe and profound mental retardation by Panerai, Ferrante, Caputo, and Impellizzeri (1998). A multidimensional assessment procedure was used to evaluate the effects of the TEACCH program principles and strategies after twelve and eighteen months of structured intervention. The sample was composed of eighteen children and adolescents with autism, with a mean chronological age of thirteen and a mean mental age of sixteen months. Results showed an increase in working skills and functional communication abilities. In addition, Structured Teaching seemed to reduce maladaptive behaviors, allowing easier management of behavioral problems. Through TEACCH physical organization, scheduling, task completion

strategies, and concept these children and adolescence improved (Panerai, Ferrante, Caputo, & Impellizzeri, 1998).

Seventh, a research study was done by Potter & Whittaker (2002) concerning teaching the spontaneous use of semantic relations through multi-pointing to a child with autism and severe learning disabilities. This study examined a three element teaching model involving highly structure teaching, engineered environments, and spontaneous communication. The focus was on spontaneous communication, undertaken through practitioner research, with a nonverbal five-year-old boy with autism and severe learning disabilities. The three elements were employed to encourage multi-pointing. Results indicated high rates of spontaneous use of multi - pointing to indicate "location," "agent," and "object."

Eighth, according to Ozonoff and Cathcart (1998), the effectiveness of a home program intervention for young children with autism was conducted. This research study evaluated the effectiveness of a TEACCH based home program intervention for children with autism. Parents were taught how to work with their preschool child with autism in the home setting, focusing on cognitive, academic, and prevocational skills essential to later school success. Two matched groups of children (two through six years old) were compared, a treatment group and a non-treatment control group, each consisting of eleven participants. Results demonstrated that children in the treatment group improved significantly more than those in the control group on imitation, fine-motor, gross motor, and nonverbal conceptual skills. Progress in the treatment group was three to four times greater than in the control group on all outcome tests (Ozonoff & Cathcart, 1998).

Ninth, Francke and Geist (2003) did a study on the effects of teaching play strategies on social interaction for a child with autism. The three-year-old boy with autism was taught play

skills using a Structured Teaching model TEACCH. At the end of the nine-week period, significant changes were observed in how the boy engaged in social play with adults and peers.

Tenth, Craig, Telfer, and Sexton (2005) conducted a case study on a child with an autism spectrum disorder and hyperlexia. Hyperlexia is a condition characterized by precocious single-world recognition skills and weaker comprehension skills. The student demonstrated advanced writing skills and a strong general preference for learning materials presented visually rather than orally. His speech language pathologist, parents, tutors, and teachers used his exceptional skills in decoding and writing to scaffold his growth in oral language comprehension and interactive turn taking over time. His reading skills supported his learning to comprehend Wh questions presented orally, and to take turns appropriately in individual and group language intervention. In addition, visual scaffolding was used to prime the language necessary to complete lessons in the academic content areas. Overall, the case study underscores the need for clinicians to look at a child's behavioral profile in a comprehensive way so that no potential supports for language growth are overlooked. Through six months of TEACCH, the student improved skills in language by modifying the environment to accommodate deficits. In addition, parent and therapist (speech and language) collaboration enhanced techniques to be continued at home. Unique educational programs were designed for the student on the basis of regular assessments of abilities. Also, Structured Teaching was the key to success (Craig, Telfer, & Sexton, 2005). The student gained success and improvement over the six-month period.

Summary and Analysis of Research

Over the years, there has been considerable discussion about the differences in the provision of intervention with children with autism spectrum disorders, and what form this intervention should take. Parents and educators are often confronted with many different

approaches that may be employed with children with autism. Two methodologies that are often positively recognized among those that are effective with persons with autism are that of Division TEACCH's Structured Teaching Approach and ABA. Many experts believe that children with autism are less likely than other children to learn from the everyday environment (Lovass, 1987). The ABA approach attempts to fill this gap by providing teaching tools that focus on simplified instructional steps and consistent reinforcement. Research shows that ABA works for children with autism; however, this is true, but the behavior cannot be modified without Structured Teaching. TEACCH is basic and the approach, direct instruction of skills occur at one-to-one teaching tables and once mastered skills are practiced for skill retention, generalization, and the development of independent functioning at independent work areas (Mesibov, Shea, & Schopler, 2005a). If a student is structured and directed with the TEACCH approach, the behavior will be positive, and the student will learn to be independent. ABA is the scientific study of behavior to meet a certain end (Baer, Wolf, & Risley, 2001), but the TEACCH approach is more effective to produce the all around student independence. The ABA approach cannot be done independently without TEACCH and be effective.

From another perspective, the Natural Language Paradigm is viewed by many as an application of Incidental Teaching Procedures. The aim is to increase a child's motivation to learn, monitoring of his/her own behavior, and initiations of communication with others. Studies have indicated the Natural Language Paradigm improve academic performance, increase language and play skills, and reduce disruptive behavior in individuals with autism (Delprato, 2001). These skills are incorporated in the TEACCH approach through the entire process and organization. The system is built on structure that will enhance communication, monitor behavior, and produce positive outcomes for functioning.

The Developmental Approaches are based on creative abilities, cognitive development, psycho-social development, technical/manipulative development, and multiple intelligences. Considerations of these theories can be of great value for children with autism and should be utilized for much creativity; however, it addresses a select population of children with autism. TEACCH will give the basis for learning and progressing in life, and the Developmental Approach will only address stages of design and graphic development (Campbell, 1994).

Dietary Intervention should always be carried out in conjunction with a qualified medical practitioner. Children will perform better with less toxic substances in the body. The low functionality of the body's detoxification system means that many other substances can build up in the body causing extra difficulty, and if not addressed properly, can mask any benefits enjoyed from the removal of opioids. Vitamins are necessary for children with autism, especially vitamin C, Omega three, six, and nine. In addition, vitamin B6 and DMG with Folinic Acid and B12 will enhance concentration and attention. Using the TEACCH approach, problems with diet will surface to the teacher. Students cannot function well, if their diets are improper. This can be detected through the TEACCH approach (Sherer & Schreibman, 2005).

Strengths of TEACCH

The strengths of TEACCH are toward emphasis on systems and organizational strategies as a method of intervention to address the neuropsychological deficits of autism. Utilizing the strengths of individuals with autism such as their routine, desire for predictability, strong visual memory and detailed processing are major elements of intervention approach within the TEACCH model. The work system is taught at the direct instruction table and then moved to the independent worktable to promote independent functioning skills. The use of techniques that facilitate communication, acquisition of social skills, development of greater social perspective

taking ability, and various other coping strategies have been encouraged. Adaptation to the curriculum and environment to promote greater independent functioning, preparation for vocational placement, teaching flexibility in responding to varied directions and visual cues and strategies all promote TEACCH. The support for the underlying weaknesses in communication, social interaction, and behavioral coping/responding that characterize autism spectrum conditions have been introduced through TEACCH. Building understanding and imparting meaningful experiences to the individual with autism through system approaches are seen as essential to helping individuals with autism adapt to situations and function more effectively in an ever changing world (Hume & Odom, 2007).

Weaknesses of TEACCH

In the initial phases of work with families of children with autism in the early years of the TEACCH program, more of the ABA type interventions were utilized by teachers and practitioners working with autism who were affiliated with the program, as was consistent with the “behaviorist” thinking of the day. The roots of Structured Teaching grew out of a strong behaviorist tradition, which emphasized reinforcement based procedures, but over time psychologists and educators began to recognize the limitations of such operant-based learning as a “one size fits all” model for learning across the human continuum (Baer, Wolf, & Risley, 2001).

Another weakness of TEACCH is sometimes too much one on one teaching. Students with autism become dependent with the aide, or the teacher, and sometimes refuse to work independently starting distractible gestures.

Limitations of TEACCH

There are recognizable differences of students with autism. These students must learn and their challenges must be addressed to confront a rapidly changing world; therefore, TEACCH must be incorporated with other interventions as well to produce the best results. Moreover, the value, success, and effectiveness of TEACCH are limited by those students who have autism.

Conclusion

There are recognized differences in how professionals who implement Structured Teaching strategies and the other intervention (ABA, Natural Language Paradigm, Developmental Approaches, TEACCH, Medical/Dietary, and SCERTS) approaches when working with children or adults with autism. These techniques are similarly rooted in a strong behaviorist tradition. They are all concerned with the improvement of the lives of individuals with autism and their ability to learn and address challenges and confront them in a rapidly changing society of the 21st century. The approaches emphasize different ways of achieving various goals, and if carefully employed, can help to increase the skills of an individual with autism to a variety of different situations, persons and settings. Using TEACCH from a young age, promotes a sense of competence and satisfaction on the part of the person with autism within a holistically applied, person-centered, and individualized support system (Mesibov, Shea, & Schopler, 2005b). In addition, a major step towards achieving greater self-efficacy is accomplished through TEACCH as well. Lastly, the TEACCH approach secures sufficient individualized and meaningful levels of understanding, and allows the person with autism to make greater sense of the changing, and at times, confusing aspects of the world.

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