

# **TEACCH (Treatment and Education of Autistic and related Communication handicapped Children)**

This is an alternate version of the characteristics overview chart on the next page. It is provided for accessibility.

## Verbal skills

- Nonverbal
- Mixed
- Verbal

## Grade Level

- PK
- Elementary
- Middle/High

## Cognitive Level


- Classic
- High Functioning

## Areas Addressed

- (Pre)Academic/Cognitive/Academic
- Adaptive Behavior/Daily Living
- Behavior
- Communication/Speech
- Social/Emotional

# TEACCH

## (Treatment and Education of Autistic and related Communication handicapped Children)

	<b>Verbal Skills</b>	<b>Grade Levels</b>	<b>Cognitive Level</b>	<b>Areas Addressed</b>
	<input checked="" type="checkbox"/> Nonverbal <input checked="" type="checkbox"/> Mixed <input checked="" type="checkbox"/> Verbal	<input checked="" type="checkbox"/> PK <input checked="" type="checkbox"/> Elementary <input checked="" type="checkbox"/> Middle/High	<input checked="" type="checkbox"/> Classic <input type="checkbox"/> High Functioning	<input checked="" type="checkbox"/> (Pre)Academic/ Cognitive/Academic <input checked="" type="checkbox"/> Adaptive Behavior/ Daily Living <input checked="" type="checkbox"/> Behavior <input checked="" type="checkbox"/> Communication/Speech <input checked="" type="checkbox"/> Social/Emotional



### **Brief Introduction**

According to the central deficit theory, children with autism (AU) require increased structure and task-analyzed goals in order to learn (Erba, 2000). Providing structure and organization in the learning environment on a student's level of understanding can help to alleviate or moderate challenges students with AU otherwise encounter.



### **Description**

The TEACCH (*Treatment and Education of Autistic and related Communication handicapped Children*) program is a comprehensive structured teaching approach designed for individuals with AU and communication disabilities and their families. The TEACCH program was developed by Eric Schopler in the late 1970s and is administered through the University of North Carolina at Chapel Hill.

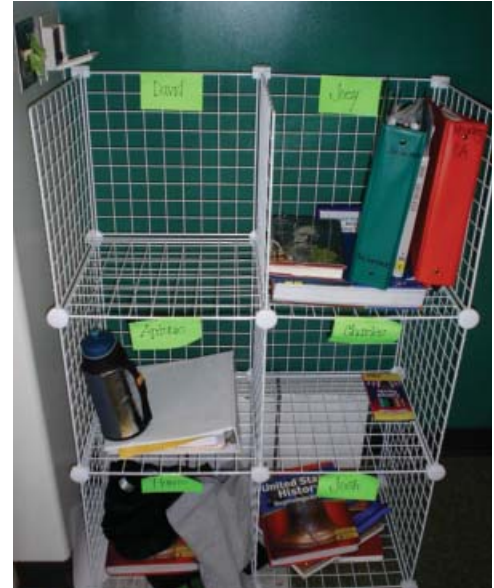
The principles of TEACCH's structured teaching include (a) understanding the culture of AU; (b) developing an individual person- and family-centered plan for each student, rather than using a standard curriculum; (c) structuring the physical environment in a way that will assist students with AU to understand 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.

## Interventions

The principle of modifying the environment to accommodate the needs of students with AU is the foundation for structured teaching (Schopler, Mesibov, & Hearsey, 1995). Four main components are connected to this process:

1. *Physical organization.* Physical organization refers to the physical layout of the classroom or the area for teaching. Physical organization helps or hinders a student's independent functioning and his recognition of and compliance with rules and limits. It is designed to provide students with visual information to direct their activities in a predictable manner.

*Note:* This and the following photos were contributed by Melissa Trautman.



2. *Scheduling.* Since students with AU have problems with sequential memory and organization of time, they need schedules. Visual schedules let the students know what activities will take place and in what sequence (Shopler et al., 1995) and assist them in predicting events, lessening their anxiety.

3. *Work systems.* Work systems tell the students what activities must be completed in independent work areas by visually specifying what and how much work must be done and indicating when each task and the work session are complete (Schopler et al., 1995).

	Class	Teacher/Room
1 <sup>st</sup> hour 7:45 – 8:30	Social Studies	Jones/310
2 <sup>nd</sup> hour 8:35 – 9:20	Math	Smith/308
3 <sup>rd</sup> hour 9:25 – 10:10	Social Skills (Navigator room)	Trautman/110
4 <sup>th</sup> hour 10:15 – 11:00	Exploration – Start with computer	Kavacak
5 <sup>th</sup> hour 11:05 – 11:30	Reading	Brown/302
11:30 – 12:00	LUNCH	
12:05 – 12:20	Reading continued	
6 <sup>th</sup> hour 12:25 – 1:10	Science	Thomas/305
7 <sup>th</sup> hour 1:15 – 2:00	CA	Greent/302
8 <sup>th</sup> hour 2:05 – 2:50	Guided Study	Trautman/110



4. *Task organization.* Similar to work systems, task organization determines what work students do independently, what needs to be done within a task, how many items must be completed, and final outcomes (Schopler et al., 1995).

Structured teaching uses materials frequently found in educational, home, vocational, and residential settings for individuals with AU, and it may be administered by anybody who works with this population. Nevertheless, structured teaching training is highly recommended; it is available through Division TEACCH ([www.teacch.com](http://www.teacch.com)).



**Individual Work Task: Matching by Color** (from [www.tinsnips.com](http://www.tinsnips.com))





## Steps

The TEACCH approach calls on a wide range of techniques and services to meet the individual needs of children and families. The ultimate goal is to foster independence and understanding while providing individuals with AU the tools they need to successfully interact in the environment.



## Brief Example

Mike is a third-grade student with AU. He has difficulty completing in-class assignments due to his poor organizational skills and becomes distracted easily. His teacher, Ms. Cooper, created a small work area in a corner of the classroom with a table that faced the wall where Mike could complete his in-class assignments.

In Mike's work area, he has a sequence strip of individual numbers 1-10 attached by Velcro™ to his desk. He also has multiple "work jobs" located to his left. To complete tasks in the work system, he takes the number "1" off his number strip and matches it to the number "1" located on one of the work jobs. This is the task he must complete first. He continues matching numbers to tasks in order to complete the tasks in a specified, sequential order.



## Summary

The TEACCH approach utilizes individuals' relative strengths (Schopler et al., 1995) and is appropriate for individuals with AU of all ages and developmental levels. The principles of structured teaching support individuals with AU in understanding their world better and enable them to be more independent and productive.



## Research Table

# of Studies	Ages (years)	Sample Size	Area(s) Addressed	Outcome
12*	2-adult	493	Working skills, functional communication abilities, problem behaviors, play skills, personal independence, social abilities, cognitive skills, academic skills, prevocational skills, imitation, fine motor; gross motor; and nonverbal conceptual skills	+

\*Note: Also see studies on visual environmental supports, rules, and routines, and adult-mediated social skills strategies – components of the TEACCH model.



## Studies Cited in the Research Table

1. Hume, K., & Odom, S. (2007). Effects of an individual work system on the independent functioning of students with autism. *Journal of Autism and Developmental Disorders*, 37, 1166-1180.  
Three students with AU participated in the study examining the effects of a work system on independent work and play skills. Observational data indicated that all students showed increases in on-task behavior and in the number of tasks completed or play materials utilized, and reduction of teacher prompts. The results were maintained through the one-month follow-up.
2. Tsang, S.K.M., Shek, D.T.L., Lam, L. L., Tang, F. L.Y., & Cheung, P.M.P. (2007). Brief report: Application of the TEACCH program on Chinese pre-school children with autism – Does culture make a difference? *Journal of Autism and Developmental Disorders*, 37, 390-396.  
A longitudinal study was conducted with 34 children with AU 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 study provided initial support for the effectiveness of using the TEACCH program with Chinese children.
3. Siaperas, P., & Beadle-Brown, J. (2006). A case study of the use of a structured teaching approach in adults with autism in a residential home in Greece. *Autism*, 10, 330-343.  
Using interview questionnaires and systematic naturalistic observations, this case study explored the effectiveness of structured teaching for 12 adolescents and adults with AU 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.
4. Francke, J., & Geist, E.A. (2003). The effects of teaching play strategies on social interaction for a child with autism: A case study. *Journal of Research in Childhood Education*, 18, 125-140.  
Play skills were taught to a 3-year-old boy with AU using a structured teaching method, modeled after 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.
5. Van Bourgondien, M. E., Reichle, N. C., & Schopler, E. (2003). Effects of a model treatment approach on adults with autism. *Journal of Autism and Developmental Disorders*, 33, 131-140.  
Thirty-two adolescents and adults with AU participated in the study, which evaluated the effectiveness of a residential program, based on the TEACCH model, in improving the quality of the treatment program and the adaptation of individuals with AU with severe disabilities. The results indicated that participants experienced gains in communication, independence, socialization, developmental planning, and positive behavior management compared to participants in control settings.
6. Panerai, S., Ferrante, L., & Zingale, M. (2002). Benefits of the Treatment and Education of Autistic and Communication Handicapped Children (TEACCH) program as compared with a non-specific approach. *Journal of Intellectual Disability Research*, 46, 318-327.  
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, and nosographic diagnosis. The TEACCH program was applied to the experimental group, while the control group was integrated in regular schools with a support teacher. The Psycho-Educational Profile-Revised and

## Interventions

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.

7. Persson, B. (2000). Brief report: A longitudinal study of quality of life and independence among adult men with autism. *Journal of Autism and Developmental Disorders*, 30, 61-66.  
This study examined whether seven adults with AU and mental retardation, who had not previously been treated using the TEACCH structured teaching method, would benefit with respect to independence, skills, and quality of life. The results from the 2.5-year study showed that all participants made progress across time.
8. Panerai, S., Ferrante, L., Caputo, V., & Impellizzeri, C. (1998). Use of structured teaching for treatment of children with autism and severe and profound mental retardation. *Education and Training in Mental Retardation and Developmental Disabilities*, 33, 367-374.  
A multidimensional assessment procedure was used to evaluate the effects of the TEACCH program principles and strategies after 12 and 18 months of structured intervention. The sample was composed of 18 children and adolescents with AU, with a mean chronological age of 13 and a mean mental age of 16 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.
9. Ozonoff, S., & Cathcart, K. (1998). Effectiveness of a home program intervention for young children with autism. *Journal of Autism and Developmental Disorders*, 28, 25-32.  
This study evaluated the effectiveness of a TEACCH-based home program intervention for children with AU. Parents were taught how to work with their preschool child with AU in the home setting, focusing on cognitive, academic, and prevocational skills essential to later school success. Two matched groups of children (2-6 years old) were compared, a treatment group and a no-treatment control group, each consisting of 11 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.
10. Panerai, S., Ferrante, L., & Caputo, V. (1997). The TEACCH strategy in mentally retarded children with autism: A multidimensional assessment: Pilot study. *Journal of Autism and Developmental Disorders*, 27, 345-347.  
A multidimensional assessment was used to evaluate whether the TEACCH program treatment used with 18 children with AU (aged 7-18) with severe and profound mental retardation increased learning capacities and adaptive behavior and reduced behavioral problems. Results indicated that progress was made in areas of communication, socialization, self-help care, perception, motor activities, and cognitive performance.
11. Potter, C.A., & Whittaker, C.A. (1997). Teaching the spontaneous use of semantic relations through multi-pointing to a child with autism and severe learning disabilities. *Child Language Teaching & Therapy*, 13, 177-193.  
This study examined a three-element teaching model (individualized highly structured teaching, engineered environments, and spontaneous communication) focusing on spontaneous communication, undertaken through practitioner research, with a nonverbal 5-year-old boy with AU 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."

12. Schopler, E., Mesibov, G., & Baker, A. (1982). Evaluation of treatment for autistic children and their parents. *Journal of the American Academy of Child Psychiatry, 21*, 262-267.
- This article reviewed five systematic studies evaluating outcome elements of the TEACCH program. Questionnaires were returned by 348 families who had participated in the program. The family members with AU were 2-26 years old, and their intellectual functioning ranged from severe retardation to average. Specifically, the studies evaluated (a) the effect of program structure, (b) home observation of child behaviors before and after treatment, (c) behavioral ratings of parents' teaching effectiveness before and after treatment, (d) parents' and therapists' perceptions of treatment outcome, and (e) long-range outcome as measured by rate of institutionalization. The outcome studies offer a cumulative body of outcome evidence for treatment effectiveness.



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## **Resources and Materials**

- Division TEACCH: [www.teacch.com](http://www.teacch.com)  
A part of the TEACCH website, this webpage gives extensive, practical information for classroom implementation of structured teaching.
- TEACCH: [www.autismtaskforce.com/downloads/teacch\\_august\\_2006.pdf](http://www.autismtaskforce.com/downloads/teacch_august_2006.pdf)  
This links the user to a concise fact sheet regarding structured teaching
- Mesibov, G. B., Shea, V., & Schopler, E. (2005). *The TEACCH approach to autism spectrum disorders*. New York: Kluwer Academic/Plenum.  
This book describes the TEACCH approach.