

## Module: Visual Supports

### Evidence Base for Visual Supports

The National Professional Development Center on ASD has adopted the following definition of evidence-based practices.

To be considered an evidence-based practice for individuals with ASD, efficacy must be established through peer-reviewed research in scientific journals using:

- *randomized or quasi-experimental design studies*. Two high quality experimental or quasi-experimental group design studies,
- *single-subject design studies*. Three different investigators or research groups must have conducted five high quality single subject design studies, or
- *combination of evidence*. One high quality randomized or quasi-experimental group design study and three high quality single subject design studies conducted by at least three different investigators or research groups (across the group and single subject design studies).

High quality randomized or quasi experimental design studies do not have critical design flaws that create confounds to the studies, and design features allow readers/consumers to rule out competing hypotheses for study findings. High quality in single subject design studies is reflected by a) the absence of critical design flaws that create confounds and b) the demonstration of experimental control at least three times in each study.

This definition and criteria are based on the following sources:

Horner, R., Carr, E., Halle, J., McGee, G., Odom, S., & Wolery, M. (2005). The use of single subject research to identify evidence-based practice in Special Education. *Exceptional Children, 71*, 165-180.

Nathan, P. & Gorman, J. M. (2002). *A guide to treatments that work*. NY: Oxford University Press.

Odom, S. L., Brantlinger, E., Gersten, R., Horner, R. D., Thompson, B., Harris, K. (2004). *Quality indicators for research in special education and guidelines for evidence-based practices: Executive summary*. Arlington, VA: Council for Exceptional Children Division for Research.

Rogers, S.J., & Vismara, L.A. (2008). Evidence based comprehensive treatments for early autism. *Journal of Child Clinical Psychology, 37(1)*, 8-38.

## **Module: Visual Supports**

Using these criteria, the empirical studies referenced below provide documentation for supporting peer mediated instruction and intervention as an evidence-based practice.

### **Preschoolers**

Dauphin, M., Kinney, E. M., & Stromer, R. (2004). Using video enhanced activity schedules and matrix training to teach sociodramatic play to a child with autism. *Journal of Positive Behavior Interventions, 6*, 238–250.

Johnston, S., Nelson, C., Evans, J., & Palazolo, K. (2003). The use of visual supports in teaching young children with autism spectrum disorder to initiate interactions. *AAC: Augmentative & Alternative Communication, 19*, 86-104.

Krantz, P.J., & McClannahan, L.E. (1998). Social interaction skills for children with autism: A script-fading procedure for beginning readers. *Journal of Applied Behavior Analysis, 31*, 191-202.

Massey, G., & Wheeler, J. (2000). Acquisition and generalization of activity schedules and their effects on task engagement in a young child with autism in an inclusive preschool classroom. *Education and Training in Mental Retardation and Developmental Disabilities, 35*, 326-335.

Morrison, R., Sainato, D., BenChaaban, D., & Endo, S. (2002). Increasing play skills of children with autism using activity schedules and correspondence training. *Journal of Early Intervention, 25*, 58-72.

### **Elementary and Middle School Age**

Bryan, L., & Gast, D. (2000). Teaching on-task and on-schedule behaviors to high functioning children with autism via picture activity schedules. *Journal of Autism and Developmental Disorders, 30*, 553-567.

Dettmer, S., Simpson, R., Myles, B., & Ganz, J. (2000). The use of visual supports to facilitate transitions of students with autism. *Focus on Autism and Other Developmental Disabilities, 15*, 163-170.

Krantz, P., MacDuff, M., & McClannahan, L. (1993). Programming participation in family activities for children with autism: Parent's use photographic activity schedules. *Journal of Applied Behavior Analysis, 26*, 137-138.

## **Module: Visual Supports**

- MacDuff, G., Krantz, P., & McClannahan, L. (1993). Teaching children with autism to use photographic activity schedules: Maintenance and generalization of complex response chains. *Journal of Applied Behavior Analysis, 26*, 89-97.
- O'Reilly, M., Sigafoos, J., Lancioni, G., Edrisinha, C., & Andrews, A. (2005). An examination of the effects of a classroom activity schedule on levels of self-injury and engagement for a child with severe autism. *Journal of Autism & Developmental Disorders, 35*, 305-311.
- Pierce, K., & Schreibman, L. (1994). Teaching daily living skills to children with autism in unsupervised settings through pictorial self-management. *Journal of Applied Behavior Analysis, 27*, 471-481.
- Schmit, J., Alper, S., Raschke, D., & Ryndak, D. (2000). Effects of using a photographic cueing package during routine school transitions with a child who has autism. *Mental Retardation, 38*, 131-137.
- Vaughn, B., & Horner, H. (1995). Effects of concrete versus verbal choice systems on problem behavior. *Augmentative and Alternative Communication, 11*, 89-92.