

Module: Prompting

Overview of Prompting

Neitzel, J., & Wolery, M. (2009). *Overview of prompting*. Chapel Hill, NC: The National Professional Development Center on Autism Spectrum Disorders, Frank Porter Graham Child Development Institute, The University of North Carolina.

Prompting procedures include any help given to learners that assist them in using a specific skill. These procedures are often used in conjunction with other evidence-based practices including time delay and reinforcement. Prompts are generally given by an adult or peer *before* or as a learner attempts to use a skill. A variety of prompting procedures support the learning and development of children and youth with autism spectrum disorders (ASD). They include:

- *Least-to-most prompts*: This prompting procedure is also referred to as the system of least prompts. With this procedure, a prompt hierarchy is used to teach learners with ASD new skills. The hierarchy is comprised of at least three levels. The first level provides the learner with the opportunity to respond without prompts. The remaining levels are sequence from the least amount of help to the most amount of help.
- *Simultaneous prompting*: With this prompting procedure, the cue (i.e., a signal to learner to use target skill) and controlling prompt (i.e., prompt that ensures that the learner will use the target skill successfully) are delivered simultaneously. The cue is then presented again while the teacher/practitioner waits for the learner to respond.
- *Graduated guidance*: With graduated guidance, teachers/practitioners provide a controlling prompt (i.e., a prompt that ensures the learner will use the skill correctly) and then gradually remove the prompt during a teaching activity. This procedure differs from other prompting procedures because it requires teachers/practitioners to make judgments during the teaching activity about the type and amount of prompting to provide based upon the learner's response.

With these procedures, teachers and other practitioners use different types of prompts in a systematic fashion to help learners with ASD acquire target skills. Prompts generally fall into one of the following categories:

- *Verbal prompts*: Teachers/practitioners make statements that help learners with ASD acquire target skills (e.g., "You might need to try it a different way," "Write your name").
- *Gestural prompts*: Teachers/practitioners make movements that cue learners to use a particular behavior or skill (e.g., pointing to the top of the paper where the learner needs to write his name).
- *Model prompts*: Teachers/practitioners perform the target skill or behavior. Full model prompts can be verbal if the skill being taught is verbal, or they can be motor responses if the skill being taught involves moving a body part.

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- *Physical prompts:* Teachers/practitioners touch learners to help them use the target behavior or skill (e.g., tapping a learner's hand to cue him to begin writing his name, teacher putting hand over learner's to help her write her name).
- *Visual prompts:* Teachers/practitioners provide pictures of events that provide learners with information about how to use the target skill or behavior (e.g., task analysis checklist, transition picture card).

Evidence

Prompting meets the evidence-based practice criteria with five single-subject design studies, demonstrating its effectiveness in the domains of academic and language/communication in all three age groups (i.e., preschool, elementary, middle/high school).

With what ages is prompting effective?

Prompting can be used effectively with children and youth with ASD, regardless of cognitive level and/or expressive communicative abilities across the age range. The evidence base shows that prompting is an effective intervention for learners with ASD ranging from 3 to 22 years of age.

What skills or intervention goals can be addressed with prompting?

Prompting can be used to teach a variety of skills including seeking information, pointing to objects, identifying numbers/objects, and remaining in "on-task" behavior.

In what settings can prompting be effectively used?

The evidence-based studies were conducted mainly in clinic-based settings or in one-to-one teaching sessions with learners with ASD. The research did not demonstrate the use of prompting in more naturalistic settings such as during ongoing classroom routines and activities, in the home, or in community-based settings; however, each of the prompting procedures could be adapted for use in these settings.

Evidence Base

The studies cited in this section document that this practice meets the NPDC on ASD's criteria for an evidence-based practice. This list is not exhaustive; other quality studies may exist that were not included.

Preschool

Taylor, B. A., & Harris, S. L. (1995). Teaching children with autism to seek information: Acquisition of novel information and generalization of responding. *Journal of Applied Behavior Analysis, 28*, 3-14.

Elementary

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- Akmanoglu, N., & Batu, S. (2004). Teaching pointing to numerals to individuals with autism using simultaneous prompting. *Education and Training in Developmental Disabilities, 39*(4), 326-336.
- Ault, M. J., Wolery, M., Gast, D. L., Doyle, P. M., & Eisenstat, V. (1988). Comparison of response prompting procedures in teaching numeral identification to autistic subjects. *Journal of Autism and Developmental Disorders, 18*(4), 627-636.
- Bryan, L. C., & Gast, D. L. (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*(6), 553-567.
- Godby, S., Gast, D. L., & Wolery, M. (1987). A comparison of time delay and system of least prompts in teaching object identification. *Research in Developmental Disabilities, 8*, 283-306.
- Taylor, B. A., & Harris, S. L. (1995). Teaching children with autism to seek information: Acquisition of novel information and generalization of responding. *Journal of Applied Behavior Analysis, 28*, 3-14.

Middle/High School

- Akmanoglu, N., & Batu, S. (2004). Teaching pointing to numerals to individuals with autism using simultaneous prompting. *Education and Training in Developmental Disabilities, 39*(4), 326-336.
- Godby, S., Gast, D. L., & Wolery, M. (1987). A comparison of time delay and system of least prompts in teaching object identification. *Research in Developmental Disabilities, 8*, 283-306.

Selected Additional References

- Cicero, F. R., & Pfadt, A. (2002). Investigation of a reinforcement -based toilet training procedure for children with autism. *Research in Developmental Disabilities, 23*, 319-331.
- Charlop-Christy, M. H., Carpenter, M., Le, L., LeBlanc, L. A., & Kellet, K. (2002). Using the picture exchange communication system (PECS) with children with autism: Assessment of PECS acquisition, speech, social-communicative behavior, and problem behavior. *Journal of Applied Behavior Analysis, 35*(3), 213-231.
- Charlop, M. H., Schreibman, L., & Thibodeau, M. G. (1985). Increasing spontaneous verbal responding in autistic children using a time delay procedure. *Journal of Applied Behavior Analysis, 18*, 155-166.
- Wolery, M., Ault, M. J., & Doyle, P. M. (1992). *Teaching students with moderate to severe disabilities: Use of response prompting strategies*. NY: Longman.