



Autism Focused Intervention
Resources & Modules

Prompting (PP) ---EBP Brief Packet---

Components of the EBP Brief Packet...

This evidence-based practice overview on Prompting (PP) includes the following components:

1. **Overview:** A quick summary of salient features of the practice, including what it is, who it can be used with, what skills it has been used with, and settings for instruction.
2. **Evidence-base:** The *PP Evidence-base* details the NPDC criteria for inclusion as an evidence-based practice and the specific studies that meet the criteria for this practice.
3. **Step-by-Step Guide:** Use the *PP Step-by-Step Practice Guide* as an outline for how to plan for, use, and monitor PP. Each step includes a brief description as a helpful reminder while learning the process.
4. **Implementation Checklist:** Use the *PP Implementation Checklist* to determine if the practice is being implemented as intended.
5. **Data Collection Sheets:** Use the data collection sheets as a method to collect and analyze data to determine if progress is being made for a learner with ASD.
6. **Tip Sheet for Professionals:** Use the *PP Tip Sheet for Professionals* as a supplemental resource to help provide basic information about the practice to professionals working with the learner with ASD.
7. **Parent Guide:** Use the *PP Parent Guide* to help parents or family members understand basic information about the practice being used with their child.
8. **Additional Resources:** Use the *Additional Resources* to learn more about the practice.
9. **CEC Standards:** A list of *CEC Standards* that apply specifically to PP.
10. **Module References:** A list of numerical *References* utilized for the PP module.

Suggested citation:

Sam, A., & AFIRM Team. (2015). *Prompting*. Chapel Hill, NC: National Professional Development Center on Autism Spectrum Disorder, FPG Child Development Center, University of North Carolina. Retrieved from <http://afirm.fpg.unc.edu/prompting>

This overview
brief will
support your
use of the
evidence-
based practice:
Prompting.

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information visit:**
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What is Prompting?

Prompting includes any help given to a learner that assists the learner in using a specific skill or behavior. Sometimes referred to as an *errorless learning method*, prompting reduces incorrect responding as learners acquire new skills. Prompting is a foundational practice that is used with other evidence-based practices (such as, time delay and reinforcement) and as part of the protocols for evidence-based practices (such as discrete trial training, pivotal response training, and video modeling).

Evidence-base

Based upon the recent review, prompting meets the evidence-based practice criteria set by NPDC with 32 single case design studies. The practice has been effective for early intervention (0-2 years) to high school-age learners (15-22 years) with ASD. Evidence-based practices (EBP) and studies included in the 2014 EBP report detailed how prompting can be used effectively to address: academic, adaptive, behavior, communication, joint attention, motor, play, school readiness, social, and vocational outcomes.

How is PP Being Used?

Prompting can be used by a variety of professionals, including teachers, special educators, therapists, paraprofessionals, and early interventionists in educational and community-based environments. Parents and family members also can use prompting in the home.

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---Evidence-base for Prompting---

The National Professional Development Center on ASD has adopted the following criteria to determine if a practice is evidence-based. The EBP Report provides more information about the review process (Wong et al., 2014).

Efficacy must be established through high quality, 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)].

--OVERVIEW--

Prompting is a foundational practice that includes any help given to learners with ASD to assist them in using a specific skill. Prompting meets the evidence-based practice criteria with 32 single case design studies. The practice has been effective with learners in early intervention (0-2 years) to high school (15-22 years). Studies included in the 2014 EBP report detailed how prompting can be used effectively to address: academic, adaptive, behavior, communication, joint attention, motor, play, school readiness, social, and vocational outcomes.

In the table below, the outcomes identified by the evidence base are shown by age of participants.

Early Intervention (0-2)	Preschool (3-5)	Elementary (6-11)	Middle (12-14)	High (15-22)
	Social	Social	Social	
	Communication	Communication	Communication	
	Joint Attention	Joint Attention		
		Behavior		Behavior
	School-Readiness		School-Readiness	School-Readiness
Play	Play	Play		
	Motor	Motor		
	Adaptive			Adaptive
				Vocational
	Academic	Academic	Academic	Academic

Early intervention (0-2 years)

*Barton, E. E., & Wolery, M. (2010). Training teachers to promote pretend play in young children with disabilities. *Exceptional Children, 77*(1), 85-106.

Preschool (3-5 years)

*Barton, E. E., & Wolery, M. (2010). Training teachers to promote pretend play in young children with disabilities. *Exceptional Children, 77*(1), 85-106.

Endicott, K., & Higbee, T. S. (2007). Contriving motivating operations to evoke mands for information in preschoolers with autism. *Research in Autism Spectrum Disorders, 1*(3), 210-217. doi: 10.1016/rasd.2006.10.003

Fischer, J. L., Howard, J. S., Sparkman, C. R., & Moore, A. G. (2010). Establishing generalized syntactical responding in young children with autism. *Research in Autism Spectrum Disorders, 4*(1), 76-88. doi: 10.1016/j.rasd.2009.07.009

Groskreutz, N. C., Groskreutz, M. P., & Higbee, T. S. (2011). Effects of varied levels of treatment integrity on appropriate toy manipulation in children with autism. *Research in Autism Spectrum Disorders, 5*(4), 1358-1369. doi: 10.1016/j.rasd.2011.01.018

Ingvarsson, E. T., & Hollobaugh, T. (2011). A comparison of prompting tactics to establish intraverbals in children with autism. *Journal of Applied Behavior Analysis, 44*(3), 659-664. doi: 10.1901/jaba.2011.44-659

*Ingvarsson, E. T., & Le, D. D. (2011). Further evaluation of prompting tactics for establishing intraverbal responding in children with autism. *The Analysis of Verbal Behavior, 27*(1), 75.

Koegel, R. L., Shirotova, L., & Koegel, L. K. (2009). Brief report: Using individualized orienting cues to facilitate first-word acquisition in non-responders with autism. *Journal of autism and developmental disorders, 39*(11), 1587-1592. doi: 10.1007/s10803-009-0765-9

Leaf, J. B., Sheldon, J. B., & Sherman, J. A. (2010). Comparison of simultaneous prompting and no-no prompting in two-choice discrimination learning with children with autism. *Journal of Applied Behavior Analysis, 43*(2), 215-228. doi: 10.1901/jaba.2010.43-215

Ostry, C., & Wolfe, P. S. (2011). Teaching children with autism to ask "what's that?" using a picture communication with vocal results. *Infants & Young Children, 24*(2), 174-192. doi: 10.1097/IYC.0b013e31820d95ff

Reichle, J., Dropik, P. L., Alden-Anderson, E., & Haley, T. (2008). Teaching a young child with autism to request assistance conditionally: A preliminary study. *American Journal of Speech-Language Pathology, 17*(3), 231. doi: 10.1044/1058-0360(2008/022)

*Tarbox, J., Zuckerman, C. K., Bishop, M. R., Olive, M. L., & O'Hora, D. P. (2011). Rule-governed behavior: Teaching a preliminary repertoire of rule-following to children with autism. *The Analysis of verbal behavior, 27*(1), 125.

Taylor, B. A., & Hoch, H. (2008). Teaching children with autism to respond to and initiate bids for joint attention. *Journal of Applied Behavior Analysis, 41*(3), 377-391. doi: 10.1901/jaba.2008.41-377

Preschool (3-5 years continued)

- Thomas, B. R., Lafasakis, M., & Sturmey, P. (2010). The effects of prompting, fading, and differential reinforcement on vocal mands in non-verbal preschool children with autism spectrum disorders. *Behavioral Interventions*, 25(2), 157-168. doi: 10.1002/bin.300
- Twarek, M., Cihon, T., & Eshleman, J. (2010). The effects of fluent levels of Big 6+ 6 skill elements on functional motor skills with children with autism. *Behavioral Interventions*, 25(4), 275-293. doi: 10.1002/bin.317
- Vedora, J., Meunier, L., & Mackay, H. (2009). Teaching intraverbal behavior to children with autism: A comparison of textual and echoic prompts. *The Analysis of Verbal Behavior*, 25(1), 79.
- Williams, G., Donley, C. R., & Keller, J. W. (2000). Teaching children with autism to ask questions about hidden objects. *Journal of Applied Behavior Analysis*, 33(4), 627-630. doi: 10.1901/jaba.2000.33-627

Elementary (6-11 years)

- *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.
- Anderson, J., & Le, D. D. (2011). Abatement of intractable vocal stereotypy using an overcorrection procedure. *Behavioral Interventions*, 26(2), 134-146. doi: 10.1002/bin.326
- Birkan, B., McClannahan, L. E., & Krantz, P. J. (2007). Effects of superimposition and background fading on the sight-word reading of a boy with autism. *Research in Autism Spectrum Disorders*, 1(2), 117-125. doi: 10.1016/j.rasd.2006.08.003
- Coe, D., Matson, J., Fee, V., Manikam, R., & Linarello, C. (1990). Training nonverbal and verbal play skills to mentally retarded and autistic children. *Journal of Autism and Developmental Disorders*, 20(2), 177-187. doi: 10.1007/BF02284717
- *Ingvarsson, E. T., & Le, D. D. (2011). Further evaluation of prompting tactics for establishing intraverbal responding in children with autism. *The Analysis of Verbal Behavior*, 27(1), 75.
- Shabani, D. B., Katz, R. C., Wilder, D. A., Beauchamp, K., Taylor, C. R., & Fischer, K. J. (2002). Increasing social initiations in children with autism: Effects of a tactile prompt. *Journal of Applied Behavior Analysis*, 35(1), 79-83. doi: 10.1901/jaba.2002.35-79
- Shillingsburg, M. A., Valentino, A. L., Bowen, C. N., Bradley, D., & Zavatkay, D. (2011). Teaching children with autism to request information. *Research in Autism Spectrum Disorders*, 5(1), 670-679. doi: 10.1016/j.rasd.2010.08.004
- *Tarbox, J., Zuckerman, C. K., Bishop, M. R., Olive, M. L., & O'Hora, D. P. (2011). Rule-governed behavior: Teaching a preliminary repertoire of rule-following to children with autism. *The Analysis of verbal behavior*, 27(1), 125.
- Whalon, K., & Hanline, M. F. (2008). Effects of a reciprocal questioning intervention on the question generation and responding of children with autism spectrum disorder. *Education and Training in Developmental Disabilities*, 43(3), 367.

Elementary (6-11 years continued)

- Yanardag, M., Birkan, B., Yılmaz, İ., Konukman, F. K., Ağbuğa, B., & Lieberman, L. (2011). The effects of least-to-most prompting procedure in teaching basic tennis skills to children with autism. *Kineziologija*, 43(1), 44-55.
- Yi, J. I., Christian, L., Vittimberga, G., & Lowenkron, B. (2006). Generalized negatively reinforced manding in children with autism. *The Analysis of Verbal Behavior*, 22(1), 21.
- Yılmaz, I., Konukman, F., Birkan, B., & Yanardag, M. (2010). Effects of most to least prompting on teaching simple progression swimming skill for children with autism. *Education and Training in Autism and Developmental Disabilities*, 440.

Middle (12-14 years)

- *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.
- Batchelder, A., McLaughlin, T. F., Weber, K. P., Derby, K. M., & Gow, T. (2009). The effects of hand-over-hand and a dot-to-dot tracing procedure on teaching an autistic student to write his name. *Journal of Developmental and Physical Disabilities*, 21(2), 131-138. doi: 10.1007/s10882-009-9131-2
- Harris, S. L., Handleman, J. S., & Alessandri, M. (1990). Teaching youths with autism to offer assistance. *Journal of Applied Behavior Analysis*, 23(3), 297-305. doi: 10.1901/jaba.1990.23-297

High (15-22 years)

- 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.
- Bouxsein, K. J., Tiger, J. H., & Fisher, W. W. (2008). A comparison of general and specific instructions to promote task engagement and completion by a young man with Asperger syndrome. *Journal of Applied Behavior Analysis*, 41(1), 113-116. doi: 10.1901/jaba.2008.41-113
- Cihak, D. F., & Grim, J. (2008). Teaching students with autism spectrum disorder and moderate intellectual disabilities to use counting-on strategies to enhance independent purchasing skills. *Research in Autism Spectrum Disorders*, 2(4), 716-727.
- Montgomery, J., Storey, K., Post, M., & Lemley, J. (2011). The use of auditory prompting systems for increasing independent performance of students with autism in employment training. *International Journal of Rehabilitation Research*, 34(4), 330-335. doi: 10.1097/MRR.0b013e32834a8fa8
- Symons, F., & Davis, M. (1994). Instructional conditions and stereotyped behavior: The function of prompts. *Journal of Behavior Therapy and Experimental Psychiatry*, 25(4), 317-324. doi: 10.1016/0005-7916(94)90040-X

* Research which included participants in multiple age ranges.



Prompting (PP) ---Step-by-Step Guide---

BEFORE YOU START...

Each of the following points is important to address so that you can be sure the selected EBP is likely to address the learning needs of your student.

Have you found out more information about...?

- Identified the behavior...
- Collected baseline data through direct observation...
- Established a goal or outcome that clearly states when the behavior will occur, what the target skill is, and how the team will know when the skill is mastered...

If the answer to any of these is “no,” review the process of how to select an EBP.

This practice guide outlines how to plan for, use, and monitor the prompting practice.

Keep in mind that the three prompting procedures are:

- Least-to-most prompting
- Graduated guidance
- Simultaneous prompting

While each procedure is different, the practice guide is applicable to all. When unique features are tied to a specific procedure, we will identify them through examples or cautions.

Now you are ready to start...

Step 1: PP Planning


The planning step explains how to select a prompting procedure and prepare to use the selected prompting procedure.

1.1 Identify the target skill/behavior as a discrete or chained task

Identify the observable and measurable target skill/behavior as a discrete or chained task. For chained tasks, identify the individual target skills or behaviors of the chain.

1.2 Select the prompting procedure to use

Select the appropriate prompting procedure to address the target skill/behavior. Remember to only provide the necessary support when using prompts.

 *The **Prompting Decision Tree** found in the Resource section will help you identify a prompting procedure to use with the learner.*

1.3 Identify the target stimulus

Identify the target stimulus which is the event of thing that cues the learner with ASD to engage in the target behavior. Determine if the target stimulus is a naturally occurring event, completion of one vent or activity, or an external signal.

1.4 Select cues or task directions

Cues and task directions help learners identify the target stimulus and then engage in the target response.

1.5 Select reinforcers

To increase the likelihood that the learner with ASD will use the target skill again in the future, select reinforcers that are appropriate for the individual learner with ASD and target skills. Refer to the reinforcement module for more information about reinforcers.

1.6 Follow unique planning steps for selected prompting procedure

Different planning steps will be needed for each prompting procedure:

Least-to-Most Prompting Procedure:

- Select the number of levels in the hierarchy. Remember, the hierarchy must have a minimum of three levels. Be sure to include an independent level (no prompt) and a controlling prompt (prompt that consistently helps learner use the target skill or behavior).

Step 1: PP Planning (continued)

1.6 Follow unique planning steps for selected prompting procedure (continued)

- Select the types of prompts to be used. The five types of prompts include gestural prompts, verbal prompts, visual prompts, model prompts, and physical prompts.
- Sequence the prompts from least-to-most assistance.
- Determine the prompt interval. Usually only a few seconds (3-5 seconds) is needed.
- Identify activities and times for using least-to-most prompting. Consider times of the day the learner might need to use the target skill and other opportunities in ongoing activities or direct instructional sessions.



Complete the **Least-to-Most Planning Worksheet** before using the procedure.

Graduated Guidance Prompting Procedure:

- Identify the controlling prompt. The controlling prompt ensures the learner with ASD performs the target skill/behavior correctly. With graduated guidance, the controlling prompt is almost always physical.
- Determine the length of the response interval by considering learner characteristics, task characteristics, and the amount of time a learner will be allowed to begin and complete a task.
- Specify prompt fading procedures. Decisions to fade prompts are made within the context of on-going routines and activities. However, clear strategies for prompt fading need to be considered before using prompting to decrease prompt dependence.
- Identify activities and times for using graduated guidance. Analyze the day and determine when and where the chain is needed. If few natural times to teach the chain are identified, build in times to teach the skill.



Complete the **Graduated Guidance Planning Worksheet** before using the procedure.

Simultaneous Prompting Procedure

- Identify the controlling prompt. The controlling prompt ensures the learner with ASD performs the target skill/behavior correctly.
- Determine the length of response interval. The controlling prompt will be presented before the learner has a chance to respond to ensure the learner response correctly during instructional sessions.
- Identify activities and times for using simultaneous prompting. Identify two times for two session (instructional and probe sessions).



Complete the **Simultaneous Prompting Planning Worksheet** before using the procedure.

Step 2: Using PP

This step describes the process of using each of the prompting procedures.

2.1 Follow the unique steps for using least-to-most prompting

Establish learner attention, deliver stimulus, and provide the cue

Establish learner attention by delivering the target stimulus, using an attention-getting strategy, and presenting the cue or task direction.

Wait for the learner to respond

Wait for the designated response interval determined during the planning step.

Respond to the learner's attempts

Teachers and practitioners respond to the learner when s/he uses the target skill correctly, incorrectly, or when s/he does not attempt to use the skill at all.



Use the **Least-to-Most Response Diagram** to guide your response to learner's attempts.

2.2 Follow the unique steps for using graduated guidance

Establish learner attention, deliver stimulus, and provide the cue

Teachers/practitioners approach the learner, secure the learner's attention, present the target stimulus or call the learner's attention to the target stimulus, and deliver the task direction.

Wait for learner response

Wait for the designated response interval determined during the planning step.

Respond to learner's attempts

Teachers and practitioners respond to the learner based upon the behavior of the learner.



Use the **Graduated Guidance Response Diagram** to guide your response to learner's attempts.

2.3 Follow the unique steps for using simultaneous prompting

Establish learner attention, deliver stimulus, and provide the cue

Use an attention getting strategy, deliver the target stimulus, and present the cue or task direction.

Conduct instructional sessions

Immediately provide the controlling prompt to the learner and respond to the learner's attempt.



Use the **Simultaneous Prompting Response Diagram** to guide your response to learner's attempts.

Conduct probe sessions

Deliver the response interval with no prompt.



Use the **Simultaneous Prompting Response Diagram** to guide your response to learner's attempts.

Step 3: Monitoring PP

The following process describes how the use of prompting procedures can be monitored and how to adjust your plan based on the data.

3.1 Collect data on target behaviors

Least-to-most data collection.

Track learner's unprompted correct responses, prompted correct responses, unprompted errors, prompted errors, and no errors.

 Use the *Least-to-Most Discrete Skill Data Collection form* or the *Least-to-Most Chained Skill Data Collection Form* to collect data.

Graduated guidance data collection.

Collect data on chains completed without prompts, chained completed with prompts, and chains completed with resistance.

 Use the *Graduated Guidance Data Collection Form* to collect data.

Simultaneous prompting data collection.

Collect data to monitor progress during both instructional and probe sessions.

 Use the *Simultaneous Prompting Data Collection Form* to collect data.

3.2 Determine next steps based on learner progress

If the learner with ASD is showing progress with reinforcement based upon collected data, then continue to use this practice with the learner. Gradually new target skills and behaviors can be introduced to the learner with ASD.

If the target skill or behavior is not increasing, ask yourself the following questions:

- Is the target skill or behavior well defined?
- Is the skill or behavior measurable and observable?
- Is the skill too difficult and needs to be broken down into smaller steps?
- Has enough time been devoted to using this strategy?
- Was prompting used with fidelity? (Use the *Prompting Implementation Checklist* to determine fidelity.)
- Is the selected prompting procedure appropriate for addressing the target skill or behavior?
- Are reinforcements used that are motivating to the learner?
- Is the response interval an appropriate length?
- Are teachers and practitioners responding to the learner's response appropriately?

If these issues have been addressed and the learner with ASD continues not to show progress, consider selecting a different evidence-based practice to use with the learner with ASD.

Prompting (PP)

---Implementation Checklist---

Before you start:

Have you...

- Identified the behavior?
- Collected baseline data through direct observation?
- Established a goal or outcome that clearly states **when** the behavior will occur, **what** the target skill is, and **how** the team will know when the skill is mastered.

If the answer to any of these is "no", refer to the "Selecting EBPs" section on the website.

	Observation Date	1	2	3	4
	Observer's Initials				
Step 1: Planning					
1.1 Identify the target skill/behavior as either a discrete or chained task					
1.2 Select prompting procedure to use					
1.3 Identify target stimulus					
1.4 Select cues or task directions					
1.5 Select reinforcers					
1.6 Follow unique planning steps for selected prompting procedure					
<i>Least-to-Most Prompting</i>					
<input type="checkbox"/> Select the number of levels in the hierarchy					
<input type="checkbox"/> Select the types of prompts to be used					
<input type="checkbox"/> Sequence prompts from least-to-most assistance					
<input type="checkbox"/> Determine the length of the response interval					
<input type="checkbox"/> Identify activities and times for using least-to-most prompting					
<i>Graduated Guidance</i>					
<input type="checkbox"/> Identify the controlling prompt					
<input type="checkbox"/> Determine the length of the response interval					
<input type="checkbox"/> Specify prompt fading procedures					
<input type="checkbox"/> Identify activities and times for using graduated guidance					
<i>Simultaneous Prompting</i>					
<input type="checkbox"/> Identify the controlling prompt					
<input type="checkbox"/> Determine the length of the response interval					
<input type="checkbox"/> Identify activities and times for using simultaneous prompting					
Step 2: Using					
<i>Least-to-Most Prompting:</i>					
<input type="checkbox"/> Establish learner attention, deliver stimulus, and provide the cue					
<input type="checkbox"/> Wait for learner to respond					
<input type="checkbox"/> Respond to learner's attempts					
<i>Graduated Guidance:</i>					
<input type="checkbox"/> Establish learner attention, deliver stimulus, and provide the cue					
<input type="checkbox"/> Wait for learner to respond					
<input type="checkbox"/> Respond to learner's attempts					
<i>Simultaneous Prompting:</i>					
<input type="checkbox"/> Establish learner attention, deliver stimulus, and provide the cue					
<input type="checkbox"/> Conduct instructional sessions by:					
○ Delivering the controlling prompt					
○ Responding to learner's attempts					
<input type="checkbox"/> Conduct probe sessions by:					
○ Providing no prompt					
○ Responding to learner's attempts					
Step 3: Monitoring					
3.1 Collect data on target behaviors					
3.2 Determine next steps based on learner progress					

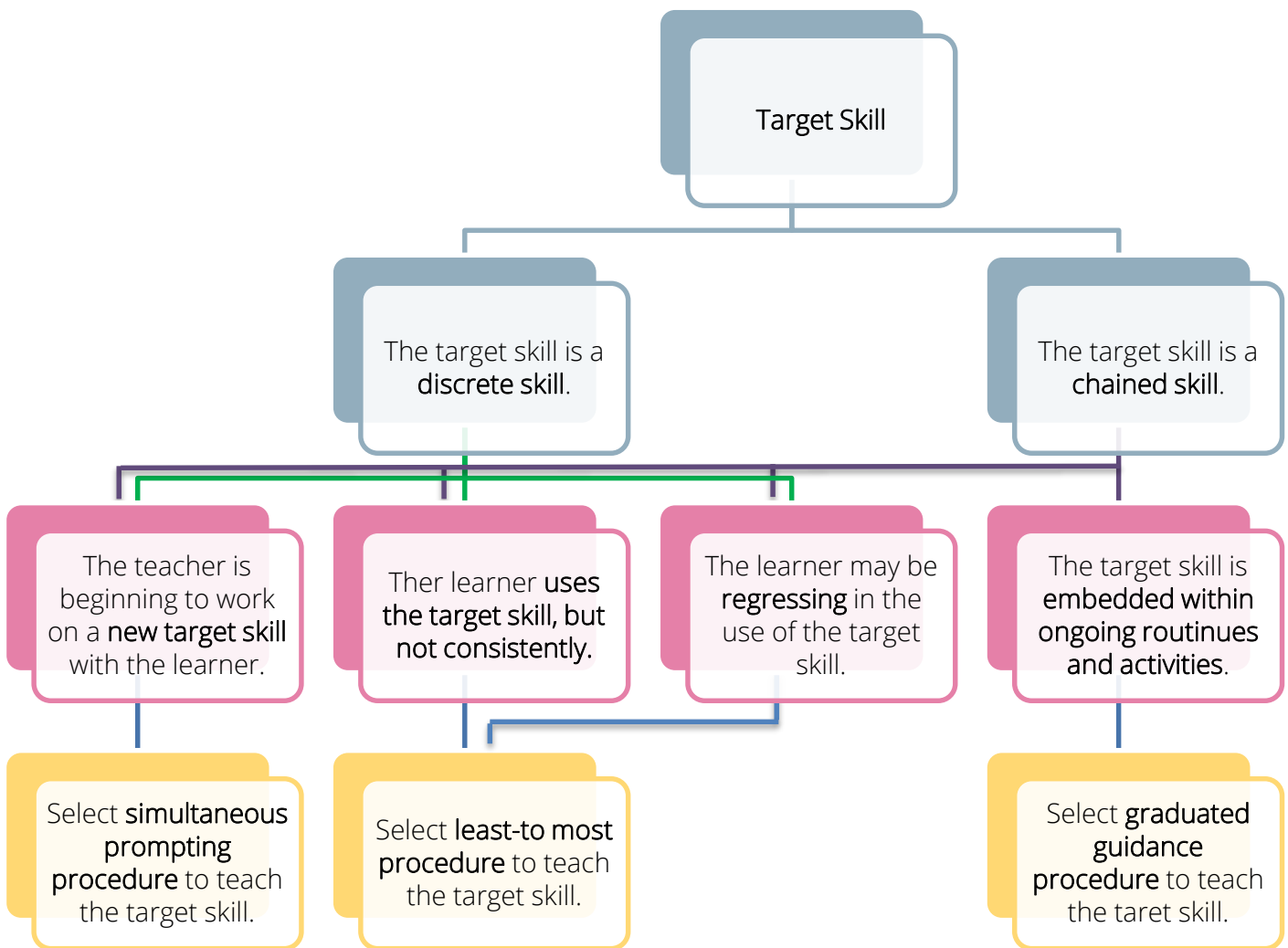


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---PP Decision Tree---

Directions: Use the prompting decision tree to determine which prompting procedure to use with a learner with ASD.

Target Skill/Behavior: _____



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---PP Planning Worksheet--- Least-to-Most PP Procedure

Learner's Name: _____ Date/Time: _____

Observer(s): _____

Least-to-Most Prompting Procedure:

A prompt hierarchy with at least three levels used to teach new skills. At the first level, the learner is given the opportunity to respond without prompts. The remaining levels include prompts that proceed from least to most amounts of assistance. The last level is the controlling prompt, which is a prompt that ensures the learner will respond correctly.

Target skill: _____

Is this target skill a: discrete task or a chained task? (*Check the appropriate box*)

What is the target stimulus? _____

Is this target stimulus:

- A naturally occurring event
- The completion of one event or activity
- An external signal

Describe the cues or task directions that will be used to tell the learner to use the target skill:

Select reinforcers that will increase the learner's use of target skill or behavior in the future.

Levels in prompt hierarchy and types of prompts:

Consider the task characteristics, learner characteristics, and time available to determine the number of levels in the prompt hierarchy and prompt types to use.

Levels in prompt hierarchy: _____

Select Type of Prompts	Describe how selected prompt types will be used
<input type="checkbox"/> Gestural	
<input type="checkbox"/> Verbal	
<input type="checkbox"/> Visual	
<input type="checkbox"/> Model (full, partial)	
<input type="checkbox"/> Physical (full, partial)	

Sequence Prompts from Least-to-Most Assistance:

Use the prompt levels and types of prompt to sequence prompts from least-to-most assistance.

Level	Type of Prompt	Description
Independent (learner is able to perform the target skill without additional assistance)	No prompt	Target stimulus: Cue or task directions:
Intermediate (at least one and up to 3 intermediate prompts)		
Controlling prompt (Prompt is provided that ensures the learner will use the target skill correctly)		

Determine the Response Interval:

Time how long it takes the learner to complete similar tasks

Similar Task	Time to Complete

Consider the learner characteristics, task characteristics, and the amount of time a learner will be allowed to begin and complete the task to determine the response interval.

Response interval: _____ seconds

Identify Activities and Times for Using Least-to-Most Prompting Procedure:

Consider times during the day that learner might need to use the target skill: _____

Consider specific routines and activities in which the target skill can be incorporated: _____

When and where will instruction occur? _____

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---PP Diagram--- Least-to-Most

Learner's Name: _____ Date/Time: _____

Observer(s): _____

Least-to-Most Prompting Procedure:

A prompt hierarchy with at least three levels used to teach new skills. At the first level, the learner is given the opportunity to respond without prompts. The remaining levels include prompts that proceed from least to most amounts of assistance. The last level is the controlling prompt, which is a prompt that ensures the learner will respond correctly.

Learner's response is correct

- Offer reinforcement (praise, access to materials, break) and
- State what the learner did

Learner's response is incorrect

- Interrupt the incorrect response,
- Deliver the next prompt in the hierarchy, and
- Continue through the prompting hierarchy until a correct response occurs, and then deliver the reinforcer

Learner does not response

- Use the prompt in the next level of the prompt hierarchy and
- Continue through the prompting hierarchy until a correct response occurs, and then deliver the reinforcer

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---Least-to-Most Data Collection--- Discrete Skills

Learner's Name: _____ Date/Time: _____

Observer(s): _____

Target Behavior(s): _____

Discrete Skills:

Use this form when collecting data on a discrete skill and using least-to-most prompting procedures. Remember to collect data on correct responses, incorrect responses, and no responses.

		Prompt Level: (Type)			
Trial	Target stimulus	Level 1:	Level 2:	Level 3:	Level 4:
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
Summary Data		# correct	# correct	# correct	# correct

Key: + = correct; - = incorrect; o = no response

Adapted from: Wolery, M., Ault, M. J., & Dyle, P. M. (1992). Teaching students with moderate and severe disabilities: Use of response prompting strategies. White Plains, NY: Longman.

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---Least-to-Most Data Collection--- Chained Skills

Learner's Name: _____ Date/Time: _____

Observer(s): _____

Target Behavior(s): _____

Chained Skills:

Use this form when collecting data on a chained skill and using least-to-most prompting procedures.
Remember to collect data on correct responses, incorrect responses, and no responses.

Trial:		Prompt Level: Type			
		Level 1: Independent	Level 2:	Level 3:	Level 4:
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
Summary Data	Correct	= correct %	= correct %	= correct %	= correct %
	Incorrect	= incorrect %	= incorrect %	= incorrect %	= incorrect %
	No response	= no response %	= no response %	= no response %	= no response %

Key: + = correct; - = incorrect; o = no response

Adapted from: Wolery, M., Ault, M. J., & Dyle, P. M. (1992). Teaching students with moderate and severe disabilities: Use of response prompting strategies. White Plains, NY: Longman.

**For more
information visit:**
www.afirm.fpg.unc.edu



Autism Focused Intervention
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---PP Planning Worksheet---

Graduate Guidance PP Procedure

Learner's Name: _____

Date/Time: _____

Observer(s): _____

Graduated Guidance Procedure:

Teachers and practitioners provide a controlling prompt which ensures the learner will do the skill correctly and then gradually remove the prompt during a teaching activity. As learners begin to use the skill, the prompts are withdrawn, but quickly reinstated if learners regress. Judgments are made during the teaching activity based upon the learner's response. Failure to appropriately fade prompts can cause the learner to become prompt dependent.

Target skill: _____

Is this target skill a: discrete task or a chained task? *(Check the appropriate box)*

What is the target stimulus? _____

Is this target stimulus:

- A naturally occurring event
- The completion of one event or activity
- An external signal

Describe the cues or task directions that will be used to tell the learner to use the target skill:

Select reinforcers that will increase the learner's use of target skill or behavior in the future.

Identify the Controlling Prompt:

Try out different prompts to see which ones are successful in getting the learner with ASD to complete the task consistently.

Prompt	Level of Success

Controlling prompt selected: _____

Determine the Response Interval:

Time how long it takes the learner to complete similar tasks

Similar Task	Time to Complete

Consider the learner characteristics, task characteristics, and the amount of time a learner will be allowed to begin and complete the task to determine the response interval.

Response interval: _____ seconds

Specify Fading Procedures:

Fade prompts as learners become more proficient at the chained target skill. Select a prompting strategy to fade prompts and describe how it will be used.

Level	Description
<input type="checkbox"/> Decreasing the intensity of the prompt	
<input type="checkbox"/> Providing less assistance by changing the prompt type	
<input type="checkbox"/> Removing the prompt immediately	

Identify Activities and Times for Using Graduated Guidance Prompting Procedure:

Determine when and where the chain is needed: _____

Build in possible times to teach the skill, if few natural times are identified: _____

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information visit:**
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Autism Focused Intervention
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---PP Diagram--- Graduated Guidance

Learner's Name: _____

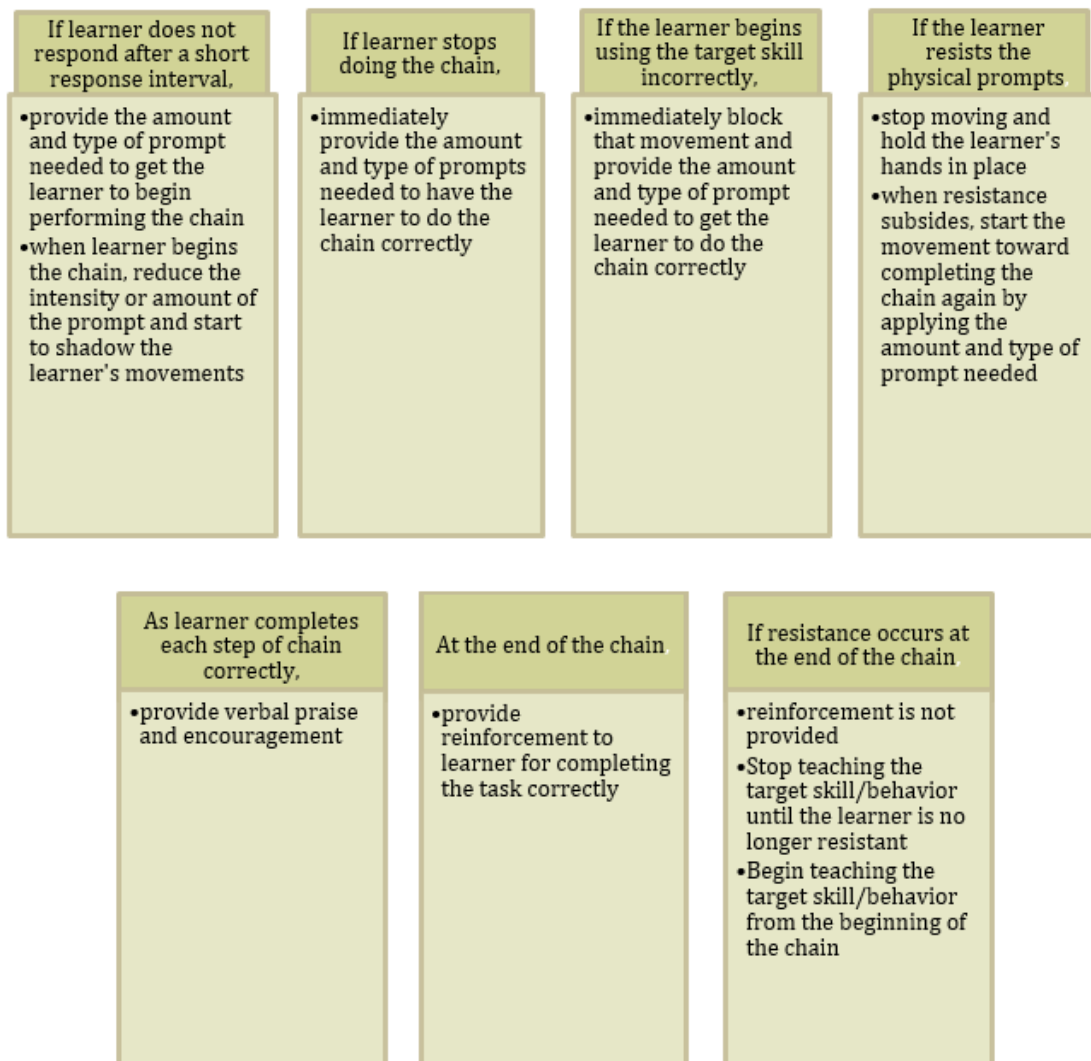
Date/Time: _____

Observer(s): _____

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Graduated Guidance Procedure:

Teachers and practitioners provide a controlling prompt which ensures the learner will do the skill correctly and then gradually remove the prompt during a teaching activity. Judgments are made during the teaching activity based upon the learner's response.





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---Graduated Guidance Data Collection--- Chained Skills

Learner's Name: _____ Date/Time: _____

Observer(s): _____

Target Behavior(s): _____

Chained Skills:

Use this form when collecting data on a chained skill and using graduated guidance prompting procedures. Remember to collect data on chains completed correctly without prompts, with prompts, and with resistance.

Steps of the chain	Time			
	Session	1	2	3
	Date			
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

I = independent, P = prompted, and R = resistance

**For more
information visit:**
www.afirm.fpg.unc.edu



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---PP Diagram--- Simultaneous Prompting

Learner's Name: _____

Date/Time: _____

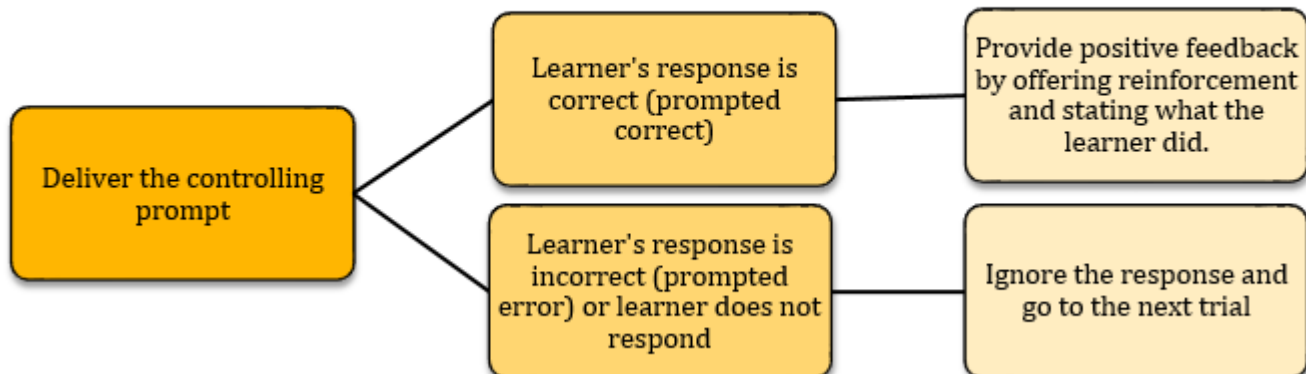
Observer(s): _____

For more information visit:
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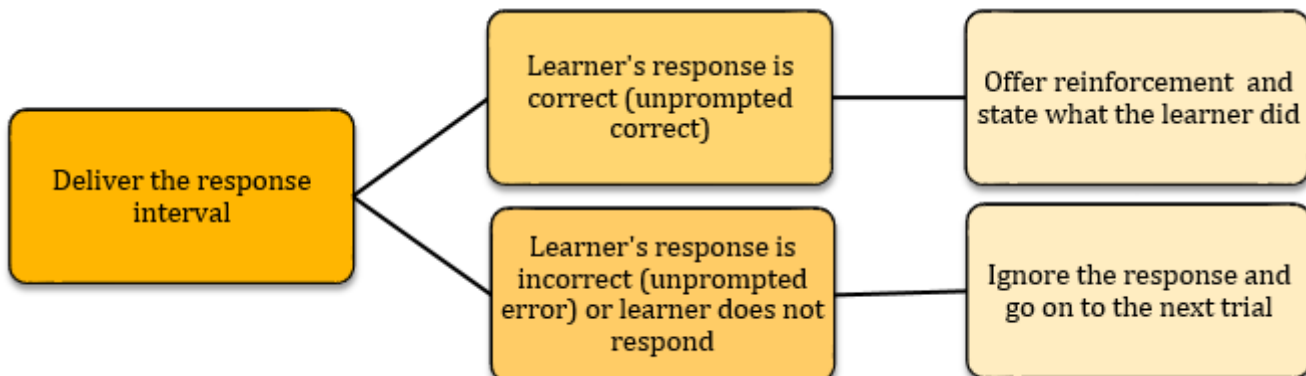
Simultaneous Prompting Procedure:

In the instructional session, the task direction or cue (signal to use target skill) and controlling prompt (prompt that ensures learner will do the target skill successfully) are delivered simultaneously. In the probe sessions, the cue or task direction is delivered without the prompts to monitor progress.

Instructional Sessions:



Probe Sessions





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---Simultaneous Data Collection---

Learner's Name: _____ Date/Time: _____

Observer(s): _____

Classroom/Setting: _____

Target Behavior(s): _____

Instructional or Probe Session: _____

Simultaneous Prompting:

Use this form when collecting data when using simultaneous prompting procedures. Remember to collect data on prompted correct responses, prompted error responses, and no responses.

Trial	Stimulus	C	E	NR
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
Total #:				
Total %:				

Key: C = correct; E = error; NR = no response

Adapted from: Wolery, M., Ault, M. J., & Dyle, P. M. (1992). Teaching students with moderate and severe disabilities: Use of response prompting strategies. White Plains, NY: Longman.

**For more
information visit:
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---PP Planning Worksheet--- Simultaneous PP Procedure

Learner's Name: _____ Date/Time: _____

Observer(s): _____

Simultaneous Prompting Procedure:

Instructional and probe sessions are conducted. In the instructional session, the task direction or cue (signal to use target skill) and controlling prompt (prompt that ensures learner will do the target skill successfully) are delivered simultaneously. In the probe sessions, the cue or task direction is delivered without the prompts to monitor progress. Simultaneous prompting is one of the most effective near-errorless teaching procedures and is relatively easy to implement.

Target skill: _____

Is this target skill a: discrete task or a chained task? *(Check the appropriate box)*

What is the target stimulus? _____

Is this target stimulus:

- A naturally occurring event
- The completion of one event or activity
- An external signal

Describe the cues or task directions that will be used to tell the learner to use the target skill:

Select reinforcers that will increase the learner's use of target skill or behavior in the future.

Identify the Controlling Prompt:

Try out different prompts to see which ones are successful in getting the learner with ASD to complete the task consistently.

Prompt	Level of Success

Controlling prompt selected: _____

Determine the Response Interval:

Time how long it takes the learner to complete similar tasks

Similar Task	Time to Complete

Consider the learner characteristics, task characteristics, and the amount of time a learner will be allowed to begin and complete the task to determine the response interval.

Response interval: _____ seconds

Identify Activities and Times for Using Simultaneous Prompting Procedure:

Determine when and where the chain is needed: _____

Build in possible times to teach the skill, if few natural times are identified: _____

Identify how many trials will be implemented during each instructional and probe session:

Instructional session = _____ trials

Probe session = _____ trials

**For more
information visit:**
www.afirm.fpg.unc.edu

Prompting (PP) ---Tip Sheet for Professionals---

Prompting PP

Prompting...

- is a foundational evidence-based practice for children and youth with autism spectrum disorder (ASD) from birth to 22 years old that is implemented in a variety of ways across multiple settings.
- is a set of procedures designed to reduce incorrect responses as learners acquire new skills and minimize negative effects learners might experience when target skills are not used successfully.

Why Use?

- Prompting maximizes the success of the learner.
- Prompting increases a learner's ability to generalize use of skills.

Outcomes

- The evidence-base for PP supports the use of this practice to address the outcomes below:

Early Intervention (0-2)	Preschool (3-5)	Elementary (6-11)	Middle (12-14)	High (15-22)
	Social	Social	Social	
	Communication	Communication	Communication	
	Joint Attention	Joint Attention		
		Behavior		Behavior
	School-Readiness		School-Readiness	School-Readiness
Play	Play	Play		
	Motor	Motor		
	Adaptive			Adaptive
				Vocational
	Academic	Academic	Academic	Academic



TIPS:

- Use the Prompting Decision Tree to select a prompting procedure.
- Identify reinforcers that will promote the use of the target skill or behavior.
- Respond to learner's attempts based upon if the attempt was correct or incorrect.
- Collect data on target skills or behaviors to determine next steps based on learner progress.



Prompting (PP) ---Tip Sheet for Professionals---

Prompting PP

This tip sheet was designed as a supplemental resource to help provide basic information about the practice.

For more information visit:
www.afirm.fpg.unc.edu



STEPS FOR IMPLEMENTING

1. Plan

- Identify the target skill/behavior as discrete or chained
- Select prompting procedure to use
- Identify target stimulus
- Select cues or task directions
- Select reinforcers
- Follow unique planning steps for selected prompting procedure (refer to Prompting Implementation Checklist for further details regarding the planning steps of selected prompting)

2. Use

- Least-to-Most Prompting:
 1. Establish learner attention, deliver stimulus, and provide the cue
 2. Wait for learner to respond
 3. Respond to learner's attempts
- Graduated Guidance:
 1. Establish learner attention, deliver stimulus, and provide the cue
 2. Wait for learner to respond
 3. Respond to learner's attempts
- Simultaneous Prompting:
 1. Establish learner attention, deliver stimulus, and provide the cue
 2. Conduct instructional sessions
 3. Conduct probe sessions

3. Monitor

- Collect data on target behaviors
- Determine next steps based on learner progress

Prompting (PP) ---Parent's Guide---



This parent introduction to PP was designed as a supplemental resource to help answer basic questions about this practice.

To find out more about how PP is used with your child, speak with:

For more information visit:
www.afirm.fpg.unc.edu

This introduction provides basic information about prompting.

What is PP?

- Prompting is an evidence-based practice for children and youth with autism spectrum disorder (ASD) from birth to 22 years old.
- Prompting includes a set of procedures designed to reduce incorrect responses as learners acquire new skills.
- The three prompting procedures are least-to-most prompting, graduated guidance, and simultaneous prompting.

Why use PP with my child?

- Prompting is used to instruct learners with ASD to maximize their success and increase their generalized use of the target skill.
- Research studies have shown that prompting has been used effectively with many age groups to achieve outcomes in the following areas: academic, adaptive, behavior, communication, joint attention, motor, play, school readiness, social, and vocational outcomes

What activities can I do at home?

- Model or demonstrate a behavior you would like your child to use. For example, demonstrate brushing teeth to help your child learn to brush teeth.
- Try a variety of prompts (verbal prompts, physical prompts, visual prompts, and model prompts) to see which work best for you and your child.
- Praise or reinforce appropriate behaviors (such as saying hello, using a spoon, asking for more).



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---Additional Resources---

Articles:

Akmanoglu, N., Yanardag, M., & Batu, E. S. (2014). Comparing video modeling and graduated guidance together and video modeling alone for teaching role playing skills to children with autism. *Education and Training in Autism and Developmental Disabilities, 49*(1), 17-31.

Domire, S. C. & Wolfe, P. (2014) Effects of video prompting techniques on teaching daily living skills to children with autism spectrum disorders: a review. *Research Practice for Persons with Severe Disabilities, 39*(3), 211-266.

Kagohara, D. M., van der Meer, L., Achmadi, D., Green V. A., O'Reilly, M. F., Lancioni, G. E., Sutherland, D., et al. (2012). Teaching picture naming to two adolescents with autism spectrum disorders using systematic instruction and speech-generating devices. *Research in Autism Spectrum Disorders, 6*, 1224-1233.
doi:10.1016/j.rasd.2012.04.001

Pennington, R. C., Collins, B. C., Stenhoff, D. M., Turner, K., & Gunselman, K. (2014). Using simultaneous prompting and computer-assisted instruction to teach narrative writing skills to students with autism. *Education and Training in Autism and Developmental Disabilities, 49*(3), 396-414.

Swain, R., Lane, J. D., & Gast, D. L. (2014) Comparison of constant time delay and simultaneous prompting procedures: Teaching functional sight words to students with intellectual disabilities and autism spectrum disorder. *Journal of Behavioral Education, 24*, 2210-224. doi: 10.1007/s10864-014-9209-5

Check out
these
resources to
support your
use of
prompting.

**For more
information visit:**
www.afirm.fpg.unc.edu

Websites:

Inge, K. J., Hendricks, D., & Palko, S. (n.d.). Autism Q and A: Using prompts to promote skill acquisition. Retrieved on December 16, 2015 from: <https://vcuautismcenter.org/resources/factsheets/printView.cfm/983>

The Center on Secondary Education for Students with Autism Spectrum Disorder. (n.d.) EBP: Prompting. Retrieved on December 16, 2015 from: <http://csesa.fpg.unc.edu/high-school-case-studies>



Autism Focused Intervention
Resources & Modules

Prompting CEC Standards

The CEC Standards that apply to all 27 evidence-based practices can be found on our website at: <http://afirm.fpg.unc.edu/learn-afirm>

Below are CEC Standards that apply specifically to Prompting (PP) module.

Standard	Description
Initial Preparation Standard 2: Learning Environments	
ISCI 2 K5	Social skills needed for educational and other environments
ISCI 2 S2	Identify realistic expectations for personal and social behavior in various settings
ISCI 2 S4	Design learning environments that encourage active participation in individual and group activities
ISCI 2 S5	Modify the learning environment to manage behaviors
ISCI 2 S10	Use effective and varied behavior management strategies
DDA2.S3	Use specialized instruction to enhance social participation across environments
Initial Preparation Standard 3: Curricular Content Knowledge	
DDA3 S3	Plan instruction for independent functional life skills and adaptive behavior
Initial Preparation Standard 4: Assessment	
ISCI 4 S5	Interpret information from formal and informal assessments
Initial Preparation Standard 5: Instructional Planning & Strategies	
ISCI 5 S19	Use strategies to support and enhance communication skills of individuals with exceptionalities
DDA5 S15	Use specialized instruction to enhance social participation across environments

Standard	Description
Advanced Preparation Standard 3: Programs, Services, and Outcomes	
SEDAS3 S7	Design and implement instruction that promote effective communication and social skills for individuals with developmental disabilities/autism spectrum disorders
SEDAS3 S8	Provide varied instruction and opportunity to learn play and leisure skills
SEDAS3 S12	Identify evidence based strategies to increase an individual's self-determination of activities, services and preferences

**For more
information visit:**
www.afirm.fpg.unc.edu

---Module References---

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10. West, E. A., & Billingsley, F. (2005). Improving the system of least prompts: A comparison of procedural variations. *Education and Training in Developmental Disabilities, 40*(2), 131-144.
11. Alberto, P. A., & Troutman, A. C. (2008). *Applied behavior analysis for teachers* (8th ed). Upper Saddle River, NJ: Prentice-Hall.
12. Akmanoglu-Uludag M., & Batu, S. (2005). Teaching naming relatives to individuals with Autism using simultaneous prompting. *Education and Training in Developmental Disabilities, 40*(4), 401-410.
13. Colozzi, G. A., Ward, L. W., & Crotty, K. E. (2008). Comparison of simultaneous prompting procedure in 1:1 and small group instruction to teach play skills to preschool students with Pervasive Developmental Disorder and developmental disabilities. *Education and Training in Developmental Disabilities, 43*(2), 226-248.
14. Gursel, O., Tekin-Iftar, E., & Bozurt, F. (2006). Effectiveness of simultaneous prompting in small group: The opportunity of acquiring non-target skills through observational learning and instructive feedback. *Education and Training in Developmental Disabilities, 41*(3), 225-243.
15. Kurt, O., & Tekin-Iftar, E. (2008). A comparison of constant time delay and simultaneous prompting within embedded instruction on teaching leisure skills to children with Autism. *Topics in Early Childhood Special Education, 28*(1), 53-64.
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