



EBP Brief Packet: PROMPTING FOR TODDLERS

UNC Frank Porter Graham Child Development Institute Autism Focused Intervention Resources & Modules for Toddlers Amsbary, J., Sam, A., Waters, V., Dees, R., & AFIRM for Toddlers Team, 2023







FRANK PORTER GRAHAM
CHILD DEVELOPMENT INSTITUTE





OVERVIEW OF CONTENT

1.	What is PP for Toddlers: A quick summary of salient features of Prompting, including specific procedures.	•
2.	Evidence-base: The evidence-base details the National Clearinghouse on Autism Evidence and Practice (NCAEP) criteria for inclusion as an evidence-based practice and the specific studies that meet the criteria for Prompting.	
3.	Implementation Checklists: Use these checklists to determine if Prompting for Toddlers is being implemented as intended.	6 is 12
4.	Planning Checklist & Other Planning Resources: Resources may include decision trees, checklists, and/or template forms that will support planning for the use of Prompting.	14
5.	<u>Coaching Resources:</u> Resources may include decision trees, checklists, and/or template forms that will support the use of Prompting.	28
6.	Data Collection Form(s): Use this form as a method for collecting and analyzing data to determine if the toddler is making progress towards the target goal/behavior/skill.	33
7.	Monitoring Progress Checklist & Other Monitoring Resources: Resources may include decision trees, checklists, and/or template forms that will support monitoring the use of Prompting.	
8.	Step-by-Step Guide for Early Interventionists: Use this guide as an outline for how to plan for, use, and monitor Prompting.	38
9.	<u>Tip Sheet for Caregiver:</u> Use this tip sheet, intended for caregivers working with toddlers on the spectrum, as a supplemental resource to help provide basic information about Prompting.	40
10.	Family Guide: Use this guide intended for parents or family members of toddlers on the spectrum to help them understand basic information about Prompting and how it is being used with their child.	
11.	Standards: A guide for early interventionists serving families and/or childcare providers of toddlers to support instructional outcomes.	Ī
12.		
13.	References: This list details the specific references used for developing this PP for Toddler module in numerical order.	S













PROMPTING

WHAT IS PP FOR TODDLERS?

Prompting is a foundational practice often used in combination with other evidence-based practices (such as reinforcement, visual supports, time delay) will assist the toddler in using specific skills or demonstrating specific behaviors.

Prompting hierarchy is the continuum of prompting used to support a learner in acquiring new skills.

Time Delay (TD) is an evidence-based practice using increasing amounts of wait time between instruction and prompting to increase the likelihood of independent use of the target skill/behavior.

SUGGESTED CITATION:

Amsbary, J., Sam, A., Waters, V., Dees, R., & AFIRM for Toddlers Team, (2023). *Prompting* for Toddlers. The University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Institute, Autism Focused Intervention Resources and Modules for Toddlers. https://afirm.fpg.unc.edu













Types of Prompts

GESTURAL

- A physical movement that provides the learner with information about how to perform the target skill/behavior
- El providers/caregivers use a gesture to provide the toddler with information about how to use a target skill/behavior or complete a task
- When a toddler is learning to wash their hands, the provider/caregiver points to the soap to indicate that the toddler should take some.

INDEPENDENT

• The learner is able to perform the target skill/behavior without assistance or support from others

MODEL

- Demonstrating the correct way to perform the target skill/behavior for the learner
- Model prompts involve demonstrating the target skill/behavior and are used when verbal or visual prompts are not sufficient in helping the toddler use the target skill
- El provider or caregiver may go through each step of hand washing in action to show the toddler what to do

PHYSICAL

- Hands-on assistance given to the learner to support them to perform the target skill/behavior
- Physical prompts are useful when teaching motor behaviors and when the toddler is not responding to less restrictive prompts (modeling, gestural, visual, or verbal).
- For full physical prompts, the provider/caregiver leads the toddler through the task by providing full assistance (e.g., hand-over-hand) to ensure correct use of the target skill/behavior.
- For partial physical prompts, the provider/caregiver provides minimal physical assistance (e.g., taps, nudges, and light pushes) to help the toddler use the target skill/behavior correctly.
- El provider or caregiver may stand behind the toddler and provide hand over hand assistance to support the toddler in hand washing (full) or the provider/caregiver may provide a partial prompt such as guiding the toddlers elbow towards the faucet and soap to support the toddler in hand washing.













VERBAL

- Any spoken words direct to the learner to help them perform the target skill/behavior
- Includes any verbal assistance provided to toddlers to help them use a target skill/behavior or complete a task
- El provider or caregiver tells the toddler, "Get soap" when the toddler has gotten hands wet and next needs soap.

VISUAL

 A picture, icon, or physical object used to provide the learner with information on how to perform the target skill/behavior









EVIDENCE-BASE

The National Clearinghouse on Autism Evidence and Practice has adopted the following criteria to determine if a practice is evidence-based. The 2020 EBP report (Steinbrenner et al., 2020) provides more information about the systematic review process.

Efficacy must be established through high-quality, peer-reviewed research in scientific journals using:

- At least 2 randomized or quasi-experimental group design studies, or
- At least 5 single subject/case design studies, or a
- Combination of evidence of 1 randomized or quasi-experimental group design study and 3 single subject/case design studies

OVERVIEW:

Based upon the 2020 systematic review conducted by the National Clearinghouse on Autism Evidence and Practice (NCAEP), prompting for toddlers is a focused intervention that meets the evidence-based practice criteria with 65 single case design and 7 group design studies. This practice has been effective for early intervention (0-2 years) and preschoolers (3-5 years) with autism. Studies included the 2020 EBP report⁵⁸ detail how prompting for toddlers can be used to effectively address the following outcomes for a target goal/behavior/skill: academic/preacademic, adaptive/self-help, behavior, cognitive, communication, joint attention, mental health, motor, play, school readiness, and social.

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

Age	Academic*	Adaptive	Behavior	Cognitive	Communication	Joint Attention	Motor	Play	School readiness	Social
0-2					Yes	Yes	Yes	Yes		Yes
3-5	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

*The NCAEP review classified practices into domains for an age range of 0-22. The focus of early intervention should be on pre-academic skills and the social and emotional well-being of children. AFIRM for Toddlers does not recommend working on academic goals/outcomes with children in early intervention.

Note: New studies since 2011 (2012 till 2017) are denoted in bold











EARLY INTERVENTION (0-2 YEARS) & PRESCHOOL (0-5) YEARS:

- *Akmanoglu, N., Kurt, O., & Kapan, A. (2015). Comparison of simultaneous prompting and constant time delay procedures in teaching children with autism the responses to questions about personal information. Educational Sciences: Theory and Practice, 15(3), 723-737. https://doi.org/10.12738/estp.2015.3.2654
- *Albert, K. M., Carbone, V. J., Murray, D. D., Hagerty, M., & Sweeney-Kerwin, E. J. (2012). Increasing the mand repertoire of children with autism through the use of an interrupted chain procedure. Behavior Analysis in Practice, 5(2), 65-76. https://doi.org/10.1007/bf03391825
- *Bailey, B., Arciuli, J., & Stancliffe, R. J. (2017a). Effects of ABRACADABRA instruction on spelling in children with autism spectrum disorder. Scientific Studies of Reading, 21(2), 146-164. https://doi.org/10.1080/10888438.2016.1276183
- *Bailey, B., Arciuli, J., & Stancliffe, R. J. (2017b). Effects of ABRACADABRA literacy instruction on children with autism spectrum disorder. Journal of Educational Psychology, 109(2), 257-268. https://doi.org/10.1037/edu0000138
- *Barkaia, A., Stokes, T. F., & Mikiashvili, T. (2017). Intercontinental telehealth coaching of therapists to improve verbalizations by children with autism. Journal of Applied Behavior Analysis, 50(3), 582-589. https://doi.org/10.1002/jaba.391
- Barton, E. E. (2015). Teaching generalized pretend play and related behaviors to young children with disabilities. Exceptional Children, 81(4), 489-506. https://doi.org/10.1177/0014402914563694
- *Barton, E. E., & Wolery, M. (2010). Training teachers to promote pretend play in young children with disabilities. Exceptional Children, 77(1), 85-106. https://doi.org/10.1177/001440291007700104
- Bremer, E., Balogh, R., & Lloyd, M. (2015). Effectiveness of a fundamental motor skill intervention for 4-yearold children with autism spectrum disorder: A pilot study. Autism: The International Journal of Research and Practice, 19(8), 980-991. https://doi.org/10.1177/1362361314557548
- Carlson, B., McLaughlin, T., Derby, K. M., & Blecher, J. (2009). Teaching preschool children with autism and developmental delays to write. Electronic Journal of Research in Educational Psychology, 7(1), 225-238. https://doi.org/10.25115/ejrep.v7i17.1313
- Carp, C. L., Peterson, S. P., Arkel, A. J., Petursdottir, A. I., & Ingvarsson, E. T. (2012). A further evaluation of picture prompts during auditory-visual conditional discrimination training. Journal of Applied Behavior Analysis, 45(4), 737-51. https://doi.org/10.1901/jaba.2012.45-737
- Cengher, M., Shamoun, K., Moss, P., Roll, D., Feliciano, G., & Fienup, D. M. (2016). A comparison of the effects of two prompt-fading strategies on skill acquisition in children with autism spectrum disorders. Behavior Analysis in Practice, 9(2), 115-25. https://doi.org/10.1007/s40617-015-0096-6
- *Delmolino, L., Hansford, A. P., Bamond, M. J., Fiske, K. E., & Larue, R. H. (2013). The use of instructive feedback for teaching language skills to children with autism. Research in Autism Spectrum Disorders, 7(6), 648-661. https://doi.org/10.1016/j.rasd.2013.02.015
- Dixon, M. R., Peach, J., Daar, J. H., & Penrod, C. (2017). Teaching complex verbal operants to children with autism and establishing generalization using the peak curriculum. Journal of Applied Behavior Analysis, 50(2), 317-331. https://doi.org/10.1002/jaba.373
- 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. https://doi.org/10.1016/rasd.2006.10.003
- *Fentress, G. M., & Lerman, D. C. (2012). A comparison of two prompting procedures for teaching basic skills to children with autism. Research in Autism Spectrum Disorders, 6(3), 1083-1090. https://doi.org/10.1016/j.rasd.2012.02.006
- 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. https://doi.org/10.1016/j.rasd.2009.07.009
- Fleury, V. P., Miramontez, S. H., Hudson, R. F., & Schwartz, I. S. (2014). Promoting active participation in book reading for preschoolers with Autism Spectrum Disorders: A preliminary study. Child Language Teaching and Therapy, 30(3), 273-288. https://doi.org/10.1177/0265659013514069









PP

for Toddlers



- For more information, please visit: https://afirm.fpg.unc.edu/
- *Frampton, S. E., Wymer, S. C., Hansen, B., & Shillingsburg, M. A. (2016). The use of matrix training to promote generative language with children with autism. Journal of Applied Behavior Analysis, 49(4), 869-883. https://doi.org/10.1002/jaba.340
- *Garcia-Albea, E., Reeve, S. A., Brothers, K. J., & Reeve, K. F. (2014). Using audio script fading and multipleexemplar training to increase vocal interactions in children with autism. Journal of Applied Behavior Analysis, 47(2), 325-343. https://doi.org/10.1002/jaba.125
- Gena, A. (2006). The effects of prompting and social reinforcement on establishing social interactions with peers during the inclusion of four children with autism in preschool. International Journal of Psychology, 41(6), 541-554. https://doi.org/10.1080/00207590500492658
- *Gilley, C., & Ringdahl, J. E. (2014). The effects of item preference and token reinforcement on sharing behavior exhibited by children with autism spectrum disorder. Research in Autism Spectrum Disorders, 8(11), 1425-1433. https://doi.org/10.1016/j.rasd.2014.07.010
- Goldstein, H. & Cisar, C. L. (1992). Promoting interaction during sociodramatic play: Teaching scripts to typical preschoolers and classmates with disabilities. Journal of Applied Behavior Analysis, 25(3), 265-280. https://doi.org/10.1901/jaba.1992.25-265
- *Greenberg, J. H., Lau, W., & Lau, S. (2016). Teaching appropriate play to replace stereotypy using a treatment package with students having autism. Global Education Review, 3(3), 94-104.
- 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. https://doi.org/10.1016/j.rasd.2011.01.018
- Hudson, R. F., Sanders, E. A., Greenway, R., Xie, S., Smith, M., Gasamis, C., Martini, J., Schwartz, I., & Hackett, J. (2017). Effects of emergent literacy interventions for preschoolers with autism spectrum disorder. Exceptional Children, 84(1), 55-75. https://doi.org/10.1177/0014402917705855
- *Humphreys, T., Polick, A. S., Howk, L. L., Thaxton, J. R., & Ivancic, A. P. (2013). An evaluation of repeating the discriminative stimulus when using least-to-most prompting to teach intraverbal behavior to children with autism. Journal of Applied Behavior Analysis, 46(2), 534-8. https://doi.org/10.1002/jaba.43
- *ladarola, S., Shih, W., Dean, M., Blanch, E., Harwood, R., Hetherington, S., Mandell, D., Kasari, C., & Smith, T. (2018). Implementing a manualized, classroom transition intervention for students with ASD in underresourced schools. Behavior Modification, 42(1), 126-147. https://doi.org/10.1177/0145445517711437
- *† Ingvarsson, E. T., & Hollobaugh, T. (2010). Acquisition of intraverbal behavior: Teaching children with autism to mand for answers to questions. Journal of Applied Behavior Analysis, 43(1), 43847. https://doi.org/10.1901/jaba.2010.43-1
- 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. https://doi.org/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. https://doi.org/10.1007/bf03393093
- *Knight, V. F., Smith, B. R., Spooner, F., & Browder, D. (2012). Using explicit instruction to teach science descriptors to students with autism spectrum disorder. Journal of Autism and Developmental Disorders, 42(3), 378-89. https://doi.org/10.1007/s10803-011-1258-1
- *Kodak, T., Paden, A., & Dickes, N. (2012). Training and generalization of peer-directed mands with non-vocal children with autism. The Analysis of Verbal Behavior, 28(1), 119-24.
- Koegel, R. L., Shirotova, L., & Koegel, L. K. (2009). Brief report: Using individualized orienting cues to facilitate firstword acquisition in non-responders with autism. Journal of Autism and Developmental Disorders, 39(2), 1587-1592. https://doi.org/10.1007/s10803-009-0765-9
- Krstovska-Guerrero, I., & Jones, E. A. (2016). Social-communication intervention for toddlers with Autism Spectrum Disorder: Eye gaze in the context of requesting and joint attention. Journal of Developmental and Physical Disabilities, 28(2), 289-316. https://doi.org/10.1007/s10882-015-9466-9
- *Kryzak, L. A., & Jones, E. A. (2015). The effect of prompts within embedded circumscribed interests to teach initiating joint attention in children with autism spectrum disorders. Journal of Developmental and Physical Disabilities, 27(3), 265-284. https://doi.org/10.1007/s10882-014-9414-0
- *Kryzak, L. A., Bauer, S., Jones, E. A., & Sturmey, P. (2013). Increasing responding to others' joint attention directives using circumscribed interests. Journal of Applied Behavior Analysis, 46(3), 674-9. https://doi.org/10.1002/jaba.73













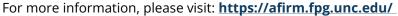
- Lang, R., Machalicek, W., Rispoli, M., O'Reilly, M., Sigafoos, J., Lancioni, G., Peters-Scheffer, N., & Didden, R. (2014). Play skills taught via behavioral intervention generalize, maintain, and persist in the absence of socially mediated reinforcement in children with autism. Research in Autism Spectrum Disorders. 8(7), 860-872. https://doi.org/10.1016/j.rasd.2014.04.007
- *Latham, S. O., & Stockman, I. J. (2014). Effect of augmented sensorimotor input on learning verbal and nonverbal tasks among children with autism spectrum disorders. Journal of Autism and Developmental Disorders, 44(6), 1288-1302. https://doi.org/10.1007/s10803-013-1990-9
- *Leaf, J. B., Leaf, R., Taubman, M., McEachin, J., & Delmolino, L. (2014). Comparison of flexible prompt fading to error correction for children with autism spectrum disorder. Journal of Developmental and Physical Disabilities, 26(2), 203-224. https://doi.org/10.1007/s10882-013-9354-0
- 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. https://doi.org/10.1901/jaba.2010.43-215
- *Leaf, J. B., Townley-Cochran, D., Mitchell, E., Milne, C., Alcalay, A., Leaf, J., Leaf, R., Taubman, M., McEachin, J., & Oppenheim-Leaf, M. L. (2016). Evaluation of multiple-alternative prompts during tact training. Journal of Applied Behavior Analysis, 49(2), 399-404. https://doi.org/10.1002/jaba.289
- LeBlanc, L. A., Carr, J. E., Crossett, S. E., Bennett, C. M., & Detweiler, D. D. (2005). Intensive outpatient behavioral treatment of primary urinary incontinence of children with autism. Focus on Autism and Other Developmental Disabilities, 20(2), 98-105. https://doi.org/10.1177/10883576050200020601
- †Leung, J. P. (1994). Teaching spontaneous requests to children with autism using a time delay procedure with multi-component toys. Journal of Behavioral Education, 4(1), 21-31. https://doi.org/10.1007/BF01560506
- Levin, D. S., Volkert, V. M., & Piazza, C. C. (2014). A multi-component treatment to reduce packing in children with feeding and autism spectrum disorders. Behavior Modification, 38(6), 940-63. https://doi.org/10.1177/0145445514550683
- *Lorah, E. R., Parnell, A., & Speight, D. R. (2014). Acquisition of sentence frame discrimination using the iPad as a speech generating device in young children with developmental disabilities. Research in Autism Spectrum Disorders, 8(12), 1734-1740. https://doi.org/10.1016/j.rasd.2014.09.004
- Lorah, E., Tincani, M., Dodge, J., Gilroy, S., Hickey, A., & Hantula, D. (2013). Evaluating picture exchange and the iPad as a speech generating device to teach communication to young children with Autism. Journal of Developmental & Physical Disabilities, 25(6), 637-649. https://doi.org/10.1007/s10882-013-
- MacDuff, J. L., Ledo, R., McClannahan, L. E., & Krantz, P. J. (2007). Using scripts and script-fading procedures to promote bids for joint attention by young children with autism. Research in Autism Spectrum Disorders, 1(4), 281-290. https://doi.org/10.1016/j.rasd.2006.11.003
- Marion, C., Martin, G. L., Yu, C. T., Buhler, C., & Kerr, D. (2012). Teaching children with autism spectrum disorder to mand 'where?'. Journal of Behavioral Education, 21(4), 273-294. https://doi.org/10.1007/s10864-012-9148-y
- *Matson, J. L., Taras, M. E., Sevin, J. A., Love, S. R., & Fridley, D. (1990). Teaching self-help skills to autistic and mentally retarded children. Research in Developmental Disabilities, 11(4), 361-378. https://doi.org/ 10.1016/0891-4222(90)90023-2
- *McDowell, L. S., Gutierrez, A., & Bennett, K. D. (2015). Analysis of live modeling plus prompting and video modeling for teaching imitation to children with autism. Behavioral Interventions, 30(4), 333-351. https://doi.org/10.1002/bin.1419
- Miller, S. A., Rodriguez, N. M., & Rourke, A. J. (2015). Do mirrors facilitate acquisition of motor imitation in children diagnosed with autism? Journal of Applied Behavior Analysis, 48(1), 194-8. https://doi.org/10.1002/jaba.187
- Muzammal, M. S., & Jones, E. A. (2016). Social-communication intervention for toddlers with autism spectrum disorder: Effects on initiating joint attention and interactions with mother. Journal of Developmental and Physical Disabilities, 29, 203-221. https://doi.org/10.1007/s10882016-9519-8
- Ninci, J., Lang, R., Davenport, K., Lee, A., Garner, J., Moore, M., Boutot, A., Rispoli, M., & Lancioni, G. (2013). An analysis of the generalization and maintenance of eye contact taught during play. Developmental Neurorehabilitation, 16(5), 301-7. https://doi.org/10.3109/17518423.2012.730557
- O'Brien, M., McTiernan, A., & Holloway, J. (2017). Teaching phonics to preschool children with autism using frequency-building and computer-assisted instruction. Journal of Developmental and Physical *Disabilities*, 30, 215-237. https://doi.org/10.1007/s10882-017-9581-x













- Ostryn, 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. https://doi.org/10.1097/IYC.0b013e31820d95ff
- *Pelios, L. V., MacDuff, G. S., & Axelrod, S. (2003). The effects of a treatment package in establishing independent academic work skills in children with autism. Education and Treatment of Children, 26(1), 43851.
- *Peterson, K. M., Piazza, C. C., & Volkert, V. M. (2016). A comparison of a modified sequential oral sensory approach to an applied behavior-analytic approach in the treatment of food selectivity in children with autism spectrum disorder. Journal of Applied Behavior Analysis, 49(3), 485-511. https://doi.org/10.1002/jaba.332
- Post, A. R., & Kirkpatrick, M. A. (2004). Toilet training for a young boy with pervasive developmental disorder. Behavioral Interventions, 19(1), 45-50. https://doi.org/10.1002/bin.149
- Rakap, S., & Balikci, S. (2017). Using embedded instruction to teach functional skills to a preschool child with autism. International Journal of Developmental Disabilities, 63(1), 17-26. https://doi.org/10.1080/20473869.2015.1109801
- *Reagon, K. A., & Higbee, T. S. (2009). Parent-implemented script fading to promote play-based verbal initiations in children with autism. Journal of Applied Behavior Analysis, 42(3), 659-664. https://doi.org/10.1901/jaba.2009.42-659
- 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. https://doi.org/10.1044/1058-0360(2008/022)
- †Reichow, B., & Wolery, M. (2011). Comparison of progressive prompt delay with and without instructive feedback. Journal of Applied Behavior Analysis, 44(2), 327-340. https://doi.org/10.1901/jaba.2011.44-327
- †Rogers, L., Hemmeter, M. L., & Wolery, M. (2010). Using a constant time delay procedure to teach foundational swimming skills to children with autism. Topics in Early Childhood Special Education, 30(2), 102-111. https://doi.org/10.1177/0271121410369708
- *Satsangi, R., & Bofferding, L. (2017). Improving the numerical knowledge of children with autism spectrum disorder: The benefits of linear board games. Journal of Research in Special Educational Needs, 17(3), 218-226. https://doi.org/10.1111/1471-3802.12380
- *Schrandt, J. A., Townsend, D. B., & Poulson, C. L. (2009). Teaching empathy skills to children with autism. Journal of Applied Behavior Analysis, 42(1), 17-32. https://doi.org/10.1901/jaba.2009.42-17
- †Silbaugh, B. C., Falcomata, T. S., & Ferguson, R. H. (2018). Effects of a lag schedule of reinforcement with progressive time delay on topographical mand variability in children with autism. Developmental Neurorehabilitation, 21(3), 166-177. https://doi.org/10.1080/17518423.2017.1369190
- *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), 125-139. https://doi.org/10.1007/bf03393096
- †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(1), 3-14. https://doi.org/ 10.1901/jaba.1995.28-3
- †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. https://doi.org/10.1901/jaba.2008.41-377
- 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. https://doi.org/10.1002/bin.300
- Toelken, S., & Miltenberger, R. G. (2012). Increasing independence among children diagnosed with autism using a brief embedded teaching strategy. Behavioral Interventions, 27(2), 93-104. https://doi.org/10.1002/bin.337
- 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. https://doi.org/10.1002/bin.317
- *Tzanakaki, P., Grindle, C. F., Dungait, S., Hulson-Jones, A., Saville, M., Hughes, J. C., & Hastings, R. P. (2014). Use of a tactile prompt to increase social initiations in children with autism. Research in Autism Spectrum Disorders, 8(6), 726-736. https://doi.org/10.1016/j.rasd.2014.03.016
- Vedora, I., 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. https://doi.org/10.1007/bf03393072













For more information, please visit: https://afirm.fpg.unc.edu/



- †Venn, M. L., Wolery, M., Werts, M. G., Morris, A., DeCesare, L. D., & Cuffs, M. S. (1993). Embedding instruction in art activities to teach preschoolers with disabilities to imitate their peers. Early Childhood Research Quarterly, 8(3), 277-294. https://doi.org/10.1016/S0885-2006(05)80068-7
- Whalen, C., & Schreibman, L. (2003). Joint attention training for children with autism using behavior modification procedures. *Journal of Child Psychology and Psychiatry*, *44*(3), 456-468. https://doi.org/10.1111/1469-7610.00135
- Whalon, K., Martinez, J. R., Shannon, D., Butcher, C., & Hanline, M. F. (2015). The impact of reading to engage children with autism in language and learning (RECALL). *Topics in Early Childhood Special Education*, 35(2), 102-115. https://doi.org/10.1177/0271121414565515
- 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. https://doi.org/10.1901/jaba.2000.33-627
- *Williams, G., Pérez-González, L. A., & Vogt, K. (2003). The role of specific consequences in the maintenance of three types of questions. *Journal of Applied Behavior Analysis, 36*(3), 285-296. https://doi.org/10.1901/jaba.2003.36-285
- Wood, B. K., Wolery, M., & Kaiser, A. P. (2009). Treatment of food selectivity in a young child with autism. *Focus on Autism and Other Developmental Disabilities*, 24(3), 169-177. https://doi.org/10.1177/1088357609338381

Note: New studies since 2011 (2012 till 2017) are denoted in bold; † denotes articles specific to Time Delay













IMPLEMENTATION CHECKLIST: FOR EI PROVIDER

	Observation:	1	2	3	4	5
	Date:					
	Observer's initials:					
STEP 1	: JOINT PLANNING FOR PROMPTING					
1.1	Select target skill/behavior for toddler with caregiver (e.g., family					
	member, early care and education provider)					
1.2	Collect baseline on target skill/behavior with caregiver					
1.3	Discuss prompting basics and using steps with caregiver					Ш
1.4	Develop Individualized Prompting Plan with caregiver that include	es:				
1.4a	Determine cues that will be given to the toddler					
1.4b	Identify types of prompts to use (least to most restrictive)					
1.4c	Discuss planned wait time and how you will increase it based on					
	toddler progress					
1.4d	Determine reinforcers					
1.4e	Discuss systematic fading of prompts to promote independence					
1.5	Select activity/setting that prompting will be used with					
1.6	Have materials ready and available					
	: COACHING USE OF PROMPTING					
2.1	Model using prompting for the caregiver (Live and/or video):					
2.1a	Introduce the Caregiver Prompting Implementation Checklist to					
2.14	the caregiver					
2.1b	Model the steps of the determined Individualized Prompting					
2.10	Plan while the caregiver observes					
2.1c	Have the caregiver complete the Caregiver Prompting					
2.10	Implementation Checklist					
2.2	Answer caregiver's questions, if needed					
2.3	Support caregiver's use of Caregiver Prompting Implementation					
2.5	Checklist to practice using prompting					
2.4	Facilitate caregiver reflection and provide feedback following their					
2.4	practice use of prompting					
2.5	Discuss with the caregiver use of Prompting in daily routines and					
	activities					
STEP 3	STEP 3: MONITORING USE OF PROMPTING					
3.1	Plan for and support caregiver's data collection on the toddler's					
	progress toward the target skill/behavior					
3.2	Monitor caregiver fidelity using the Caregiver Prompting					
	Implementation Checklist					
3.3	Review data collected on the toddler's target skill/behavior	<u> </u>		<u> </u>	<u> </u>	Ш
3.4	Support use of prompting for other skills/behaviors			<u> </u>	<u> </u>	Ш
3.5	Collaborate with caregiver about next steps					









IMPLEMENTATION CHECKLIST: FOR CAREGIVER

JOINT PLANNING
 □ Discuss prompting with your provider: □ Determine cues □ Identify level and type of prompts □ Discuss wait time and how that will increase once the toddler starts using the skill □ Select rewards (reinforcers) □ View models (live and/or video) of prompting (rewards) □ Practice using prompting with reflection, support, and feedback from your provider
WHILE USING PROMPTING
 □ Have materials ready and available □ Prepare the toddler for the activity to target the skill/behavior □ Transition into the activity □ Let the toddler know what is going to happen □ Engage the toddler in the activity □ Provide prompting to support the toddler to complete target skill/behavior (following the steps on your Individualized Prompting Plan) □ Record what happened by collecting data during use of prompting to share with provider at next session CHECK-INS WITH YOUR PROVIDER
 □ Share what happened using prompting (successes, challenges, concerns, etc.) □ Discuss and problem solve with your provider □ Determine next steps based on the toddler's progress













SELECT A TARGET GOAL

	ddler's Name: Date/Time:					
	server(s): rget Skill/Goal/Behavior:					
Di	irections: Use this form to select a target behavior that is measurable and observable by ddressing the when, what, and how in collaboration with the caregiver.					
D	TERMINE GOAL:					
1.	In our service evaluation, you said your top concern(s) about the toddler was/is Is that still true? What is your biggest goal or priority for the toddler right now?					
2.	Tell me more about the toddler. What is the toddler really good at doing? What are their favorite things to play with and what does that play look like? How does it go when you join in the toddler's play with their favorite things?					
3.	Tell me about the best interaction you had with the toddler recently. Where were you and what were you doing that made it go well?					
4.	I want to hear about times things do not go well between you and the toddler. Does this happen at a certain time of day or during particular activities? What do you and the toddler do when this happens?					
5.	When you really need the toddler to do something, how do you get them to do it? What are things that motivate the toddler?					
6.	In three months, what do you hope will have changed as a result of our early intervention sessions?					













CREATE A MEASURABLE AND OBSERVABLE GOAL:

1.	WHAT	is the target goal/behavior/skill?
	**!!/~!	13 the target goal/ behavior/ 3km;

- 2. WHEN and WHERE should the target goal/behavior/skill occur?
- 3. HOW will team members/observers know the target goal/behavior/skill has been mastered?

GOAL:













DATA COLLECTION: BASELINE

Observer(s): Target Skill/ Directions: \	Goal/Behavior: Jse this sheet to collect havior/goal/skill across	baseline data on the to	ddler's and caregiver's behaviors on
Setting/ Routine	Caregiver Behavior	Toddler Behavior	Notes













INDIVIDUALIZED PROMPTING PLAN

Toddler's Name:	Date/Time:
Observer(s):	
Directions: Complete this checklist to determine if this is toddler as well as if Prompting is ready to be implemented	an appropriate practice to use with the
DETERMINE CUES:	
Is the cue to perform the target goal? ☐ Naturally occurring ☐ Completion of one event/activity ☐ An external signal ☐ Other:	
IDENTIFY HOW PROMPTS WILL BE USED:	
☐ Gestural:	
□ Model:	
□ Physical:	
□ Verbal:	
□ Visual:	











DETERMINE PROMPT ORDER & DIRECTIONS:

Level	Prompt	Instructions
Level 1	Independent	
Level 2		
Level 3		
Level 4		
Level 5		
Level 6		

DETERMINE...:

ابيدك	ana will	WOLL Wait after	cuing the toddler t	a provida tha l	loval 2 prompt2
TOW I	OHE WIII	you wait aiter	culling the todaler t	o provide trie i	Level Z prompt:

☐ 2 seconds

□ 3 seconds

☐ Other:

Reinforcers:

Plan for fading prompts to increase toddler's independence:













PROMPTING HIERARCHY

Toddler's Name: Observer(s):	Date/Time:
Target Goal/Behavior/Skill:	
•	ine order of prompts based on the toddler's needs and

PROMPTS:

- **Gestural** a physical movement that provides the learner with information about how to perform the target skill/behavior
- **Independent** the learner can perform the target skill/behavior without assistance or support from others
- Model demonstrating the correct way to perform the target skill/behavior for the learner
- **Physical** hands-on assistance given to the learner to support them to perform the target skill/behavior
- Verbal any spoken words direct to the learner to help them perform the target skill/behavior
- **Visual** a picture, icon, or physical object used to provide the learner with information on how to perform the target skill/behavior

Level	Prompt	Instructions
Level 1	Independent	
Level 2		
Level 3		
Level 4		
Level 5		
Level 6		













REINFORCER SAMPLING & CHECKLIST

Toddler's Name:	Date/Time:
Observer(s):	
Target Goal/Behavior/Skill:	
Directions: Use this worksheet and checklist to id the toddler's preferred items, interests, and activition	•

CONDUCT A REINFORCER SAMPLING:

- 1. Sit in front of the toddler and hold up two items. Ask the toddler to "Pick one."
- 2. Wait 10 seconds for the toddler to indicate selection in manner that is appropriate for the toddler (e.g., verbalization, pointing, using an augmentative communication device).
- 3. Place the selected object in a container for toddler's selection and non-selected item in the not selected container.
- 4. Repeat steps 1 through 3 until half of the objects presented are selected.

ltem 1	Selected?	ltem 2	Selected?
	Yes No		Yes No
	Yes No		Yes No
	Yes No		Yes No
	Yes No		Yes No
	Yes No		Yes No
	Yes No		Yes No
	Yes No		Yes No

LIST SELECTED REINFORCERS:













LIST POTENTIAL REINFORCERS:

	AGE APPROPRIATE?
1. What natural reinforcers could be used?	Yes No
2. What activities, objects, and/or foods does the toddler select independently?	Yes No
3. What phrases or gestures seem to produce a pleasant response from the toddler?	Yes No
4. What does the toddler say they would like to work for (if appropriate)?	Yes No
5. What reinforcers were identified by parents/family members and/or team members as being successful in the past?	Yes No
6. Does the toddler require additional adaptations/ modifications/supports? Such as visual supports or a communication device?	Yes No
7. Have reinforcers/rewards for the toddler been identified based on the toddler's interests/preferred items and/or activities?	Yes No
8. Are additional materials and/or resources for using Functional Behavior Assessment ready and available?	
	Yes No













For more information, please visit: https://afirm.fpg.unc.edu/

	PP
T	for oddlers

FO	ODS FOR SNACKS/MEA	LTI	ME ROUTINES:	
	Cheese		Fruit	Pretzels
	Chicken Nuggets		Goldfish	Other:
	Chips		Ice Cream	Other:
	French Fries		Pizza	Other:
GA	MES FOR PLAY/RECESS	RO	UTINES:	
	Burrito games with a		Peek-a-Boo	Other:
	blanket		Tickles	Other:
	Chase		Other:	Other:
	Pat-a-Cake			
TO	YS FOR PLAY/RECESS R	OU	TINES:	
	Books		Legos	Remote controlled toys
	Cars/Trains/Trucks		Noisy toys	Other:
	Computer		Phones	Other:
	Doll house		Puzzles	Other:
CD	COLAL INTERFECTS FOR	CT	N/ITIES/DOLITINES.	
	Book Character			TV Charm
	Book Character:		Movie Character:	TV Show:
	Book:		Movie:	Video Game:
	Cars, Trains, Trucks		Music	Other:
	Computers/Technology		Numbers	Other:
	Dinosaurs		Real-Life Person:	Other:
	Letters		TV Show Character:	Other:













FAMILY DAILY ROUTINES/ACTIVITIES PLAN

Toddler's Name:	Date/Time:
Observer(s):	
Target Goal/Behavior/Skill:	
•	t the family member using Prompting for Toddlers in

Morning Routine/ Activity	Enjoyment Level	Barriers/ Struggles	Transitions	Good fit for EBP?
Waking up	© ©		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Getting dressed	© ©		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Eating breakfast	© ©		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Brushing teeth	© ©		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Other	899		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No

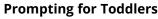
Afternoon Routine/ Activity	Enjoyment Level	Barriers/ Struggles	Transitions	Good fit for EBP?
Napping	8 9		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Playing	(C)		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Eating lunch/ snack	8 9 9		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Brushing teeth	3		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Other	© ©		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No













Prompting for ToddlersFor more information, please visit: https://afirm.fpg.unc.edu/



Evening Routine/ Activity	Enjoyment Level	Barriers/ Struggles	Transitions	Good fit for EBP?
Going to sleep	⊗ ⊕ ⊕		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Changing clothes	899		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Reading story	899		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Eating dinner	899		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Brushing teeth	899		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Bathing	899		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Other	899		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No

Other Routines	Enjoyment Level	Barriers/ Struggles	Transitions	Good fit for EBP?
Playdates/ Playgroups	© ©		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
School/ Childcare	(3)		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Playing Outside	8 9 9		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Other	8 9 9		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No









	A	
AFIRM		

Outings	Enjoyment Level	Barriers/ Struggles	Transitions	Good fit for EBP?
Playground /Park	Ø © ©		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Store	899		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Church	899		Into: NA rough so-so smooth Out: NA rough so-so smooth	□ Yes □ Maybe □ No
Pool	899		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Restaurant	899		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Doctor	Ø 9 9		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Family	899		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No
Other	899		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No

ADDITIONAL NOTES:











S PP for Toddlers

CENTER-BASED ROUTINES/ACTIVITIES PLAN

Toddler's Name: Observer(s):			Date/Time:			
Target Goal/Behavior/Skill:						
center-based da		nd activities.				
Self-care	Enjoyment Level	Barriers/ Struggles	Transitions	Good fit for EBP?		
	_	Darriers/ Struggies	Into: NA rough so-so smooth	☐ Yes		
Mealtime	<i>⊗</i> ⊕ ⊕		Out: NA rough so-so smooth	☐ Maybe ☐ No		
Snack time	8 9 9		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No		
Diapering/ Potty	8 9 9		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No		
Handwashing	8 9 9		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No		
Napping	8 9 9		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No		
Other	⊗ ⊕ ⊕		Into: NA rough so-so smooth Out: NA rough so-so smooth	☐ Yes ☐ Maybe ☐ No		
	Enjoyment			Good fit		
Activities	Enjoyment Level	Barriers/ Struggles	Transitions	for EBP?		
Activities Group time	• •	Barriers/ Struggles	Into: NA rough so-so smooth Out: NA rough so-so smooth	for EBP? Yes Maybe No		
	Level	Barriers/ Struggles	Into: NA rough so-so smooth	for EBP? Yes Maybe No Yes Maybe No No No		
Group time	Level	Barriers/ Struggles	Into: NA rough so-so smooth Out: NA rough so-so smooth Into: NA rough so-so smooth	for EBP? Yes Maybe No Yes Maybe		
Group time Story time	Level Control Contr	Barriers/ Struggles	Into: NA rough so-so smooth Out: NA rough so-so smooth Into: NA rough so-so smooth Out: NA rough so-so smooth Into: NA rough so-so smooth	for EBP? Yes Maybe No Yes Maybe No Yes Maybe No Yes Maybe		
Group time Story time Free play	Level	Barriers/ Struggles	Into: NA rough so-so smooth Out: NA rough so-so smooth Into: NA rough so-so smooth Out: NA rough so-so smooth Into: NA rough so-so smooth Out: NA rough so-so smooth Into: NA rough so-so smooth Into: NA rough so-so smooth	for EBP? Yes Maybe No No Yes		
Group time Story time Free play Center play	Level	Barriers/ Struggles	Into: NA rough so-so smooth Out: NA rough so-so smooth	for EBP? Yes Maybe No No Yes		
Group time Story time Free play Center play Outdoor play	Level	Barriers/ Struggles	Into: NA rough so-so smooth Out: NA rough so-so smooth	for EBP? Yes Maybe No No Yes Maybe No		
Group time Story time Free play Center play Outdoor play Table time Drop off/	Level	Barriers/ Struggles AFIRM Resources & Modules Development Cer	Into: NA rough so-so smooth Out: NA rough so-so smooth	For EBP? Yes Maybe No No No No No No No N		





PLANNING CHECKLIST

Toddler's Name: Date Observer(s): Target Skill/Goal/Behavior:	/Time:
Directions: Complete this checklist to determine if this is an ap toddler on the spectrum as well as if PP for Toddlers is ready to	
PLANNING:	
☐ Has the target goal/behavior/skill been identified?	
Has baseline data and/or a functional behavior assessment observation of the toddler?	been collected through direct
☐ Is the target goal/behavior/skill measurable and observables target goal/behavior/skill is, when it will occur, and how tea it has been mastered?	
☐ Is Prompting appropriate for the toddler's target goal/behave	vior/skill?
Does the toddler have needed prerequisite skills/abilities?	
Does the toddler require additional adaptations/modification supports or a communication device?	ns/supports? Such as visual
Have reinforcers/rewards for the toddler been identified bas interests/preferred items and/or activities?	sed on the toddler's
☐ Are additional materials and/or resources for using Prompti	ng ready and available?



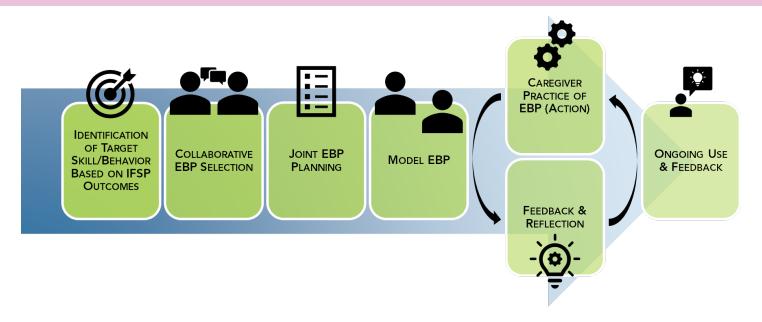








COACHING GUIDE



MODEL: Model use of prompting for the caregiver. Have the caregiver note any questions or observations that they have as you model.

- Introduce the Caregiver Implementation Checklist to the caregiver.
- Mode use of prompting with the toddler while the caregiver observes you.
- Have the caregiver complete the Caregiver Implementation Checklist.

CAREGIVER PRACTICE: Coach the caregiver as they practice using prompting, using the Caregiver Implementation Checklist as a guide. Video record them if they are comfortable.

FEEDBACK AND REFLECTION: Watch the video of the caregiver practicing prompting with the caregiver. Ask the caregiver to reflect on their own use of prompting and offer feedback for the next time they use it.

REPEAT CYCLE: Repeat the cycle of caregiver practice and reflection until the caregiver has mastered implementation of that EBP in that setting. Monitor the caregiver's on-going use of prompting while also monitoring the toddler's progress toward the target skill/behavior.

ON-GOING USE AND FEEDBACK: Re-assess once the caregiver has mastered prompting in one routine/activity and with one target skill, consider other routines and activities where prompting could be used or other goals that may be targeted by that EBP. Discuss with the caregiver if they would like to target another goal and begin evidence-based practice selection and collaborative planning cycle again.













FAQ GUIDE

What is an evidence-based practice? What makes prompting an evidence-based practice?

An evidence-based practice is an instructional/intervention procedure or set of procedures for which researchers have provided an acceptable level of research that shows the practice produces positive outcomes (NPDC, n.d.). Based upon the 2020 systematic review conducted by the National Clearinghouse on Autism Evidence and Practice (NCAEP), prompting for toddlers is a focused intervention that meets the evidence-based practice criteria (Steinbrenner et al., 2020).

Why is prompting important? Why should I use it with toddlers? What will it help toddlers with?

Prompting is important because it can be used to support a toddler to successfully use a target skill/behavior. Prompting can be used to address outcomes across a range of domains, including adaptive skills, communication skills, social skills, among many others, ultimately leading to the toddler's independent use of the target skill/behavior.

What steps are involved with using Prompting?

Using Prompting involves collaborating to determine a system of least to most prompts beginning with the opportunity for the toddler to display the target skill/ behavior independently and selecting visual, verbal, physical, gestural, and/or model prompting techniques in a hierarchical order to support the toddler to use the target skill/behavior. It also involves determining how long to wait before providing a given prompt. The end goal of Prompting is that the toddler learns to use the target skill/behavior independently.

Are there different kinds of Prompting?

There are different kinds of prompting and different types of prompts. We will collaborate to determine which prompts are appropriate for the toddler and their target skill/behavior and in which order to provide them (through a least to most intrusive approach). The most intrusive level should ensure toddler success. Prompting types include (a) visual prompts such as checklists, pictures, visual instructions, or photographs; (b) verbal prompts such as spoken words and phrases to help the toddler use the target skill/behavior; (c) physical prompts such as hand over hand support or gentle nudges to help the toddler use the target skill/behavior; (d) gestural prompts such as pointing and using other gestures to help the toddler use the target skill/behavior; and (e) model prompts such as showing the toddler what to do in order to use the target skill/behavior.

Are there any challenges to using Prompting for toddlers?

There are many different types of prompts so determining which prompt type to use for the toddler and their target skill/behavior can be challenging. Know that prompting plans can always be adapted and changed as needed. It is also important to make sure that the toddler does not become dependent on the prompt(s) in order to use the target skill/behavior.













How/When will I know it is working?

We will work together to monitor your use of prompting. You will know Prompting is working when the toddler needs less intrusive prompting and starts to use the target skill/behavior independently (as is the goal in Prompting). When this happens, help the toddler generalize the skill/behavior to different routines and settings and encourage independent use of the skill/behavior.

Where can I learn more?

The Tip Sheet for Caregivers and Family Guide both provide an overview of the practice. The Caregiver Prompting Implementation Checklist outlines the steps of using Prompting with the toddler. In addition, I will be supporting your use of Prompting and can answer any questions you have.

Can I use this practice in other routines?

Yes, our goal is ultimately to use the practice in several routines if it's effective for you and the toddler. Since this is the first time, we are using this practice, it's important that we focus on this one routine and get you and the toddler used to it before expanding to other routines.

What if it does not go well?

Interactions between adults and toddlers sometime do not go perfectly. It's important to keep practicing. If using the practice does not go well one day, try again the next day and things may be different. If the practice does not seem effective after a while, we can work together to select another practice.

What if I do the steps wrong?

It's completely ok to mess up some steps while you are learning the practice. You are a human and some days you'll do this better than others. The important thing is to keep trying. I'm here if you have any questions.

What if I cannot remember all the steps?

You may want to keep the Individualized Prompting Plan and Implementation Checklist next to you while using the practice the first few times you use it, either on paper or on your phone. What do you think would work best for you? It's ok and even expected that you will forget steps from time to time. Just keep trying.













REFLECTION GUIDE

	Observer(s):	ate/lime:					
	Target Skill/Goal/Behavior:						
Di	Directions: Use this as a guide to facilitate the caregiver's reflection on their use of prompting with their toddler.						
R	REFLECTION:						
1.	1. How do you think that went?						
2.	2. Did you encounter any challenges implementing prompt	ing with the toddler?					
3.	3. At which points did you see prompting working for the to	oddler?					
4.	4. What could you have done differently?						
5.	5. Did you feel comfortable implementing prompting with t	he toddler?					
6.	6. Did the toddler respond positively to prompting?						
7.	7. Did the toddler enjoy the activity?						



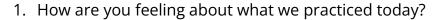








END OF SESSION REFLECTION:



- 2. Does this target skill/behavior still feel important for us to work on?
- 3. Does the prompting we selected feel like it could be helpful?
- 4. Does the routine we selected seem like a good fit for this practice?
- 5. How do you feel about doing this with the toddler this week without me here?
- 6. How do you think the toddler will respond to using this practice during the week?
- 7. Do you anticipate any issues with using this practice?
- 8. How do you think other caregivers will respond to learning about this practice?











DATA COLLECTION: CAREGIVER LOG

Toddler's Name: Date/Time: Observer(s): Farget Skill/Goal/Behavior: Directions: Use this sheet to collect data on using prompting with the toddler.						
Date: Setting/ Routine	Implementer	Additional EBPs Used?	Successful?			
☐ Mealtime ☐ Outing ☐ Dressing ☐ Sleep/Naptime ☐ Playtime ☐ Bath time ☐ Toothbrushing ☐ Handwashing ☐ Storytime ☐ Other	☐ Family☐ Parent☐ Child Care Provider☐ Other☐	☐ Prompting ☐ Modeling ☐ Visual Supports ☐ Video Modeling ☐ Other:	□ Yes □ No			
What was happening before?	What happened while using EBP? Did toddler display target skill?	What happened after? Impact on target skill?	Results/Outcomes			







PP

for Toddlers



For more information, please visit: https://afirm.fpg.unc.edu/

Date: Setting/ Routine	Implementer	Additional EBPs Used?	Successful?
☐ Mealtime ☐ Outing ☐ Dressing ☐ Sleep/Naptime ☐ Playtime ☐ Bath time ☐ Toothbrushing ☐ Handwashing ☐ Storytime ☐ Other	☐ Family ☐ Parent ☐ Child Care Provider ☐ Other	☐ Prompting ☐ Modeling ☐ Visual Supports ☐ Video Modeling ☐ Other:	☐ Yes ☐ No
What was happening before?	What happened while using EBP? Did toddler display target skill?	What happened after? Impact on target skill?	Results/Outcomes

- 1. Overall impression to discuss with El Provider (What is going well? What is difficult?):
- 2. Questions to ask El Provider:

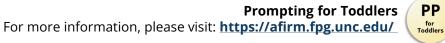












DATA COLLECTION: TIME SAMPLING

Learner's Name: Date/Time:				the target learner is making		
Date					Total	Before, During, OR After R

ANECDOTAL NOTES:













DATA COLLECTION: EVENT SAMPLING

Learner'	s Name:	Date/Time:			
	r(s):				
Direction	Target Skill/Goal/Behavior:				
Date	Tally (each	occurrence of the interfering behavior)	Total Tally		
ANECD:	OTAL NOTES:				













DATA COLLECTION: DURATION

Learner's Name: Date/Time: Date/Time:	
Target Goal/Behavior/Skill:	ne target

Date	Start Time	Stop Time	Total Time (min)	Prompts Needed	Before, During, or After Prompting	
					☐ Before ☐ During ☐ After	
					☐ Before ☐ During ☐ After	
					☐ Before ☐ During ☐ After	
					☐ Before ☐ During ☐ After	
					☐ Before ☐ During ☐ After	
					☐ Before ☐ During ☐ After	
					☐ Before☐ During☐ After	
					□ Before□ During□ After	
					☐ Before ☐ During ☐ After	
					☐ Before ☐ During ☐ After	

Prompt Key: VB = Verbal; VS = Visual; G = Gestural; M = Model; P = Physical; I = No prompts needed/Independent













MONITORING PROGRESS CHECKLIST

Toddler's Name: Date/Time: Observer(s): Target Skill/Goal/Behavior: Directions: Complete this checklist to determine if the toddler is making progress with using Prompting.
MONITORING PROGRESS:
☐ Has the toddler achieved the target goal/behavior/skill?
☐ Is the target goal/behavior/skill measurable and observable? Does it clearly state what the target goal/behavior/skill is, when it will occur, and how team members/observers will know it has been mastered?
☐ Is the target goal/behavior/skill too difficult/complex? Does it need to be broken down into smaller steps?
☐ Has enough time been devoted to using Prompting for Toddlers (frequency, intensity, and/or duration)?
☐ Has the caregiver implemented Prompting for Toddlers with fidelity?
Does the toddler require additional adaptations/modifications/supports? Such as visual supports or a communication device?
☐ Are the selected reinforcers preferred items/activities for the toddler?
☐ Has monitoring data been collected?
☐ Has using prompting been reflected on?
ANECDOTAL NOTES:











GENERALIZATION PLAN

Toddler's Name: Observer(s):	Date/Time:
Target Skill/Goal/Behavior: Directions: se this form to plan for suppor settings.	ting generalization of the toddler's skills across

Time	Activity	Setting	Notes











STEP-BY-STEP GUIDE FOR EI PROVIDER

This step-by-step practice guide outlines how to plan for, coach use, and monitor Prompting for Toddlers so that you can be sure this selected evidence-based practice is likely to be used by the caregiver to address the target goal/behavior/skill of the toddler.



STEP 1: PLANNING FOR PROMPTING

The planning step details the initial steps and considerations involved to prepare the caregiver for using prompting with a toddler.

- Use the EI Provider Implementation Checklist to coach caregivers to use prompting.
- Give the Caregiver Prompting Implementation Checklist to caregivers for them to use to follow the steps of using prompting with the toddler.

Select target skill/behavior for toddler with caregiver (e.g., family member, childcare provider)

- Invite the caregiver's expert input on the toddler's needs, culture, and priorities
- Work together to determine the most appropriate toddler skill/behavior to target with prompting.
- Use the Selecting a Target Goal form as a guide to select a target skill/behavior with the caregiver.

2. Collect baseline on target goal with caregiver

- Observe the toddler in their natural environment interacting with the caregiver and other toddlers/siblings.
- Plan with the caregiver the most effective way to collect baseline data on the target skill.
- 🖺 Use the Data Collection: Baseline with the caregiver to collect data on the toddler.

3. Discuss prompting basics and using steps with caregiver

Effective discussions about prompting include both informing caregivers about how to use prompting and also empowering them as the expert about the toddler.

- Review baseline data with the caregiver.
- Introduce the main principles of prompting and discuss how using prompting can be used to address the toddler's target skill/behavior.
 - Describe the types of prompts
 - Discuss the least to most continuum of prompts
 - Talk about wait time and the process of fading prompts
 - o Highlight the goal of prompting related to the toddler's independence
- Ask the caregiver if they have any questions about using prompting.
- End with a discussion of caregiver strengths and how those can enhance their use of prompting to address the toddler's target skill/behavior.











- Use the Tip Sheet for Childcare Providers to provide basic information about the practice to professionals working with the toddler.
- Use the Family Guide to provide basic information about the practice to caregivers or family members about the practice they are using with their child.
- Use the Prompting FAQ Guide to answer any questions the caregiver has about prompting.

4. Develop Individualized Prompting Plan with caregiver

Consider three key components: the antecedent, the target skill, and the consequence after displaying the target skill.

- 🖺 Use the Individualized Prompting Plan to develop if ready to implement prompting for toddlers.
- A. Determine cues that will be given to the toddler Discuss what cue will be used to get the toddler's attention and cue them to display the target behavior.
- B. Identify types of prompts to use (least to most restrictive) The prompts should support the toddler to display the target skill. Determine a hierarchy from least to most restrictive, depending on the toddler's strengths and needs and on the skill/behavior that you are targeting.
 - Use the Prompting Hierarchy form to determine and follow order of prompts.
- C. Discuss planned wait time and how you will increase it based on toddler progress Discuss with the caregiver how long you will wait to deliver the prompt as part of your plan. Once the toddler becomes more consistent in displaying the target skill/behavior, consider increasing the wait time in order to increase the possibility of the toddler displaying the skill/behavior independently.
- D. Determine reinforcers

Consider what motivating consequence will take place after the toddler displays the target skill/behavior. The reinforcer should be given consistently and immediately after the behavior.

- Use the Reinforcer Checklist and Sampling form to select reinforcers/rewards based on the toddler's preferred items, interests, and activities.
- E. Discuss systematic fading of prompts to promote independence Determine how to increase wait time as the toddler begins to display the target skill/behavior independently. Discuss how to both the intensity and frequency of prompting to promote independent use of the target skill and avoid prompt dependency.

5. Select activity that this prompting will be used with

When discussing activities in which to use prompting refer to the target skill/behavior discussion and the baseline data you collected with the caregiver. Consider the family or center schedule and caregivers' preferences for when to target the skill/behavior with prompting.

- Use the Family Daily/Activities Plan when selecting activities/setting for using prompting.
- 🖺 Use the Routines Determination: Center-Based when selecting activities/setting for using prompting.













6. Have materials ready and available

Be sure that the prompt levels and materials necessary for the toddler to use the target/skill behavior are nearby before you begin coaching and using prompting.

Use the Planning Checklist to determine if ready to implement prompting

STEP 2: COACHING USE OF PROMPTING

The coaching step details the using steps and considerations involved to prepare the caregiver for using Prompting for Toddlers with a toddler.

Use the Coaching Guide when coaching the caregiver to use prompting during daily routines with the toddler.

Model using the evidence-based practice for the caregiver:

- A. Introduce the Caregiver Prompting Implementation Checklist Review the Caregiver Prompting Implementation Checklist with the caregiver, explaining the steps of using prompting and how it will be used within the selected routines or activities.
 - Provide this Prompting Implementation Checklist to the caregiver to support their use of prompting
- B. Model the steps of the determined Individualized Prompting Plan while the caregiver observes

Encourage the caregiver to watch as you demonstrate the Prompting strategy and talk through the steps of using Prompting with the toddler.

- C. Have the caregiver complete the Caregiver Prompting Implementation Checklist
 - Provide this Caregiver Prompting Implementation Checklist to the caregiver to support their use of prompting for toddlers.

2. Answer caregiver's questions, if needed

Take a moment to allow the caregiver to ask you questions about using prompting and respond accordingly.

Use the FAQ Guide for Prompting to answer any questions the caregiver has about prompting.

3. Support caregiver's use of Caregiver Prompting Implementation Checklist to practice using Prompting for Toddlers

- Encourage the caregiver to use the Caregiver Prompting Implementation Checklist as a guide as they practice prompting while you observe and support them to use it.
- Prompt and encourage the caregiver as needed.
- Provide this Caregiver Prompting Implementation Checklist to the caregiver to support their use of prompting.











5. Discuss with the caregiver when they will use Prompting for Toddlers in daily routines and activities

- Discuss times of day or routines/activities during which caregivers will use prompting with their toddler.
- Start small with one routine and gradually add to this.
- Praise small successes of the caregiver
- Provide this Caregiver Log & Data Collection Form to the caregiver to support their collection of monitoring data on the toddler.

STEP 3: MONITORING USE OF PROMPTING

The monitoring use step details how to monitor the caregiver's use of Prompting for Toddlers with a toddler and how to determine next steps based on the data.

1. Plan for and support caregiver's data collection on toddler's progress towards the target skill/behavior

- Ask the caregiver to track their toddler's progress using the Data Collection Form and Caregiver Log.
- Continue to collect data both during sessions as you observe the caregiver and from the caregiver's data collected throughout the week.
- Analyze trends and monitor progress in collaboration with the caregiver.

2. Collect and analyze fidelity of caregiver's use of Prompting for Toddlers

- During sessions, monitor the caregiver's fidelity using the Caregiver Prompting Implementation Checklist as you observe them.
- Use the Individualized Prompting Plan to review the steps of using Prompting as needed.
- Review fidelity data with the caregiver to help identify where additional coaching or support may be needed.
- Discuss any questions that the caregiver has about using the practice
- Use this Prompting Implementation Checklist to collect the caregiver's fidelity of using prompting

3. Review data collected on the toddler's target skill/behavior

- Review the data collected on the toddler's progress during sessions and by the caregiver during the week.
- Periodically self-reflect with the caregiver on the use of Prompting
- Use this Monitoring Progress Checklist to guide the reflection discussion.

4. Support caregiver's use of Prompting for Toddlers for other target skills/behaviors for the toddler

Once the target skill/behavior has been mastered during one activity, consider ways to generalize the skill in other activities or routines and with other caregivers.

Provide this Generalization Plan to caregiver to support use of prompting with other target goals for their toddlers across settings.











5. Determine next steps

Collecting data will help caregivers decide about the effectiveness of using Prompting for Toddlers and whether the toddler is making progress. If a toddler is making progress based upon data collected, then the caregiver should continue to use the selected strategies. If caregivers determine that the toddler is not making progress, consider the following:

- Is the target goal/behavior/skill well defined?
- Is the target goal/behavior/skill measurable and observable?
- Is the target goal/behavior/skill too difficult/complex? Does it need to be broken down into smaller steps?
- Has enough time been devoted to using Prompting for Toddlers (frequency, intensity, and/or duration)?
- · Was Prompting for Toddlers implemented with fidelity?
- Does the toddler need additional supports?
- Are the selected reinforcers (as part of the Individualized Prompting Plan) preferred items/activities for the toddler?

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













TIP SHEET FOR CAREGIVER

PROMPTING ...

- A set of procedures used by caregivers to promote the toddler's target skills/behaviors by providing the necessary supports or prompts for the toddler to use a skill independently.
- A foundational practice that is used in conjunction with other evidence-based practices.
- Used to increase a target goal/behavior/skill and/or to decrease an interfering/inappropriate behavior.



- Prompting increases independence and reduces prompt dependence.
- Prompting can be easy and cost-effective with no special materials required
- Prompting can be embedded into most daily routines and activities



TIPS:

- Use a hierarchy of prompts that work best for the toddler, going from least to most intrusive.
- As a toddler gains skills, gradually increase wait time to reduce prompt dependence.
- Work with your El provider to develop an Individualized Prompting Plan for the toddler.

INSTRUCTIONAL OUTCOMES:

The evidence-base for Prompting supports its use to address the following outcomes, according to age range, in the table below:

Age	Academic*	Adaptive	Behavior	Cognitive	Communication	Joint Attention	Motor	Play	School readiness	Social
0-2					Yes	Yes	Yes	Yes		Yes
3-5	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

*The NCAEP review classified practices into domains for an age range of 0-22. The focus of early intervention should be on pre-academic skills and the social and emotional well-being of children. AFIRM for Toddlers does not recommend working on academic goals/outcomes with children in early intervention.











STEPS FOR IMPLEMENTING:

1. PLAN

- Discuss Prompting with the toddler's El provider to determine cues, types of prompts, wait time and reinforcers
- View models of Prompting (live or video)
- Practice using Prompting with reflection, support, and feedback from the provider

2. USE

- Have materials ready and available
- Prepare the toddler for the activity
- · Transition into the activity
- Let the toddler know what is going to happen
- Engage the toddler in the activity
- Provide Prompting to support the toddler to complete the target skill
- Record what happened when using Prompting and share with provider

3. MONITOR

- Share what happened using Prompting (successes, challenges, concerns, etc.)
- Discuss and problem-solve with the provider
- Determine next steps based on toddler progress



Prompting PP for Toddlers

This sheet was designed as a supplemental resource to provide basic information about Prompting for El Providers working with toddlers on the spectrum.

For more information about this selected evidence-based practice, please visit https://afirm.fpg.unc.edu/.













FAMILY GUIDE

WHAT IS PP?

- Prompting (PP) procedures include support given to toddlers that assist them in using a specific skill.
- A prompt can be verbal, gestural, visual, modeling or physical assistance.
- Prompting can be used to target a range of skills in both center-based and home settings.



WHY USE THIS PP MY TODDLER?

- Prompting is a versatile practice that can be used to address a variety of outcomes.
- Prompting can easily be used within a toddler's daily routines and activities.
- The goal of prompting is for a toddler to display skills independently.

WHAT ACTIVITIES CAN I DO AT HOME?

- Model a skill or behavior for your toddler. For example, show your toddler how to put one block on top of another.
- Use a variety of prompts to support a toddler's skill. Demonstrate how to wipe your mouth, point to the toddler's napkin, or provide physical assistance (hand over hand) to help the toddler wipe their own mouth.
- As the toddler learns a new skill, give fewer prompts to see what the child can do on their own.

Prompting PP for Toddlers

This parent introduction to PP for Toddlers was designed as a supplemental resource to help answer questions about Prompting.

To find out more about how this PP for Toddlers is being used with your child, please talk with:

For more information about this selected evidence-based practice, please visit https://afirm.fpg.unc.edu/.













CEC STANDARDS

INITIAL PRACTICE-BASED STANDARDS FOR EARLY INTERVENTIONISTS/EARLY CHILDHOOD (0-5 YEARS; CEC, 2020)

Standard 1: Child Development & Early Learning

- 1.1 Demonstrate an understanding of the impact that different theories and philosophies of early learning and development have on assessment, curriculum, intervention, and instruction decisions.
- 1.3 Apply knowledge of biological and environmental factors that may support or constrain children's early development and learning as they plan and implement early intervention and instruction.
- 1.4 Demonstrate an understanding of characteristics, etiologies, and individual differences within and across the range of abilities, including developmental delays and disabilities, their potential impact on children's early development and learning, and implications for assessment, curriculum, instruction, and intervention.

Standard 2: Partnering with Families

- 2.1 Apply knowledge of family-centered practices, family systems theory, and the changing needs and priorities in families' lives to develop trusting, respectful, affirming, and culturally responsive partnerships with all families that allow for the mutual exchange of knowledge and information.
- 2.3 Engage families in identifying their strengths, priorities, and concerns; support families to achieve the goals they have for their family and their young child's development and learning; and promote families' competence and confidence during assessment, individualized planning, intervention, instruction, and transition processes.

Standard 3: Collaboration & Teaming

- 3.2 Use a variety of collaborative strategies when working with other adults that are evidencebased, appropriate to the task, culturally and linguistically responsive, and take into consideration the environment and service delivery approach.
- 3.3 Partner with families and other professionals to develop individualized plans and support the various transitions that occur for the young child and their family throughout the birth through 8 age-span.

Standard 4: Assessment Processes

- 4.2 Develop and administer informal assessments and/or select and use valid, reliable formal assessments using evidence-based practices, including technology, in partnership with families and other professionals.
- 4.3 Analyze, interpret, document, and share assessment information using a strengths-based approach with families and other professionals.
- 4.4 In collaboration with families and other team members, use assessment data to determine eligibility, develop child and family-based outcomes/goals, plan for interventions and instruction, and monitor progress to determine efficacy of programming.













Standard 5: Application Of Curriculum Frameworks In The Planning Of Meaningful **Learning Experience**

- 5.1 Collaborate with families and other professionals in identifying an evidence-based curriculum addressing developmental and content domains to design and facilitate meaningful and culturally responsive learning experiences that support the unique abilities and needs of all children and families.
- 5.2 Use knowledge of early childhood curriculum frameworks, developmental and academic content knowledge, and related pedagogy to plan and ensure equitable access to universally designed, developmentally appropriate, and challenging learning experiences in natural and inclusive environments.

Standard 6: Using Responsive and Reciprocal Interactions, Interventions, & Instruction

- 6.1 In partnership with families, identify systematic, responsive, and intentional evidence-based practices and use such practices with fidelity to support young children's learning and development across all developmental and academic content domains.
- 6.2 Engage in reciprocal partnerships with families and other professionals to facilitate responsive adult-child interactions, interventions, and instruction in support of child learning and development.
- 6.3 Engage in ongoing planning and use flexible and embedded instructional and environmental arrangements and appropriate materials to support the use of interactions, interventions, and instruction addressing developmental and academic content domains, which are adapted to meet the needs of each and every child and their family.
- 6.4 Promote young children's social and emotional competence and communication, and proactively plan and implement function-based interventions to prevent and address challenging behaviors.
- 6.5 Identify and create multiple opportunities for young children to develop and learn play skills and engage in meaningful play experiences independently and with others across contexts.
- 6.6 Use responsive interactions, interventions, and instruction with sufficient intensity and types of support across activities, routines, and environments to promote child learning and development and facilitate access, participation, and engagement in natural environments and inclusive settings.
- 6.7 Plan for, adapt, and improve approaches to interactions, interventions, and instruction based on multiple sources of data across a range of natural environments and inclusive settings.

Standard 7: professional & Ethical Practice

7.2 Engage in ongoing reflective practice and access evidence-based information to improve their own practices.













DEC RECOMMENDED PRACTICES

ASSESSMENT:

- A2. Practitioners work as a team with the family and other professionals to gather assessment
- A3. Practitioners use assessment materials and strategies that are appropriate for the child's age and level of development and accommodate the child's sensory, physical, communication, cultural, linguistic, social, and emotional characteristics.
- A6. Practitioners use a variety of methods, including observation and interviews, to gather assessment information from multiple sources, including the child's family and other significant individuals in the child's life.
- A7. Practitioners obtain information about the child's skills in daily activities, routines, and environments such as home, center, and community.
- A9. Practitioners implement systematic ongoing assessment to identify learning targets, plan activities, and monitor the child's progress to revise instruction as needed.

ENVIRONMENT:

- E1. Practitioners provide services and supports in natural and inclusive environments during daily routines and activities to promote the child's access to and participation in learning experiences.
- E3. Practitioners work with the family and other adults to modify and adapt the physical, social, and temporal environments to promote each child's access to and participation in learning experiences.

FAMILY:

- F1. Practitioners build trusting and respectful partnerships with the family through interactions that are sensitive and responsive to cultural, linguistic, and socioeconomic diversity.
- F4. Practitioners and the family work together to create outcomes or goals, develop individualized plans, and implement practices that address the family's priorities and concerns and the child's strengths and needs.
- F5. Practitioners support family functioning promote family confidence and competence and strengthen family-child relationships by acting in ways that recognize and build on family strengths and capacities.
- F6. Practitioners engage the family in opportunities that support and strengthen parenting knowledge and skills and parenting competence and confidence in ways that are flexible, individualized, and tailored to the family's preferences.











RECOMMENDED PRACTICE: INSTRUCTION

- INS1. Practitioners, with the family, identify each child's strengths, preferences, and interests to engage the child in active learning.
- INS2. Practitioners, with the family, identify skills to target for instruction that help a child become adaptive, competent, socially connected, and engaged and that promote learning in natural and inclusive environments.
- INS3. Practitioners gather and use data to inform decisions about individualized instruction.
- INS4. Practitioners plan for and provide the level of support, accommodations, and adaptations needed for the child to access, participate, and learn within and across activities and routines.
- INS5. Practitioners embed instruction within and across routines, activities, and environments to provide contextually relevant learning opportunities.
- INS6. Practitioners use systematic instructional strategies with fidelity to teach skills and to promote child engagement and learning.
- INS7. Practitioners use explicit feedback and consequences to increase child engagement, play, and skills.
- INS9. Practitioners use functional assessment and related prevention, promotion, and intervention strategies across environments to prevent and address challenging behavior.
- INS10. Practitioners implement the frequency, intensity, and duration of instruction needed to address the child's phase and pace of learning or the level of support needed by the family to achieve the child's outcomes or goals.
- INS13. Practitioners use coaching or consultation strategies with primary caregivers or other adults to facilitate positive adult-child interactions and instruction intentionally designed to promote child learning and development.

RECOMMENDED PRACTICE: INTERACTION

- INT1. Practitioners promote the child's social-emotional development by observing, interpreting, and responding contingently to the range of the child's emotional expressions.
- INT2. Practitioners promote the child's social development by encouraging the child to initiate or sustain positive interactions with other children and adults during routines and activities through modeling, teaching, feedback, or other types of guided support.
- INT3. Practitioners promote the child's communication development by observing, interpreting, responding contingently, and providing natural consequences for the child's verbal and nonverbal communication and by using language to label and expand on the child's requests, needs, preferences, or interests.
- INT4. Practitioners promote the child's cognitive development by observing, interpreting, and responding intentionally to the child's exploration, play, and social activity by joining in and expanding on the child's focus, actions, and intent.
- INT5. Practitioners promote the child's problem-solving behavior by observing, interpreting, and scaffolding in response to the child's growing level of autonomy and self-regulation.















RECOMMENDED PRACTICE: TEAMING & COLLABORATION

TC1. Practitioners representing multiple disciplines and families work together as a team to plan and implement supports and services to meet the unique needs of each child and family.

TC3. Practitioners use communication and group facilitation strategies to enhance team functioning and interpersonal relationships with and among team members.













GLOSSARY

Baseline data - information gathered from multiple sources to better understand the target behavior, before using an intervention or practice; data collected on current performance level prior to implementation of intervention

Caregiver - throughout these modules, "caregiver" is used to refer to any of the people who care for a toddler during daily routines, including parents, other family members, and center-based providers or teachers

Cue - activities that set the occasion for the toddler (alert the toddler) to respond and use the target skill/behavior and receive the determined reinforcement.

Discrete Trial Teaching (DTT) - an evidence-based practice focused on adult directed, massed trial instruction, reinforcers, and clear contingencies with repetition to teach a target skill/behavior

Duration data - records how long a learner engages in a particular behavior or skill

Fade - to systematically reduce and eventually withdraw the use of stimulus such as a prompt, request, or reinforcer

Fidelity - how well and how often the implementation steps for an evidence-based practice are followed

Generalization - the ability to use learned skills in new and different environments

Goal - throughout these modules, "goal" is used to refer to child and family goals and outcomes as indicated on an IFSP

Implementation checklist - the specific steps needed to accurately follow an evidence-based practice

Interfering behavior - a behavior that interferes with the learner's ability to learn

Modeling (MD) - an evidence-based practice that involves the learner observing someone correctly performing a target behavior

Naturalistic intervention (NI) - an evidence-based practice that integrates the principles of applied behavior analysis (ABA) into the natural environment or into a learner's everyday routines and activities

Parent-Implemented Intervention (PII) - an evidence-based practice that focuses on including parents in all steps of the implementation process while applying a cycle of coaching to ensure successful implementation

















Prompting (PP) - an evidence-based practice in which the caregiver provides specific directions or arrangements of the context before the skill/behavior occurs to promote the toddlers use of the skill/behavior; prompts can be verbal, gestural, or physical

Prompting hierarchy - the continuum of prompting used to support a learner in acquiring new skills

Provider - throughout these modules, "provider" is used to refer to any early intervention provider including community-based rehabilitation service providers, early interventionists, developmental therapists, early intervention specialists, speech-language pathologists, occupational therapists, and physical therapists, among others

Reinforcement (R) - an evidence-based practice that provides feedback that increases the use of a strategy or target skill/behavior

Reinforcer - a motivating item/activity/food that serves to reinforce a toddler for displaying a target skill/behavior immediately after displaying the target skill/behavior

Time Delay (TD) - an evidence-based practice using increasing amounts of wait time between instruction and prompting to increase the likelihood of independent use of the target skill/behavior.

Toddler - throughout these models, "toddler" is used to refer to a child with autism, language disorder, developmental delay, or social communication needs below 36 months of age.













REFERENCES

- 1. Barton, E. E. (2015). Teaching generalized pretend play and related behaviors to young children with disabilities. *Exceptional Children*, *81*(4), 489-506. https://doi.org/10.1177/0014402914563694
- 2. Barton, E. E., & Wolery, M. (2010). Training teachers to promote pretend play in young children with disabilities. *Exceptional Children*, 77(1), 85-106. https://doi.org/10.1177/001440291007700104
- 3. Carlson, B., McLaughlin, T., Derby, K. M., & Blecher, J. (2009). Teaching preschool children with autism and developmental delays to write. *Electronic Journal of Research in Educational Psychology*, 7(1), 225-238. https://doi.org/10.25115/ejrep.v7i17.1313
- 4. Lang, R., Machalicek, W., Rispoli, M., O'Reilly, M., Sigafoos, J., Lancioni, G., Peters-Scheffer, N., & Didden, R. (2014). Play skills taught via behavioral intervention generalize, maintain, and persist in the absence of socially mediated reinforcement in children with autism. *Research in Autism Spectrum Disorders*, 8(7), 860-872. https://doi.org/10.1016/j.rasd.2014.04.007
- 5. Greenberg, J. H., Lau, W., & Lau, S. (2016). Teaching appropriate play to replace stereotypy using a treatment package with students having autism. *Global Education Review, 3*(3), 94-104.
- 6. Bremer, E., Balogh, R., & Lloyd, M. (2015). Effectiveness of a fundamental motor skill intervention for 4-year-old children with autism spectrum disorder: A pilot study. *Autism: The International Journal of Research and Practice*, 19(8), 980-991. https://doi.org/10.1177/1362361314557548
- 7. 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. https://doi.org/10.1016/j.rasd.2011.01.018
- 8. Krstovska-Guerrero, I., & Jones, E. A. (2016). Social-communication intervention for toddlers with Autism Spectrum Disorder: Eye gaze in the context of requesting and joint attention. *Journal of Developmental and Physical Disabilities*, *28*(2), 289-316. https://doi.org/10.1007/s10882-015-9466-9
- 9. Kryzak, L. A., & Jones, E. A. (2015). The effect of prompts within embedded circumscribed interests to teach initiating joint attention in children with autism spectrum disorders. *Journal of Developmental and Physical Disabilities*, *27*(3), 265-284. https://doi.org/10.1007/s10882-014-9414-0
- Muzammal, M. S., & Jones, E. A. (2016). Social-communication intervention for toddlers with autism spectrum disorder: Effects on initiating joint attention and interactions with mother. Journal of Developmental and Physical Disabilities, 29, 203-221. https://doi.org/10.1007/s10882016-9519-8
- 11. 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. https://doi.org/10.1901/jaba.2008.41-377
- 12. Garcia-Albea, E., Reeve, S. A., Brothers, K. J., & Reeve, K. F. (2014). Using audio script fading and multiple-exemplar training to increase vocal interactions in children with autism. *Journal of Applied Behavior Analysis*, 47(2), 325-343. https://doi.org/10.1002/jaba.125
- 13. Gena, A. (2006). The effects of prompting and social reinforcement on establishing social interactions with peers during the inclusion of four children with autism in preschool. *International Journal of Psychology*, *41*(6), 541-554. https://doi.org/10.1080/00207590500492658
- 14. Tzanakaki, P., Grindle, C. F., Dungait, S., Hulson-Jones, A., Saville, M., Hughes, J. C., & Hastings, R. P. (2014). Use of a tactile prompt to increase social initiations in children with autism. *Research in Autism Spectrum Disorders*, 8(6), 726-736. https://doi.org/10.1016/j.rasd.2014.03.016
- McDowell, L. S., Gutierrez, A., & Bennett, K. D. (2015). Analysis of live modeling plus prompting and video modeling for teaching imitation to children with autism. *Behavioral Interventions*, 30(4), 333-351. https://doi.org/10.1002/bin.1419
- 16. Venn, M. L., Wolery, M., Werts, M. G., Morris, A., DeCesare, L. D., & Cuffs, M. S. (1993). Embedding instruction in art activities to teach preschoolers with disabilities to imitate their peers. Early Childhood Research Quarterly, 8(3), 277-294. https://doi.org/10.1016/S0885-2006(05)80068-7
- 17. Gilley, C., & Ringdahl, J. E. (2014). The effects of item preference and token reinforcement on sharing behavior exhibited by children with autism spectrum disorder. *Research in Autism Spectrum Disorders*, 8(11), 1425-1433. https://doi.org/10.1016/j.rasd.2014.07.010









Prompting for Toddlers

For more information, please visit: https://afirm.fpg.unc.edu/



- 18. Barkaia, A., Stokes, T. F., & Mikiashvili, T. (2017). Intercontinental telehealth coaching of therapists to improve verbalizations by children with autism. *Journal of Applied Behavior Analysis, 50*(3), 582-589. https://doi.org/10.1002/jaba.391
- 19. Dixon, M. R., Peach, J., Daar, J. H., & Penrod, C. (2017). Teaching complex verbal operants to children with autism and establishing generalization using the peak curriculum. *Journal of Applied Behavior Analysis*, *50*(2), 317-331. https://doi.org/10.1002/jaba.373
- 20. 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. https://doi.org/10.1016/rasd.2006.10.003
- 21. Kodak, T., Paden, A., & Dickes, N. (2012). Training and generalization of peer-directed mands with non-vocal children with autism. *The Analysis of Verbal Behavior*, *28*(1), 119-24.
- 22. Leung, J. P. (1994). Teaching spontaneous requests to children with autism using a time delay procedure with multi-component toys. Journal of Behavioral Education, 4(1), 21-31. https://doi.org/10.1007/BF01560506
- 23. Lorah, E., Tincani, M., Dodge, J., Gilroy, S., Hickey, A., & Hantula, D. (2013). Evaluating picture exchange and the iPad as a speech generating device to teach communication to young children with Autism. *Journal of Developmental & Physical Disabilities*, *25*(6), 637-649. https://doi.org/10.1007/s10882-013-9337-1
- 24. Rakap, S., & Balikci, S. (2017). Using embedded instruction to teach functional skills to a preschool child with autism. *International Journal of Developmental Disabilities, 63*(1), 17-26. https://doi.org/10.1080/20473869.2015.1109801
- 25. 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. https://doi.org/10.1044/1058-0360(2008/022)
- 26. Silbaugh, B. C., Falcomata, T. S., & Ferguson, R. H. (2018). Effects of a lag schedule of reinforcement with progressive time delay on topographical mand variability in children with autism. Developmental Neurorehabilitation, 21(3), 166-177. https://doi.org/10.1080/17518423.2017.1369190
- 27. 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. https://doi.org/10.1016/j.rasd.2009.07.009
- 28. Frampton, S. E., Wymer, S. C., Hansen, B., & Shillingsburg, M. A. (2016). The use of matrix training to promote generative language with children with autism. *Journal of Applied Behavior Analysis, 49*(4), 869-883. https://doi.org/10.1002/jaba.340
- 29. 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. https://doi.org/10.1901/jaba.2011.44-659
- 30. 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. https://doi.org/10.1007/bf03393093
- 31. 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*(2), 1587-1592. https://doi.org/10.1007/s10803-009-0765-9
- 32. 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. https://doi.org/10.1901/jaba.2010.43-215
- 33. Leaf, J. B., Leaf, R., Taubman, M., McEachin, J., & Delmolino, L. (2014). Comparison of flexible prompt fading to error correction for children with autism spectrum disorder. *Journal of Developmental and Physical Disabilities*, 26(2), 203-224. https://doi.org/10.1007/s10882-013-9354-0
- 34. Leaf, J. B., Townley-Cochran, D., Mitchell, E., Milne, C., Alcalay, A., Leaf, J., Leaf, R., Taubman, M., McEachin, J., & Oppenheim-Leaf, M. L. (2016). Evaluation of multiple-alternative prompts during tact training. *Journal of Applied Behavior Analysis*, 49(2), 399-404. https://doi.org/10.1002/jaba.289
- 35. Lorah, E. R., Parnell, A., & Speight, D. R. (2014). Acquisition of sentence frame discrimination using the iPad as a speech generating device in young children with developmental disabilities. *Research in Autism Spectrum Disorders*, 8(12), 1734-1740. https://doi.org/10.1016/j.rasd.2014.09.004









Prompting for Toddlers





- 36. Reichow, B., & Wolery, M. (2011). Comparison of progressive prompt delay with and without instructive feedback. Journal of Applied Behavior Analysis, 44(2), 327-340. https://doi.org/10.1901/jaba.2011.44-327
- 37. 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. https://doi.org/10.1007/bf03393072
- 38. Whalon, K., Martinez, J. R., Shannon, D., Butcher, C., & Hanline, M. F. (2015). The impact of reading to engage children with autism in language and learning (RECALL). *Topics in Early Childhood Special Education, 35*(2), 102-115. https://doi.org/10.1177/0271121414565515
- 39. Hudson, R. F., Sanders, E. A., Greenway, R., Xie, S., Smith, M., Gasamis, C., Martini, J., Schwartz, I., & Hackett, J. (2017). Effects of emergent literacy interventions for preschoolers with autism spectrum disorder. *Exceptional Children*, *84*(1), 55-75. https://doi.org/10.1177/0014402917705855
- 40. Latham, S. O., & Stockman, I. J. (2014). Effect of augmented sensorimotor input on learning verbal and nonverbal tasks among children with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 44(6), 1288-1302. https://doi.org/10.1007/s10803-013-1990-9
- 41. 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. https://doi.org/10.1002/bin.300
- 42. Humphreys, T., Polick, A. S., Howk, L. L., Thaxton, J. R., & Ivancic, A. P. (2013). An evaluation of repeating the discriminative stimulus when using least-to-most prompting to teach intraverbal behavior to children with autism. *Journal of Applied Behavior Analysis*, 46(2), 534-8. https://doi.org/10.1002/jaba.43
- 43. Marion, C., Martin, G. L., Yu, C. T., Buhler, C., & Kerr, D. (2012). Teaching children with autism spectrum disorder to mand 'where?'. *Journal of Behavioral Education*, *21*(4), 273-294. https://doi.org/10.1007/s10864-012-9148-y
- 44. Ostryn, 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. https://doi.org/10.1097/IYC.0b013e31820d95ff
- 45. 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. https://doi.org/10.1901/jaba.2000.33-627
- 46. Cengher, M., Shamoun, K., Moss, P., Roll, D., Feliciano, G., & Fienup, D. M. (2016). A comparison of the effects of two prompt-fading strategies on skill acquisition in children with autism spectrum disorders. *Behavior Analysis in Practice*, *9*(2), 115-25. https://doi.org/10.1007/s40617-015-0096-6
- 47. 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(1), 3-14. https://doi.org/10.1901/jaba.1995.28-3
- 48. Satsangi, R., & Bofferding, L. (2017). Improving the numerical knowledge of children with autism spectrum disorder: The benefits of linear board games. *Journal of Research in Special Educational Needs*, *17*(3), 218-226. https://doi.org/10.1111/1471-3802.12380
- 49. Fleury, V. P., Miramontez, S. H., Hudson, R. F., & Schwartz, I. S. (2014). Promoting active participation in book reading for preschoolers with Autism Spectrum Disorders: A preliminary study. *Child Language Teaching and Therapy*, *30*(3), 273-288. https://doi.org/10.1177/0265659013514069
- 50. O'Brien, M., McTiernan, A., & Holloway, J. (2017). Teaching phonics to preschool children with autism using frequency-building and computer-assisted instruction. *Journal of Developmental and Physical Disabilities, 30*, 215-237. https://doi.org/10.1007/s10882-017-9581-x
- 51. 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. https://doi.org/10.1002/bin.317
- 52. 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), 125-139. https://doi.org/10.1007/bf03393096
- 53. Carp, C. L., Peterson, S. P., Arkel, A. J., Petursdottir, A. I., & Ingvarsson, E. T. (2012). A further evaluation of picture prompts during auditory-visual conditional discrimination training. *Journal of Applied Behavior Analysis*, 45(4), 737-51. https://doi.org/10.1901/jaba.2012.45-737
- 54. Peterson, K. M., Piazza, C. C., & Volkert, V. M. (2016). A comparison of a modified sequential oral sensory approach to an applied behavior-analytic approach in the treatment of food selectivity in children with autism spectrum disorder. *Journal of Applied Behavior Analysis*, 49(3), 485-511. https://doi.org/10.1002/jaba.332_
- 55. Levin, D. S., Volkert, V. M., & Piazza, C. C. (2014). A multi-component treatment to reduce packing in children with feeding and autism spectrum disorders. *Behavior Modification*, *38*(6), 940-63. https://doi.org/10.1177/0145445514550683









Prompting for Toddlers



For more information, please visit: https://afirm.fpg.unc.edu/



- Toelken, S., & Miltenberger, R. G. (2012). Increasing independence among children diagnosed with autism using 56. a brief embedded teaching strategy. Behavioral Interventions, 27(2), 93-104. https://doi.org/10.1002/bin.337
- Rogers, L., Hemmeter, M. L., & Wolery, M. (2010). Using a constant time delay procedure to teach foundational 57. swimming skills to children with autism. Topics in Early Childhood Special Education, 30(2), 102-111. https://doi.org/10.1177/0271121410369708
- 58. Steinbrenner, J. R., Hume, K., Odom, S. L., Morin, K. L., Nowell, S. W., Tomaszewski, B., Szendrey, S., McIntyre, N. S., Yücesoy-Özkan, S., & Savage, M. N. (2020). Evidence-Based Practices for Children, Youth, and Young Adults with Autism. The University of North Carolina at Chapel Hill, Frank Porter Graham Child Development Institute, National Clearinghouse on Autism Evidence and Practice Review Team.







