

Teaching Educators to Support Augmentative and Alternative Communication of Individuals with Autism through Online Training of System of Least Prompts

SELECT SLIDES FROM PRESENTATION

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Research Question

What is the effect of **online training**³ on education professionals' knowledge and use of **system of least prompts**¹ to support the communication of individuals with ASD who use AAC²?

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System of Least Prompts

- Prompting is EBP for individuals with ASD (NAC, 2015; NPDC, 2014)
 - Foundationally important (Sam et al., 2017)
- Across skills
 - Discrete
 - Chained
- AAC (Snell et al., 2006)
 - Expressive (Fink et al., 2017; Light et al., 1999)
 - Receptive (Cihak et al., 2010; Mechling et al., 2009)

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System of Least Prompts

- Systematic prompting procedure
- Unique
 - Provides learner opportunity to respond independently
 - Constant time delay between prompts
 - Increases assistance within instructional trials, as needed

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System of Least Prompts

Independent

Intermediate Prompt

Controlling Prompt

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System of Least Prompts

Independent

Verbal

Gesture

Model

Physical

- Pictures, written text, spoken words, or sign language
- Live or video
- Partial or full

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When to use which procedure

System of Least Prompts	Most to Least Prompting
Inconsistent use of target skill	New target skill
Regressing on performance	

(AFIRM Modules, National Professional Development Center on ASD, 2015)

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Important Terminology

- Cue: signals learner to respond
- Hierarchy: sequence of prompts
- Response interval: opportunity for learner to respond
- Reinforcement: strengthening consequence
- Error correction: stopping an error

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Dependent Variables

- DV 1: Knowledge assessment
 - 30 item multiple choice quiz (Cooper et al., 2007)
- Three types of knowledge (Paris et al., 1983)
 - Conceptual: "knowing *that*"
 - Procedural: "knowing *how*"
 - Conditional: "knowing *when and why*"
- Measured percent of questions correct



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Dependent Variables Continued

- Performance assessments
 - DV2: Percent correct on planning document
 - DV3: Percent correct on role-play implementation
 - Modified from Neitzel & Wolery (2009) Steps for Implementation: Least to Most Prompts
- Independently coded by 3 graduate students who were blind to condition

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Planning Steps: (SADD IDx3)

- Select 3 prompts
- Arrange prompts (L to M)
- Determine cue
- Determine response interval
- Identify learner correct response
 - Adult response: reinforce
- Identify learner incorrect response
 - Adult response: interrupt and next intrusive prompt
- Identify learner no response
 - Adult response: next intrusive prompt

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Implementation Steps: (DWR)

- Deliver cue
- Wait & respond to learners' attempts
 - If the learner is correct, provide reinforcement
 - If the learner is incorrect, provide error correction (interrupt + next intrusive prompt)
 - If the learner makes no response, provide next intrusive prompt
- Repeat
 - Continue to move down the planned prompting levels by Waiting and responding to the learners' attempts, until the learner performs the desired behavior correctly

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Limitations

- Implementation with adult confederate
 - Natural environment, learner with ASD
 - Concurrent learner behavior
- Nonresponders
- Participation analytics
- Other procedures to support AAC

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Key Takeaways

- Full acquisition of EBP
 - Combination of knowledge and performance
 - Long-term and generalized use
- Previous research
 - Focus on implementation performance
 - Participants provided with a researcher determined SLP hierarchy/procedure
- Contributions to literature
 - Evaluation of knowledge, planning, and implementation performance
 - Participants generated own SLP hierarchy (made instructional decisions)
 - Use of teleconference for role-play implementation

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