

Teaching School Readiness Skills with Visual Scene Displays Presentation

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Our Presentation

1. Introduction to School Readiness
2. Introduction to AAC Layout
3. Introduction to Visual Scene Displays
4. Purpose of our project
5. Methods we used
6. Results
7. Limitations and considerations for practice

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School Readiness

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School Readiness

- School readiness can be defined as a set of interdependent developmental skills and behaviors across a variety of domains, including physical, social, emotional, cognitive, and communication, that support a child's success in beginning school or kindergarten

(Williams & Lerner, 2019)

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School Readiness Cont.

- Each state has its own checklist
 - School readiness skills include colors, shapes, attending to stories, communicate basic information (name, age, etc.)
- Children who enter school with these skills show improved outcomes through adulthood, high performance and achievement, increased reading comprehension, decreased school dropout, higher rates of college attendance and employment compared to those who do not

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School Readiness in AAC Users

- Often overlooked in early learning centers, where focus is on basic communication (requesting items and help)
- Given the important focus on inclusive learning environments, more important than ever
- Limited research on how and when to teach these skills using AAC

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AAC Layout

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Traditional Grid Displays

- High-tech AAC can be customized and programmed for users
- Many rely on symbols or cartoon pictures to represent items and activates
- This can be challenging for children who are unable to understand abstract representation

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Visual Scene Displays

- Alternative to traditional grid display
- Use photograph of a scene or user within a scene
- Add context to communication making it more accessible
- Onboard cameras make the creation of VSDs quick and easy

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VSDs Cont.

- Take a photo of a scene or person engaging in an activity
- Pair with language through voice output
- Advantages include:
 - Easier to comprehend
 - Puts meaning in context
 - Promotes use for beginning communicators

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Instructional Strategies for AAC

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Importance of Autonomy in Instruction

- Moving away from full physical prompts
 - Lorah et al., review of literature indicated the FPP was most common for AAC intervention
- Must show compassion, autonomy, choice, and assent with instructional procedures, focus on play based instruction

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Purpose of Our Study



1. Teaching school readiness
2. Use of visual scene displays
3. Reliance on less intrusive prompts

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Two Studies



PERSONAL INFORMATION:
FIRST NAME, LAST NAME, AGE

COLORS:
SELECTED FROM A LIST OF
COLORS INCLUDED ON STATE
CHECKLIST D

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Participants

Table 1
Participant Demographic Information

Name	Age (in years, months)	Race/Ethnicity	Sex	Diagnoses
Gavin	4;3	White/Caucasian	Male	DEAFI pathogenic disorder, laryngomalacia
Hugo	5;8	White/Caucasian	Male	ASD; mixed receptive-expressive language disorder

Criteria

- Diagnosis of IDD
- Attendance in early childhood learning center
- SLP indicated participation appropriate and AAC indicated
- No history of AAC instruction
- Informed consent from each participant

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<p>Setting</p> <ul style="list-style-type: none"> • Unused office space in the early learning center • Child sized table and chairs • The children and therapist would play together on the floor • Variety of toys such as playdough and crayons/markers 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
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<p>Technology</p> <ul style="list-style-type: none"> • iPad Mini Version 2 • Scene and Heard application 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
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<p>Procedures</p> <ul style="list-style-type: none"> • Target Response: answering the question, during the play routine, with either a vocal approximation (baseline) or using the AAC, by selecting the correct hot spot and evoking the message • Correct response: social praise • Data Collection: Probe Data, with three opportunities to respond • Mastery Criteria: 100% across three consecutive days/sessions • Study Design: Multiple baseline across behaviors 	<hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
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Instructional Sessions

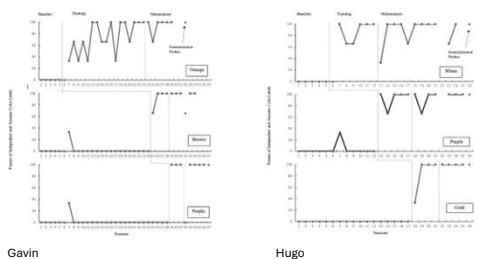
- Baseline: No AAC, give three seconds to respond, trial over
 - This was the “standard of care” for both of our participants
- Training: three second time delay, a gestural prompt was delivered, three seconds, second gestural prompt, three seconds, model prompt

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Maintenance & Generalization

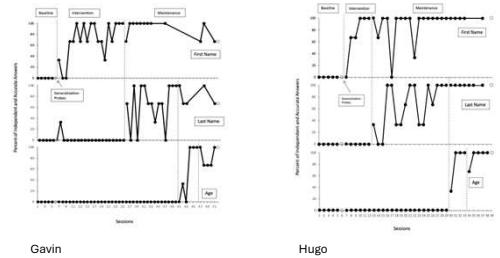
- After a target phrase was mastered, it went into a maintenance phase to test for durability. Maintenance was identical to baseline.
- Generalization was tested in baseline and after training
 - With novel teacher in novel environment

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Results 1: Colors

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Results 1: Personal Info`

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Limitations of Our Work

- The number of acquired targets was small
 - Looking at the amount of time it takes to acquire later targets we see that it becomes more rapid, speaks well for carryover into the classroom
- Pull out rather than push-in
- Only 2 participants
- VSDs were difficult to generate for personal information

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Future Work

- Look at pushing into classrooms
- Increase size of vocabulary
- Continue with early focus on school readiness skills

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Considerations for Practice

- Use of less intrusive prompts
- Focus on school readiness earlier
- Use of naturalistic teaching procedures
- Use of VSDs for beginning communicators

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