What Decisions Do SLPs Make When Designing Aided AAC Displays?
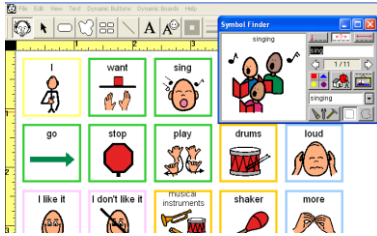

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Acknowledgements

One size does not fit all

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What visual features do SLPs incorporate into aided AAC displays for young school-age children?

Display layout
Representation
Vocabulary selection
Size, symbol, color, etc.

And why?

Images from a Google image search of "aac communication board"

Should we customize displays for specific clients?

What type of layout is best for this child/situation?

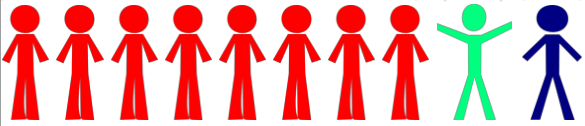What features of the display do I change?

Can we use displays "out of the box," or should we customize displays for specific clients?
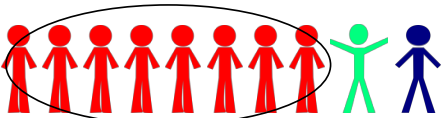
8/10 – I ALWAYS make changes

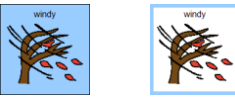1/10 – I SOMETIMES make changes

1/10 – I NEVER make changes

The majority of clinicians feel that the look and feel of the display MATTERS
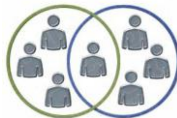

Otherwise… why bother customizing the display?

So… if the look and feel of the display matters, then research is critical to determine:

How features influence responding

Individual variation of responses

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How this affects actual functional outcomes

What type of display layout is best for a specific child (or situation)?

Representing "telephone" on **grid** and **VSD** displays

Why use a VSD rather than a grid?

Katherine Nelson: Very young children at the outset of learning to speak don't learn words in isolation, but instead acquire them in contexts of rich semantic and event-based support.

Why would we then expect a child at the outset of learning visual symbols to do so with the wholly decontextualized grid symbols?
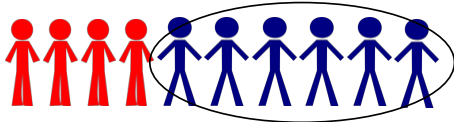
What type of display do we use?

8/10 - I choose Grids >75% of the time

2/10 – I choose VSDs ~50% of the time

This ratio shifts when presented with a specific case of a beginning communicator

The majority of clinicians feel that type of layout MATTERS

Otherwise… why not always use the same layout type?

So… if the type of layout matters, then research is critical to determine:

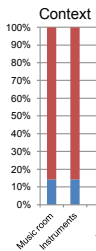*Which children benefit from each layout type?*

Would the same child benefit from both types of displays, depending on the needs/situation?

What features of the display do SLPs change?

Vocabulary selection in VSDs:

- Most SLPs provide context
- Variability in providing agents and events or actions provided by agents

Context

■ Extremely/fairly important
■ Somewhat/not very important

SLPs reported evidence based practices related to vocabulary selection

Child's abilities, skills, and interests

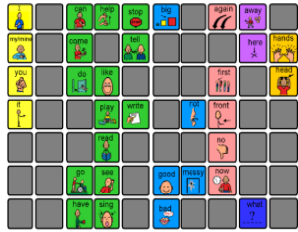What others want the child to talk about

Across contexts or environments

Other design decisions illustrate practices lacking an evidence base

Motor planning

Background color coding for syntax

prAACticalaac.org

These may or may not be efficacious practices... we just don't know empirically yet

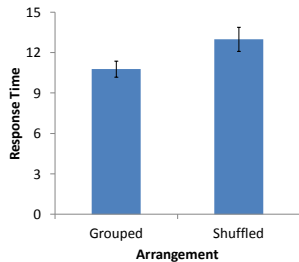## Typically developing 3 – 7 year olds completed four sessions with each of the following arrays

Symbol arrangement is important…

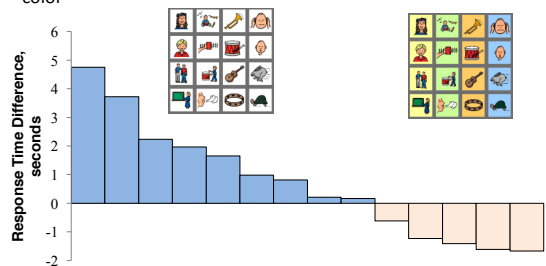- Children under 5 years old (n=14) were more accurate and faster when symbols were grouped

Median response time to sequence three symbols to repeat a spoken phrase:

Grouped = 10.8 seconds
Shuffled = 13.0 seconds

But we should not assume that background color is good (or bad) for any one child

- 9 of 14 younger participants were faster when grouped symbols had a white background
- 5 of 14 were faster when grouped symbols had background color

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