



# **Executive Function Scaffolding for Students with Complex Communication Needs: AAC Considerations**

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# My Background

Speech-language pathologist specializing in AAC since 2008

- Easter Seals Chicago Autism Therapeutic Day School (federal level 5)
- Saint Paul Public Schools
  - Bridge View School (federal level 4)
  - district AT team
- All Voices Augmentative Communication (private practice)
  - in-home AAC services in the Twin Cities metro area
  - all ages

# Land Acknowledgement

I am based out of Saint Paul, Minnesota. I live and work near Bdote Mni Sota (the confluence of the Minnesota and Mississippi rivers). Bdote Mni Sota, according to the Dakota creation story, is where the Dakota people (the Seven Fires of the Dakota) first came to the earth.

Learn more about the Dakota:

[Dakota Wicohan website](https://dakotawicohan.org/) (https://dakotawicohan.org/)

[Bdote Memory Map website](http://bdotememorymap.org/) (http://bdotememorymap.org/)

Books by Native authors and illustrators:

[AICL best books list](https://americanindiansinchildrensliterature.blogspot.com/p/best-books.html)

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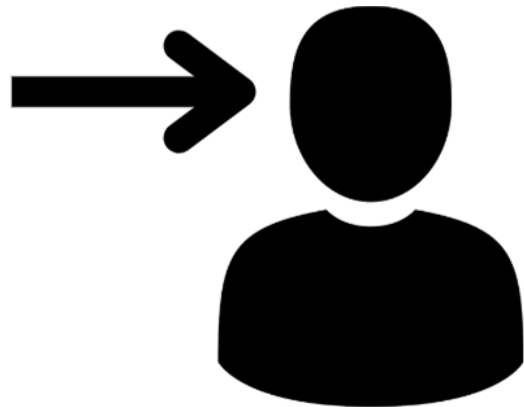
# Outline

- Foundation
- Scaffolds
  - Physical Components
  - Cognitive Components
  - Aided Language
- Final Notes
- Discussion

# Foundation: Receptive vs. Expressive Communication

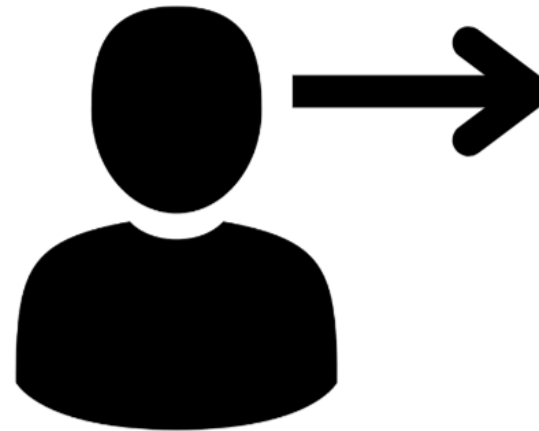
## Receptive Communication

Speech and language information a person takes in and interprets



## Expressive Communication

Speech and language messages a person expresses



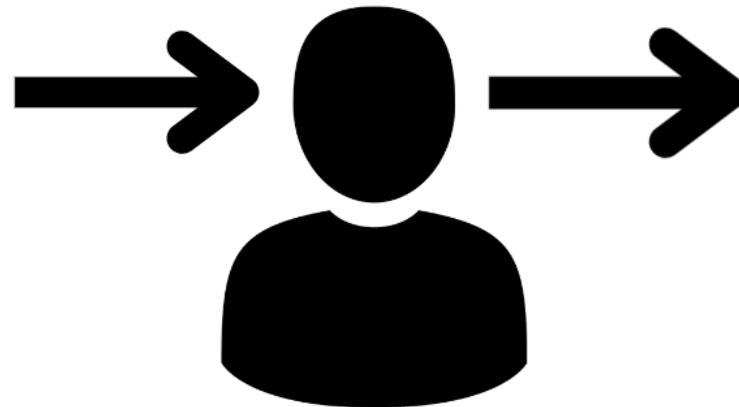
# Foundation: Receptive vs. Expressive Communication, continued

## Receptive Communication

Speech and language information a person takes in and interprets

## Expressive Communication

Speech and language messages a person expresses



# Foundation

## The Ultimate Goal for Everyone

- To be able to communicate spontaneously, independently, clearly, and in a timely manner in a range of contexts with all types of communication partners

# Foundation, continued

## The Ultimate Goal for Everyone

- To be able to communicate spontaneously, independently, clearly, and in a timely manner in a range of contexts with all types of communication partners

**...communication is hard!**



## Foundation, continued 2

**...on top of that, communicating with AAC is hard!**

We need to work to decrease the executive function load of using AAC in order to make communication as “easy” as possible for AAC users (and anyone with complex communication needs).



# Scaffold: Minimize Physical and Motoric Demands

Executive functions you are scaffolding:

- planning
- working memory
- focus/attention
- task initiation

# Scaffold: Minimize Physical and Motoric Demands, continued

## Adapted Touch Settings

- select on release
- dwell
- first finger up, last finger down
- adapted glove
- keyguard
- special stylus: [Nad Pen by Click Speak Connect](https://www.clickspeakconnect.com/nadpen/)  
(<https://www.clickspeakconnect.com/nadpen/>)

# Scaffold: Minimize Physical and Motoric Demands, continued 2

## Alternative Access

- eye gaze
- head mouse, [Smyle Mouse](https://smylemouse.com/) (https://smylemouse.com/)
- scanning
  - partner-assisted scanning: [YouTube video by Cheri C](https://www.youtube.com/watch?v=Z7CiYP56oYw) (https://www.youtube.com/watch?v=Z7CiYP56oYw)
    - present options as statements, not questions
  - switch scanning (1 vs. 2 switches?)

# Scaffold: Minimize Physical and Motoric Demands, continued 3

## Multiple Modes

- non-electronic communication modes
  - communication book
    - PODD, photo album, book based on device, etc.
  - core board
  - writing board
    - Boogie Board, dry erase board, pencil and paper

Encourage autonomy, spontaneity, and self advocacy

# Scaffold: Minimize Physical and Motoric Demands, continued 4

## Positioning

- seating can make a significant difference in level of alertness and engagement
  - try it yourself: passive posture vs. active/alert posture
- [Karen Kangas: Seating and Mobility as it relates to AAC and AT \(YouTube\)](https://www.youtube.com/watch?v=5UhobszRb0g) (https://www.youtube.com/watch?v=5UhobszRb0g)

**30 second stretch break**

# Scaffold: Minimize Cognitive Demands

Executive functions you are scaffolding:

- planning
- mental flexibility
- working memory
- organization
- task initiation



# Scaffold: Minimize Cognitive Demands, continued

## Visual organization

- symbol-based systems
- color-coded buttons

## Scaffold: Minimize Cognitive Demands, continued 2

### Vocabulary

- organized in a way that makes most sense to the user
- increase the number of messages/buttons per page as much as you can
- access to as much vocabulary as possible

## Scaffold: Minimize Cognitive Demands, continued 3

Errorless communication opportunities

- everyone needs experience communicating without worrying about saying the “right” thing
  - opinions, comments
  - art projects
  - free time to “babble”

Encourage autonomy, spontaneity, and self advocacy

# Scaffold: Provide Aided Language Support

<h2 style="text-align: center;">Aided Language</h2> <p>aided language refers to a set of strategies used to teach and encourage communication with AAC</p> <p>people might also call it "aided language stimulation," "modeling," or "partner-augmented input"</p>	<p><a href="#">"How to Get Started Modeling Language on AAC"</a>          YouTube video          2 min, 36 sec          by Rachel Model</p> 
<p><a href="#">"Aided Language Stimulation Explained"</a>          YouTube video          2 min, 31 sec          by Christopher Bugaj          Loudoun County Public Schools          Assistive Technology</p> 	<p><a href="#">"Modeling Without Expectation"</a>          YouTube video          3 min, 46 sec          by The AAC Coach</p> 
<p><a href="#">"Don't Ask, Do Tell! Non-Directive Language"</a>          YouTube video          33 min, 33 sec          by Maureen Nevers          Angelman Syndrome Foundation training</p> 	<p>SMoRRRES®          © Senner &amp; Baud 2013-2022</p> <p> <a href="#">SMoRRRES® Handout</a></p> <p><a href="#">"SMoRRRES® Ingredients"</a>          YouTube video          7 min, 49 sec          by Jill Senner and Matthew Baud          Technology and Language Center, Inc.</p> 
<p style="text-align: center;"><i>all voices augmentative communication</i>  <a href="http://allvoicesaac.com">allvoicesaac.com</a></p> <p style="font-size: small; text-align: center;">This resource list was compiled by Danielle Deschaine, MS, CCC-SLP with permission from original authors (updated January 2022)</p>	

[Aided language flyer](#) (google drive)

## Final Notes:

Encourage autonomy, spontaneity, and self advocacy!

## **Final Notes: Keep up the awesome work!**

You're already taking steps to expand your AAC knowledge, keep it up!  
Feel free to contact me if you need any help in the process!



**Thank you!**

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