

AAC in School Settings: Intervention Strategies, Goal Writing, and Progress Monitoring

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Introductions



Kate Grandbois, MS, CCC-SLP, BCBA, LABA

- SLP for 15 years, BCBA for 7
- Managing Director at Grandbois Therapy & Consulting, LLC & SLP Nerdcast
- AAC Advisory Board for Massachusetts Advocates for Children
- Co-Host, SLP Nerdcast (CEU platform)
- Visiting Lecturer, Fitchburg State University
- Clinical interests: AAC, collaboration, complex communication need

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Introductions



Kate Grandbois, MS, CCC-SLP, BCBA, LABA

Financial Disclosures: Kate is the owner / founder of Grandbois Therapy + Consulting, LLC and co-founder of SLP Nerdcast.

Non-financial Disclosures: Kate is a member of ASHA, SIG 12, and serves on the AAC Advisory Group for Massachusetts Advocates for Children. She is also a member of the Berkshire Association for Behavior Analysis and Therapy (BABAT), MassABA, the Association for Behavior Analysis International (ABAI) and the corresponding Speech Pathology and Applied Behavior Analysis SIG.

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Introductions



Amy Wonka MA, CCC-SLP

- Over 18 years as SLP
- Several years as paraprofessional
- Co-host SLP Nerdcast (CEU Platform)
- Visiting Lecturer, Fitchburg State University

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Introductions



Amy Wonka MA, CCC-SLP

- Financial Disclosures: Amy is an employee of a public school system and co-founder of SLP Nerdcast.
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Learning Objectives

Learning Objectives:

1. Identify 3 components of "good" data collection and describe the influence of "good" data collection on progress monitoring.
2. Identify key components of 2 different AAC intervention approaches.
3. Describe the influence of environmental variables and stakeholder input on goal development.

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Learning Moment

We'd like to take a moment to reflect on the word "Stakeholders"...

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Summary

We will cover:

- Key considerations when writing goals for students with complex communication needs
- The importance of communication partner input, the learning environment, tasks, and feasibility
- Different types of data collection methods
- When and why those methods might be the best fit
- Key intervention strategies commonly used in AAC intervention

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AAC Intervention Foundational Principles

What is the Communication Bill of Rights

1. NJC Document:

<https://www.asha.org/njc/communication-bill-of-rights/>

All people with a disability of any extent or severity have a basic right to affect, through communication, the conditions of their existence. Beyond this general right, a number of specific communication rights should be ensured in all daily interactions and interventions involving persons who have severe disabilities. To participate fully in communication interactions, each person has these fundamental communication rights:

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What is the Communication Bill of Rights

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What is the Communication Bill of Rights

1. The right to interact socially, maintain social closeness, and build relationships
2. The right to request desired objects, actions, events, and people
3. The right to refuse or reject undesired objects, actions, events, or choices
4. The right to express personal preferences and feelings
5. The right to make choices from meaningful alternatives
6. The right to make comments and share opinions
7. The right to ask for and give information, including information about changes in routine and environment
8. The right to be informed about people and events in one's life
9. The right to access interventions and supports that improve communication
10. The right to have communication acts acknowledged and responded to even when the desired outcome cannot be realized

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What is the Communication Bill of Rights

1. The right to have access to functioning AAC (augmentative and alternative communication) and other AT (assistive technology) services and devices at all times
2. The right to access environmental contexts, interactions, and opportunities that promote participation as full communication partners with other people, including peers
3. The right to be treated with dignity and addressed with respect and courtesy
4. **The right to be addressed directly and not be spoken for or talked about in the third person while present**
5. The right to have clear, meaningful, and culturally and linguistically appropriate communications

Why is this important for AAC users in particular?

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AAC Intervention: Matching Interventions to a Learner

AAC Intervention: matching a strategy to your learner

- Brief word about assessment
- Choose an intervention that is matched across:
 - Student variables
 - Environmental variables
 - Tasks

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The SETT Framework (by Joy Zabala)

- Student
- Environment
- Task
- Tools

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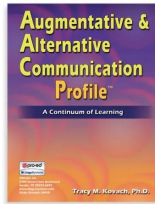
Student variables: Areas of communicative competence

First introduced by Janice Light in 1989, and updated in 2003

- Linguistic
- Social
- Strategic
- Operational
- Psychosocial factors

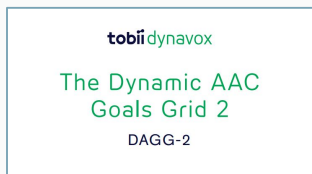
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AACP



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The DAGG-2



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Student variables: Full continuum of symbolic representation

- Aided
 - Concrete → Abstract
 - Objects
 - Text
 - Pictures

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Student variables: Full continuum of symbolic representation

- Unaided
 - Symbolic
 - Oral speech, ASL, SEE, etc
 - Conventional presymbolic
 - Waving, "thumbs up", head nod/shake, etc.
 - Unconventional presymbolic
 - Crying, pulling, breath holding, etc.

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Student variables: Preferences, interests, and sensory needs

- Engagement
- Physical systems
- Balance and regulation

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Student variables: To Review

- Areas of communicative competence
- Aided vs Unaided
 - Symbol type
 - Symbolic vs pre-symbolic
- Sensory Motor status
- Preferences and interests

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Breakout Group 1

Breakout 1

	STUDENT		
	Frequently	Sometimes	Rarely or Never
Aided: Abstract			
Aided: Concrete			
Unaided: Symbolic			
Unaided: Conventional			

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Breakout Group 1

- Choose a client who is an AAC user
- Zoom all the way in - what are the variables related to your student that you should consider before choosing an intervention?
- Work through this graphic organizer and jot down some client specific variables relevant to that client

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Environmental Considerations

The SETT Framework (by Joy Zabala)

- Student
- Environment
- Task
- Tools

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Environmental Considerations

- Generalization?

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Environmental Considerations

- Generalization?
- Sensory stimuli?

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Environmental Considerations

- Generalization?
- Sensory stimuli?
- Other variables?

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Environmental Considerations



"sometimes fireworks are just too loud" by Malingering is marked with [CC BY-NC-ND 2.0](#).

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Environmental Considerations

TARGET SKILL: Symbolic initiations (using AAC device and/or intelligible speech approximations) without being asked, instructed, or prompted. Are there certain features of the environment that seem to make the skill more or less likely to happen?

Date: Observation Location: Start Time: End Time:	FACILITATOR	BARRIER
ENVIRONMENT		

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Environmental Considerations

TARGET SKILL: Symbolic initiations (using AAC device and/or intelligible speech approximations) without being asked, instructed, or prompted. Are there certain features of the environment that seem to make the skill more or less likely to happen?

Date: Observation Location: Start Time: End Time:	FACILITATOR	BARRIER
ENVIRONMENT	<ul style="list-style-type: none"> Icon sequences printed out and posted in key areas 	<ul style="list-style-type: none"> Lots of movement (esp peers) Large group (10+) responding (? maybe??)

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The SETT Framework (by Joy Zabala)



Communication Supports Inventory-Children and Youth (CSI-CY)

for children who rely on augmentative and alternative communication (AAC)
Charity Rowland, Ph. D., Melanie Fried-Oken, Ph. D., CCC-SLP and Sandra A. M. Steiner, M. A., CCC-SLP

Administrator _____ Student _____ Date _____

RESTRICTIONS IN PARTICIPATION CAUSED BY COMMUNICATION LIMITATIONS

SCHOOL-RELATED ACTIVITIES	Don't Know	Not Applicable	Severely Restricted	Typical Peer	No Restriction	Minor Restriction	Moderate Restriction	Severe Restriction	Complete Restriction	PRIORITY for INSTRUCTION
1. Playing with others as an educational activity										
2. Classroom activities (eg. attending classes and interacting appropriately to fulfill the duties of being a student)										
3. Community activities (classroom games, assemblies, eating in the cafeteria, field trips)										
4. Recreation (physical education, recess, playground games)										
5. Complete isolation from classes, assemblies, lunch										

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Task Considerations

The SETT Framework (by Joy Zabala)

- Student
- Environment
- **I**ask
- Tools

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Task Considerations

- **Current** performance
 - What
 - Where
 - With whom
 - With what levels of support
- Connects to curriculum in what way?
- Connects to team member values and priorities in what way?

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Task Considerations

- **Desired** performance
 - What
 - Where
 - With whom
 - With what levels of support
- Connects to curriculum in what way?
 - If school-based or working with school-aged clients
- Connects to team member values and priorities in what way?

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Environment and Task Variables: To Review

- Our students' communication is often influenced by features of their environment
- We need to consider individual differences in how our students learn and what environmental factors may serve as barriers and facilitators
- Our task expectations should be informed by team members, curriculum expectations, and individual needs

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Breakout Group 2

Breakout Group 2

AAC and Progress Monitoring

Client Variables

- STUDENT VARIABLES
- ENVIRONMENTAL VARIABLES
- TASKS (THINGS YOU ASK YOUR CLIENT TO DO)

Well Matched AAC Intervention

What AAC intervention will you choose and why?

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Breakout Group 2

- Zoom out - what are some of the other variables related to your student that you should consider before choosing an intervention?

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AAC Intervention Strategies

AAC Intervention: Overview

- Aided Language modeling
- Prompting strategies
- Vocabulary types (core and fringe)
- Embedded icons
- Chaining

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AAC Intervention: Aided Language Modeling

The average 18 month old child has been exposed to 4,380 hours of oral language at a rate of 8 hours/day from birth. A child who has a communication system and receives speech/language therapy two times per week for 20-30 minute sessions will reach this same amount of language exposure in 84 years (Korsten, J.)

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AAC Intervention: Aided Language Modeling

With AAC modeling, the teacher uses the AAC system in the context of a naturalistic communication interaction. A naturalistic communication interaction is defined as a "dynamic process between at least two people which is highly interactive, bi-directional, and multi-modal" (Kraat, 1985, p. 21) and occurs naturally in the context of the learner's day (p. 2).

Learn more at: <https://tinyurl.com/bdz599b4>

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AAC Intervention: Aided Language Modeling

When you are thinking about introducing ALM strategies into your work, be sure to think about naturalistic communication exchanges that occur throughout your session or the client's day. What types of things are they very interested in? What routines happen frequently? An awareness of these functional and naturalistic opportunities is important when integrating ALM into a treatment approach. Consider the importance of modeling within naturalistic exchanges – particularly those that are engaging and meaningful for your client – and finding opportunities to model a range of pragmatic functions (perhaps all with the same small set of vocabulary words) within those opportunities.

Learn more at: <https://tinyurl.com/bdz599b4>

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Modeling and ALI

Do



- Take the pressure off
- Model when it's easy
- Make it fun
- Provide wait time
- Invite a response

Don't



- Model if it's stressful
- Model only requests
- Quiz/test
- Create an echo
- Require a response

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AAC Intervention: Aided Language Modeling

Aided language stimulation - what does it look like?

- a. It will look different for each person or student
- b. Research:
 - i. 30 models should be provided in a 15-min session (Binger & Light, 2007)
 - ii. When combining symbols or pointing to referents, there should be no more than a 2-s delay (Drager et al., 2006)

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AAC Intervention: Prompting

- Prompts are a teaching strategy
- They are meant to be faded
- Incorporate the use of a structured hierarchy
 - Least to most
 - Most to least

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AAC Intervention: Prompting

MOST to LEAST

- Provide model
- Hold finger over specific button(s)
- Gesture generally toward device but not specific buttons
- Extended pause/ expectant look

LEAST to MOST

- Extended pause/ expectant look
- Gesture generally toward device but not specific buttons
- Hold finger over specific button(s)
- Provide model

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AAC Intervention: Prompting

- We provide prompts in the context of natural cues
- The natural cues will not be faded and are not prompts

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AAC Intervention: Modeling

Modeling ([Link to substantial reference list: https://bit.ly/ALMReferences](https://bit.ly/ALMReferences))

As prompting

vs

As input

- Partner says, "cake" using oral speech and activates icon sequence for CAKE on AAC device
- Partner says, "cake" using oral speech and activates icon sequence for CAKE on AAC device

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AAC Intervention: Modeling

Modeling ([Link to substantial reference list: https://bit.ly/ALMReferences](https://bit.ly/ALMReferences))

As prompting

vs

As input

- Partner is holding up a picture of cake, asking, "What is it?" and providing the first step in a most to least prompting hierarchy
- Partner is engaging client in play at the kitchen center of a preschool and providing language input using multimodal communication

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AAC Intervention: Modeling

Modeling ([Link to substantial reference list: https://bit.ly/ALMReferences](https://bit.ly/ALMReferences))

As prompting

vs

As input

- Partner provides feedback when client responds accurately to the prompt and labels the cake picture
- Partner does NOT expect imitation, they are providing input

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AAC Intervention: Modeling

Free Resource!
Communication Partner Input Form

Date: _____

Communication Partner Input for _____

What topics are you most interested in having the _____

Are you familiar with the student's tool / communication system?

What cues interact with the student are there things that make modeling difficult? Describe at least one:

- ☐ Behavior in a noisy environment
- ☐ Communication delay (delay, distraction)
- ☐ Intonation and timing (rhythm)
- ☐ Visual attention to the tool
- ☐ Response latency
- ☐ Non-verbal cues
- ☐ Accented voice (looking for screen, switch access, etc.)
- ☐ Other: _____

Please describe: _____

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AAC Intervention: Modeling

Free Resource!
ALM Planning Worksheet

<https://bit.ly/ALMPlanning>

ALM Planning Worksheet

Use this form to plan your modeling and prompting and to track your progress. Use this form to plan your modeling and prompting and to track your progress. Use this form to plan your modeling and prompting and to track your progress.

Session	Modeling (What did you do?)	What did you get?	How did it go?
Session 1			
Session 2			
Session 3			
Session 4			
Session 5			

Notes: _____

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AAC Intervention: Core & Fringe

Core

- 80% of what we say
- 300-400 words for adults
- High frequency words
- Mostly pronouns, verbs and demonstratives
- Not context specific

Fringe

- 20% of what we say
- Infinite number of words
- Low frequency words
- Mostly nouns
- Context specific

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AAC Intervention: Core & Fringe

- Core vocabulary gives communicative power!
- Fringe is also important
- Program personal fringe/key vocabulary
- Babies often start with fringe and quickly move to core vocabulary



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AAC Intervention: Embedded Icons

Embedded icons

- Icons from an AAC system embedded in the natural environment
 - Classroom culture shift / inclusion
 - Peer use / support
 - Ease of access for communication partners

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AAC Intervention: Other Intervention Strategies

Chaining Procedures

- Chaining is used so frequently in AAC, especially in systems where users are accessing language through a series of movements.
- All forms of chaining are used:
 - Forwards, backwards, total task
- Each form of chaining is best suited to a different type of learner
- Reference for more on chaining in AAC: <https://bit.ly/ChaininginAAC>



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AAC Intervention: Other Intervention Strategies

- Don't know what chaining is?

Two resources: PrAACtical AAC blog post:
<https://bit.ly/aacchainingblog>



SLP Nerdcast: Chaining in AAC:
<https://bit.ly/aacchainingpodcast>



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Breakout Group 3

Breakout Group 3

AAC and Progress Monitoring

Client Variables

- STUDENT VARIABLES
- ENVIRONMENTAL VARIABLES
- TASKS (THINGS YOU USE YOUR CLIENT TO DO)

Well Matched AAC Intervention

What AAC intervention will you choose and why?

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Breakout Group 3

- What AAC intervention is best matched to your learner?
- What SET variables are the most important to consider when choosing an intervention?
- Thinking ahead, are there other considerations related to a SET variable that will impact the intervention
 - e.g. staff training, equipment / material customization, etc.

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Goal Writing & Data Collection: Foundational Principles

Data Collection and Goal Writing

What is the relationship between data collection and goal writing?

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Data Collection and Goal Writing



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Data Collection and Goal Writing



- Korsten (2002)
 - What is the goal for the technology?
 - What are the "minimum performance criteria" for the task at hand?
 - What are the possible obstacles to success?
 - What can be measured to demonstrate success?
 - How can the data be framed in order to identify whether criteria is achieved?
 - When criteria are not met, will the data provide information needed to make changes in either the tools or the strategies?
 - Who will collect the data? When? Where? How often?
 - Who will analyze, summarize and share the data?

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Data Collection and Goal Writing

BFF



- Korsten (2002)
 - What is the goal for the technology?
 - What are the "minimum performance criteria" for the task at hand?
 - What are the possible obstacles to success?
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Goal Writing: Considerations

Necessary Considerations for Goal Writing

- Why do we write goals?
 - Ethics

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Necessary Considerations for Goal Writing

- Why do we write goals?
 - Ethics
 - Research (Goodman & Bond, 1993)

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Necessary Considerations for Goal Writing

- Why do we write goals?
 - Ethics
 - Research (Goodman & Bond, 1993)
 - Goals have a direct impact on treatment

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Necessary Considerations for Goal Writing

- The critical importance of client perspectives and values
 - Client perspectives + functional application = value

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Necessary Considerations for Goal Writing

- The critical importance of client perspectives and values
 - Client perspectives + functional application = value
- Goals are shaped by workplace norms

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Necessary Considerations for Goal Writing

- The critical importance of client perspectives and values
 - Client perspectives + functional application = value
- Goals are shaped by workplace norms
- Goals are informed by assessments → data

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Necessary Considerations for Goal Writing

- The critical importance of client perspectives and values
 - Client perspectives + functional application = value
- Goals are shaped by workplace norms
- Goals are informed by assessments → data
- Goals are written to be reasonably achievable

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Necessary Considerations for Goal Writing

- A word on Goal Banks (Diehm, 2017)



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Data Collection: Considerations

Why is data collection important?

Data Collection & Evidence Based Practice (EBP)

1. Let's talk about that word "Evidence":
 - a. External Evidence
 - b. Internal Evidence
2. How can you provide "competent service" or "evidence" based practice without measurement?
 - a. How can you measure something without data?

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Why is data collection important?

Data Collection & Accountability

1. Olswang & Bain (1994) reviews the importance of this concept:
 - a. Data justifies why certain treatment decisions were made
 - b. Guides future clinical decision making
2. Without data you cannot be accountable to your past, present, or future clinical decision making

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Why is data collection important?

Goal Writing & Progress Monitoring

1. Planning goals and objectives that are:
 - a. Meaningful to our clients and other stakeholders
 - b. Relevant and appropriate for the target environment(s)
2. Monitoring and reporting on progress
3. Determining whether our treatment is working/needs to change
4. Providing meaningful ongoing support to communication partners
5. Providing input on environmental and/or task accommodations or modifications to reduce barriers to communication

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Why is data collection important?

Collaboration and answering clinical questions

1. How is your treatment working in other settings?
 - a. → data!
2. How do you resolve a disagreement over what treatment approach to use?
 - a. → data!
3. What is one way to counsel team members who want to continue with a treatment approach that isn't working?
 - a. → data!

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What is “good” data collection?

Good data is:

1. **Reliable** - the same values are produced over repeated measurements
2. **Accurate** - observer values match true values
3. **Valid** - how well something measures what it is supposed to measure

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Data Collection - Continuum of Options

1. **Quantitative** - objective, observable, involves an operational definition
2. **Qualitative**

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Data Collection - Continuum of Options

1. **Quantitative** - objective, observable, involves an operational definition (numbers-type data)
2. **Qualitative** - subjective, often observational in nature (characteristic and descriptor-type data)

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What is “good” data collection?

Ok, so you're saying data collection is important.... But... it's haaard.

1. Data collection can
 - a. Feel cumbersome
 - b. Be inaccurate
 - c. Be taken by someone else
 - d. Require training

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What is “good” data collection?

Data collection made easier:

1. Choose a data collection system that is realistic within your setting
2. Consider important factors that will impact your data collection*
 - a. Who is collecting the data?
 - b. What other tasks are happening at the same time as your data collection
 - c. What role does the environment play in your data collection
3. Take good data less often!
4. Graph graph graph!

(Korsten, 2002)

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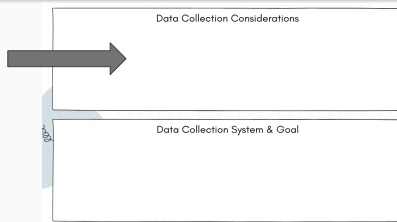
Data Collection - Considerations

1. More than one way to collect data
2. Match the method to your needs
 - a. Target skill
 - b. Environment
 - c. Time demands
 - d. Personnel
3. Think about data collection while (not after) goal writing

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Breakout Group 4

Breakout Group 4



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Breakout Group 4

- Consider your student: Look at your SETT variables and specific considerations for the interventions you chose
 - Who is taking your data?
 - In what environment?
 - What is the specific skill you want to measure?
 - What is defined as "success"?
 - How long will you continue data collection to measure progress?
- Brainstorm a list of data collection considerations

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Data Collection Systems

Data Collection - Considerations

Client X will independently produce skill Y with 80% accuracy across 3 consecutive sessions

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Data Collection - Continuum of Options

S - ubjective	Qualitative data
Q - bjective	Quantitative data
A - ssessment	Review and interpret data
P - lan	Think forward based upon your assessment of data - what might you change in your therapy? Your data collection? Your communication partner support? Your environmental or task recommendations?

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Data Collection - Continuum of Options

Some data collection methods (e.g., rubrics, permanent products, surveys/interviews, etc.) can be quantitative OR qualitative. A mix of methods might best answer some clinical questions.

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Data Collection - Continuum of Options

1. Continuous*
2. Discontinuous

*Refers to clinical application of this term per our readings this week, not mathematical application of this term (often used in contrast to discrete data) - for any SLP/mathematicians out there!

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Data Collection - Continuum of Options

1. Continuous - collecting all of the data on a target skill - every instance is recorded
2. Discontinuous

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Data Collection - Continuum of Options

1. Continuous - collecting *all* of the data on a target skill - every instance is recorded
2. Discontinuous - collecting *some* of the data on a target skill - but using an intentional and planned mechanism for sampling this data (may also hear this referred to as probe data)

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Setting the Stage

- Ask yourself what question you are trying to answer with your data
 - What do I really need to know?
- Ask yourself how much time you are able and willing to spend on this mini assessment
 - What other tasks are you doing?
 - How often are you collecting this data?
 - Who else is involved?

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Setting the Stage

- Select the data collection method that best answers your identified question(s) AND meets your time/environmental constraints
- Generate operational definitions or a defined structure (if desired when using qualitative methods)
 - Can be particularly important for clients who have CCN

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Data collection summary

1. Frequency - how often something happens
2. Rate - frequency over time
3. Accuracy - how often something meets a "correct" criteria
4. Duration - how long something lasts
5. Interval - did something happen during specified, repeated time periods
6. Latency - how long it takes for something to happen (after something else happened first)
7. Trials to Criterion - how many teaching trials are needed to reach a predetermined criterion
8. Survey/Interview - what do people think and feel about something
9. Observation - what do you notice about something
10. Rubric - predetermining criteria related to the component parts of a skill and assigning a score based on different performance features

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Methods - Frequency

Frequency - how often something happens (also known as tallies/tally count or event recording)

1. The data collection process involves counting how many times something happens
2. Good for/pros:
 - a. Measuring discrete events
 - b. Measuring over consistent time periods (e.g., 15-minute intervals)

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Methods - Frequency

Environment:
Task:
Duration:
Definition:

FREQUENCY

Date	Frequency

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Methods - Rate

Rate - how often something happens in a specified time interval

1. The data collection process involves counting how many times something happens in a specific block of time
2. To determine the rate, take the frequency and divide it by the duration of the data collection period
 - a. For example, Client initiates using symbolic communication 15 times in 60 minutes, so they initiated using symbolic communication 0.25 times an hour (15 divided by 60 = 0.25)
3. Good for/pros:
 - a. Gives you a bit more detail than frequency alone
 - b. Better choice if the duration of your data collection varies

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Methods - Rate

RATE			
<u>Environment:</u>			
<u>Task:</u>			
<u>Definition:</u>			
Date	Frequency	Duration of Data Collection (minutes)	Rate (frequency total / duration total)

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Methods - Percent Accuracy

Accuracy - how often something happens at a predetermined accurate criteria versus not at that criteria (often expressed as a percentage, % correct)

1. Define the accurate response
 - a. For example, marking a closed syllable with any consonant or consonant approximation is very different from marking a closed syllable with the voiceless stop, /p/
2. Good for/pros
 - a. When you need to know how accurately a client demonstrates a skill
 - b. Easily understood by multiple stakeholders

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Methods - Percent Accuracy

ACCURACY			
Environment:			
Task:			
Duration:			
Definition:			
Date	Accurate	Error	Percent Accurate (accurate / total all) * 100

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Methods - Duration

Duration - how long something happens

1. Need to define the start and stop of the target
2. Calculate average (mean) duration by adding all your recorded durations together and dividing by the total number of recordings (e.g., 35 seconds, 41 seconds, and 12 seconds = $88/3 = 29.3$)
3. Consider whether median and mode would be helpful information as well
4. Good for/pros
 - a. When you need to know how long something takes

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Methods - Duration

DURATION									
Environment:									
Task:									
Definition Start and Stop:									
Date	Start	Stop	Duration	Start	Stop	Duration	Start	Stop	Duration

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Methods - Interval or Time Sampling

Interval - did something happen during a specified, repeated duration of time

1. Define the target skill
2. Determine interval type:
 - a. Whole interval - did the skill happen the whole time period?
 - b. Partial interval - did the skill happen at all during the time period?
 - c. Momentary time sampling - was the skill happening at the precise time you checked?
3. Good for/pros
 - a. When you want to know if something is happening but recording every instance is impossible or less than ideal
4. Reminder - interval data is discontinuous and gives an estimate of the actual occurrence

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Methods - Interval

Environment: Partial Interval - record if any occurrence
Task:
Definition:

Date	Interval 1	Interval 2	Interval 3	Interval 4	Interval 5

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Methods - Latency

Latency - how long it takes for something to start happening (after something else has happened)

1. Define the initial event and what is required to mark the initiation of the target
2. Good for/pros
 - a. When you need to how long it takes for something to begin happening

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Methods - Latency

LATENCY									
Environment:									
Task:									
Definition Initial Event and Stop:									
Date	Start	Stop	Latency	Start	Stop	Latency	Start	Stop	Latency

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Methods - Trials to Criterion

Trials to Criterion - how long it takes/how many teaching trials or opportunities in order for a client to meet a predetermined criterion

1. Define the criterion (how will you know it has been met?)
2. Good for/pros
 - a. When you need to how long it takes for something to reach a certain degree of mastery
 - b. When you want to compare different methods of instruction to find which is best

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Methods - Frequency

FREQUENCY	
Environment:	
Task:	
Duration:	
Definition:	
Date	Frequency

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Methods - Surveys/Interviews

Surveys/Interviews - a method for gathering information from stakeholders, usually focused on qualitative data, but can also be quantified (e.g., rating scales)

1. Determine what you want to know, what questions to ask, who to ask, and how often to ask them
2. Good for/pros
 - a. When you need to get input from multiple stakeholders and quantitative methods are not possible/feasible
 - b. When you want to make your quantitative data more meaningful with the addition of qualitative information

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Methods - Surveys/Interviews

What do you feel is going well or has increased your success or confidence in communication exchanges with STUDENT?

What are the two biggest challenges (if any) in communication exchanges with STUDENT?

Share an example of a time something went well regarding participation and/or communication in your classroom

Share an example of a time when you noticed challenges with participation and/or communication in your classroom

Please share any other thoughts or questions!

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Methods - Observations

Observations - a method for gathering information through clinical observation, which can focus on qualitative or quantitative data

1. Determine what you want to know, what questions to ask, how to best collect that data (what your data sheet looks like), where you will observe, for how long, and how often
2. Good for/pros
 - a. When you need input about environmental and task factors, particularly details that may not come up through consult, surveys, or interviews

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Methods - Observations

Date: Observation Location: Start Time: End Time:	FACILITATOR	BARRIER
ENVIRONMENT		
TASK		

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Methods - Rubric

Rubric: how well a skill aligns with a predetermined mastery criteria, often across multiple areas

1. Define the target skill
2. Determine rubric elements and generate rubric, consider:
 - a. Frequency/accuracy
 - b. Prerequisite skills/tasks
 - c. Prompting/levels of support
 - d. Environments/environmental variables
3. Good for/pros
 - a. Potential to integrate quantitative and qualitative data elements
 - b. Provides more holistic view of functional use of integrated skills

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Methods - Rubric

Uses Aided Communication to Answer Content Questions in Science Block

	4	3	2	1	TOTAL SCORE
Accurately answers Q	75% - 100% of time	50% - 74% of the time	25% - 49% of the time	0-24% of the time	
Cues needed	Indirect or direct cues, same as peers	1:1 support, cues, and/or redirection to task no more than 3 times	1:1 support, cues, and/or redirection to task no more than 4-7 times	Ongoing individualized support greater than 8 times	
Environment	Gen ed classroom science group 3+ peers	Gen ed classroom science group 2 peers	Gen ed classroom science group 1 peer	Gen ed classroom 1:1 with adult	

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Data Collection - Key Takeaways

1. Data collection is a form of assessment
2. Some methods (discontinuous) are more efficient - but give us *estimates*
3. We can collect data on many areas (not just direct student performance!) to enhance our interventions
 - a. Environment
 - b. Communication partners
 - i. Identify values, barriers, facilitators, etc.
4. Without ongoing analysis and modifications to our plan where warranted, data collection is a pointless exercise

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Data Collection - Putting it all Together

Outcomes - ultimately, we need to regularly review our data and assess whether or not what we are doing is "working" - three possible outcomes:

1. It IS working - we clearly see improvement toward our goal, we will keep doing what we are doing
2. It IS NOT working - we clearly do not see improvement toward our goal or there are other indicators that a change is needed
3. I am not really sure - we see some progress, but it is slower than expected, or less consistent than expected - check definitions and procedures, consider and implement small changes, then revisit

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Writing your Goal

Writing your Goal

- SMART is an acronym for:

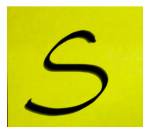
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Writing your Goal



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Writing your Goal



Specific

- Specific but jargon free
- If adding supports, make those specific too
- Make sure the skill is actionable and observable
- Don't overdo it

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Writing your Goal

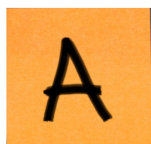


Measurable

- 4 components of a measurable goal (Diehm, 2017)
- Think about your data collection!
 - Make sure the unit of measurement is compatible with the skill!
- Consider generalization, content, and context

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Writing your Goal

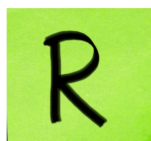


Attainable (achievable, actionable)

- Nothing else matters
- Consider your code of ethics
- Dictated by funding or workplace norms
- Influenced by all aspects of EBP

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Writing your Goal



Relevant (realistic)

- Academic relevance
- Functional relevance
- Client perspective / value relevance

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Writing your Goal



Timely (or time-bound)

- What is the timeframe in which the goal will be achieved?
- Dictated often by workplace norms or funding sources
- Long-term vs short term goals

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Bringing it all together

Data Collection and Goal Writing



- New-to-you student, CCN
- Your task: write the IEP goal
- Where do you start?

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Data Collection and Goal Writing



- Step 1: Qualitative Data is your BFF

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Data Collection and Goal Writing



- Step 1: Qualitative Data is your BFF
- Step 2: Don't forget what is better together!
 - Quantitative data might feel left out!

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Data Collection and Goal Writing



- Korsten (2002)
 - What is the goal for the technology?
 - What are the "minimum performance criteria" for the task at hand?
 - What are the possible obstacles to success?
 - What can be measured to demonstrate success?
 - How can the data be framed in order to identify whether criteria is achieved?
 - When criteria are not met, will the data provide information needed to make changes in either the tools or the strategies?
 - Who will collect the data? When? Where? How often?
 - Who will analyze, summarize and share the data?

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Data Collec



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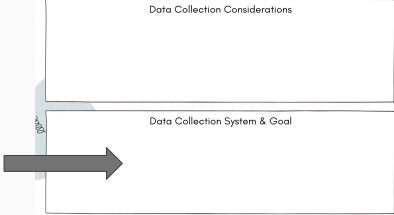
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Breakout Group 5:
Bringing it all together

Breakout Group 4

Data Collection Considerations

Data Collection System & Goal



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Breakout Groups

- What data collection system will you choose?
- How will this impact the goal you write?
- What essential components will you put in your goal?

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Questions?

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Online Resources & Links

ICF-CY
<http://www.icfcy.org/aac>
SETT Framework
<https://www.joyzabala.com/>
Communication Matrix
<https://www.communicationmatrix.org/>

Online Resources & Links

Augmentative Alternative Communication Profile:
<https://www.proedinc.com/Products/34010/aacp-augmentative--alternative-communication-profile-a-continuum-of-learning.aspx>

DAGG:
<http://tdvox.web-downloads.s3.amazonaws.com/MyTobiiDynavox/dagg%2020-%20writable.pdf>

Use of Rubrics:

<https://leader.pubs.asha.org/doi/10.1044/why-use-rubrics-to-measure-communication-goals/full/>

<https://practicalaac.org/practical/introducing-relaacs-rubric-for-evaluating-the-language-of-apps-for-aac/>

Online Resources & Links

- The Communication Bill of Rights:
<https://www.asha.org/njc/communication-bill-of-rights/>
- Aided Language Modeling Reference List: <https://bit.ly/ALMReferences>
- Chaining and AAC Resources:
 - Blog Post: <https://bit.ly/aacchainingblog>
 - Podcast episode: <https://bit.ly/aacchainingpodcast>
 - Reference list: <https://bit.ly/ChaininginAAC>
- Communication Partner Input Form: <https://bit.ly/CommInputForm>

Online Resources & Links

- Implementation Plan Template: <https://bit.ly/AACImplementationPlan>
- Service Delivery Models:
 - In SLP: <https://bit.ly/CSDServiceDelivery>
 - In AAC: <https://bit.ly/AACServiceDelivery>
- Aided Language Stimulation / Modeling:
 - Blog: <https://bit.ly/AidedLanguageBlog>
 - Podcast: <https://bit.ly/AidedLanguageBasics>
 - Podcast: <https://bit.ly/ALMApplication>

Online Resources & Links

- PrAACtical AAC: <https://practicalaac.org/>
- International Society for Augmentative Alternative Communication (ISAAC): <https://isaac-online.org/english/home/>
- Closing the Gap: <https://www.closingthegap.com/conference/>
- Assistive Technology International Association: <https://www.atia.org/>
- The IMPAACT Program (communication partner training by Cathy Binger & Jennifer Kent-Walsh)
- Sarah Gregory / Inclusion & AAC / YouTube Chanel: <https://www.youtube.com/c/sarahgregorySLP>

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