

AN INTRODUCTION TO THE DYNAMIC AAC GOAL GRID

HOW DO WE GET BEYOND EAT, DRINK AND POTTY TO FOCUS ON THE INTERACTION AND INDEPENDENCE?

This question first inspired the development of a Dynamic AAC Goals tool built around the guiding principles of the InterAACT Framework. The InterAACT Framework (DynaVox's language philosophy) addresses the power of interaction with access to language and communication tools within an AAC system to support day-to-day conversation and language and literacy development. It provides the opportunity to transition dynamically through communication ability levels (Emergent, Context-Dependent, and Independent) as well as throughout the lifespan.

With the visual of the InterAACT Framework, a second guiding principle and component of the tool emerged: **If competence is not inherent, we must teach it.** We focused on incorporating a more holistic and systematic way to look at goals that embrace Light's (1988) four communicative competencies (Linguistic, Operational, Social and Strategic) for individuals who use AAC. The task at hand was to provide a big picture view of comprehensive goals addressing competence with an AAC system that will meet not only immediate communication needs, but allows for the potential growth and variation in communication skills and strategies and the shifting demands of the environment (Nelson*, 1992).

Assessment and intervention goals for AAC should reflect this dynamic journey. Yet, how do we address goals for today while still preparing to meet tomorrow's needs? How do we assess and set goals addressing communication independence at any ability or skill level? How do we show the most measurable progress possible for our individuals using AAC when gains appear to be minimal, or when the same goal is targeted for a considerable length of time? In essence: **where do we start, where do we go, and how do we get there?!**

Thus, the ultimate purpose of The Dynamic AAC Goals Grid is to provide a framework for assessment and intervention planning of current and future communication strategies which will meet the majority of an individual's interaction needs given their communication ability level.

*Nelson, N. (1992) Performance is Prize: Language Competence and Performance among AAC users. *Augmentative and Alternative Communication*, 8, 3-18.

COMPONENTS

InterAACT Framework and Strategy (McAfoose/DynaVox Mayer-Johnson)

Communication Ability Levels (Dowden*/InterAACT)

Communicative Competencies (Light*)

Chain of Cues/Prompting Hierarchy (Diener/Elder)

*References on the first page of the Dynamic AAC Goals Grid

THE INTERAACT FRAMEWORK

The InterAACT framework is based on the belief that language is at the heart of every AAC device. The purpose of the InterAACT Framework is to support successful day-to-day interaction (which we will call Language Use) and to support the development and use of higher level language and literacy skills (which we will call Language Structure). The communication pages developed based on the InterAACT Framework are designed to meet differing needs, address distinctive characteristics and skills, and provide a way to interact with a variety of people and environments.

The InterAACT framework provides the individual with a building block system. Within this language system they can build communication and literacy skills, move across a continuum of age and/or ability all without sacrificing skills learned and used at earlier levels. InterAACT is a framework that truly grows with the communicator in both age and ability while always providing content or vocabulary appropriate for the context or environment in which they are communicating.

INTERAACT STRATEGY

The InterAACT framework supports a language system for both functional communication and literacy development. It is driven primarily by three factors:

- communicator's age
- communication ability
- the context within which they want to communicate

The common elements throughout the page sets support continuity and progression across the age and level of communication independence. They support the individual's chronological and communicative changes by maintaining the following elements in all page sets across the spectrum:

- Physical structure and layout
- Language use elements
- Language structure elements
- User interface framework
- Connections to the user's environment

COMMUNICATION ABILITY LEVELS

Each Communicative Competency has been organized into three levels: **Emergent, Context-Dependent and Independent**. The InterAACT Framework recognized that people with complex communication needs fall on a broad spectrum and embraced the communication ability levels (influenced by Pat Dowden) as a way to define observable behaviors that these individuals are currently using to communicate.

INTERAACT FRAMEWORK	COMPONENTS
Language Use	Language Use
Language Structure	Language Structure
Age Ranges (Users)	Age Ranges (Users)
Communication Ability Levels (Page Sets)	Communication Ability Levels (Page Sets)

In the Dynamic AAC Goal Grid, these levels are also represented on a dynamic continuum that flows from one level to the next to support present and progressing competency skills. This provides a direction to help support where an individual is currently and to identify strategies to help this person grow as a communicator. Each level presents a way to assess where the individual is now, what goals should we work on to be more independent at the current communicative ability level, what "tomorrow goals" can I introduce or expose him/her to work towards the much larger vision of independent communication.

COMMUNICATION ABILITY LEVEL	SNAPSHOT DESCRIPTION
EMERGENT	<ul style="list-style-type: none"> • Uses facial expression, body language, gestures, and/or behaviors (either socially appropriate or challenging) to communicate • May be starting to use clear and simple symbols (especially in motivating or preferred activities) • May show some variability in both understanding and expression from day-to-day or activity- to-activity • Relies on communication partner to be a successful communicator
CONTEXT-DEPENDENT	<ul style="list-style-type: none"> • Understands general conversations and directions as well as same age peers • Uses symbols and objects spontaneously to communicate basic needs and wants • Beginning to combine 2 or more symbols to create longer and/or more complex messages • Communicates best in routines regarding familiar topics and, in some cases, with the support of communication partners • Developing literacy skills (e.g. letter names and sounds, site words, spelling of simple words)
INDEPENDENT	<ul style="list-style-type: none"> • Understands communication the same as same-age peers • Combines single words, spelling and phrases together to communicate about a variety of subjects as others would at his/her age • Literacy and social skills on par with same-age peers

Using the Dynamic AAC Goals Grid tool, you may first use the InterAACT Framework checklist on the back page for a general idea of which communication ability level the individual may initially fall. Note that these are not discrete categories; an individual may be straddling the line between two levels. This quick snapshot may provide unforeseen insight into communicative potential even if only one characteristic within a next level is marked. However, using the main AAC Goals Grid, an individual should always be evaluated from the Emergent level moving forward through the Independent level. Why? We may see that the individual has skills which fall into communication ability levels above or below what we expect. This provides us with skills on which we can capitalize for growth, or skills which might need to be our first point of focus. There may be goals within this level that, if addressed, could assist in that individual being even more communicatively independent.

COMMUNICATIVE COMPETENCIES

"The development of communicative competence is essential to express needs and wants, share information with others, and develop social closeness with family and friends" (Light, Buekleman, Reichle, 2003)*. The ability to communicate with others, an essential part of life, is not inherent. We all must learn the skills required to communicate effectively and efficiently with a variety of people and environments. For those using an AAC system, the ability to communicate is even more essential and yet the challenges to achieve communicative competence are often even greater. Competence includes having knowledge, judgment and skills across four interrelated areas: Linguistic, Operational, Social and Strategic. Skills in these four areas are directly related to conversational interactions. Therefore, we must address goals across the four competencies in order to achieve the highest level of communicative independence possible.

LINGUISTIC COMPETENCY

- The ability to learn and apply vocabulary and grammatical rules.
- Linguistic codes unique to one's AAC system
- Receptive and expressive skills in the native language of the family and broader community.
- Examples:
 - Comprehension of spoken language.
 - Understanding the symbols on the AAC system itself.
 - Ability to combine words/symbols to create phrases and sentences.

OPERATIONAL COMPETENCY

- The ability of the AAC user to operate and maintain their communication system to the greatest extent possible.
- Technical skills for accurate, efficient, and appropriate use.
- Examples:
 - Skills to produce hand shapes and movements to produce signs or gestures.
 - Skills to use a head pointer to point to items on a communication board.
 - Skills to use a single switch for row-column scanning.
 - Awareness of low battery and skills for recharging or alerting someone else to assist.

SOCIAL COMPETENCY

- Adhering to the social rules that govern interaction with others.
- Discourse strategies
- Knowledge and application of social rules relating to interpersonal dynamics.
 - When to speak, when not to, and what to talk about, with whom, where, when and in what manner
 - Knowing when an intended communication partner has time to talk

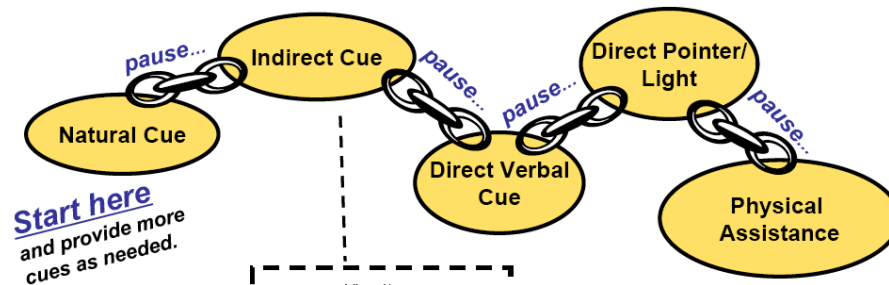
STRATEGIC COMPETENCY

- The ability to prevent or repair communication breakdowns effectively.
- Skills to overcome functional limitations of communication:
 - Speed, lack of prosody, unfamiliarity of communication partners
- Strategies to "make the best of what they do know and what they can do" (Light, 1996).
- Examples:
 - Introduction strategy for unfamiliar communication partners.
 - Communication breakdown plan ("Start Over" or "That's Not Right" strategies)
 - Rate Enhancement strategies (Telegraphic)
 - Conversational control statements ("Yeah", "uh-huh", "Wait")

**References on first page of the Dynamic AAC Goals Grid*

CHAIN OF CUES

When we are trying to teach an expressive communication skill, we often use a graduated or “least to most” prompting hierarchy to elicit the communicative response. The end goal would be such that an individual would respond with the least directive cue. Ultimately the desired outcome would be that the individual needs only the cue natural to the activity that indicates the presence of a communicative opportunity (e.g. action, facial expression, gesture, statement or question) because this is how we would typically interact in a conversation. For example, if I am eating a chocolate bar and say “Mmmm this is good!” (Natural cue) you might respond with “May I have some?” If the individual is using a “Natural Cue” the targeted goal would be met. Below is a visual for the Chain of Cues prompting hierarchy and contextual example:



PROMPTING EXAMPLE:

- Situation: AAC user enters a room, people in the room say “Hello”
- Communication opportunity targeted: Greeting others (“Hi”)
- **Goal Met (Natural Cue):** Other people saying hello
- **Indirect Cue (IC):**
 - Search light – randomly moving light/pointer over device
 - Verbal – “Did you hear what they said?” “I wonder what you can say.”
 - Visual/Gestural – shrug of shoulders, “I don’t know” hand gesture
- **Direct Verbal Cue (DVC):** “They said hello to you.” or “They were nice to say “hello” to you.”
- **Direct Pointer Cue (DPC):** Showing the location of “hi” on the device without activating it
- **Physical Assistance (PA):** Provide some means of physical assistance to activate the appropriate message on device

In the Dynamic AAC Goals Grid, this component provides additional structure to measure smaller increments of progress for each goal in each area of competency. This capability is significant because individuals using AAC may only demonstrate small amounts of progress towards a goal in a given year or review period. Without the prompting hierarchy, reporting this goal at the end of the year would show that the individual either achieved it or not. Using the prompting hierarchy allows you to show that the individual made progress from the initial assessment when they required “Physical Assistance (PA)” in order to be successful to only requiring a “Direct Verbal Cue (DVC)” at the end of the review period. This progress, although small to some, is actually a huge accomplishment toward communicative independence. In addition, if the individual is closer to the end goal (Goal Met) of natural cue, you are able to determine whether it is time to introduce (or provide exposure) him/her to the next (or new) goal. This ability is the overall “big picture” idea of The Dynamic AAC Goals Grid – being able to visualize “where I am and where I am going” as I become a more independent communicator.

UTILIZING THE AAC GOAL GRID: CASE STUDY

The intention of The Dynamic AAC Goal Grid is to help guide you in addressing more comprehensive goals for individuals using AAC that take into consideration communication ability levels across the four areas of communicative competence. In order to utilize this tool to help provide a “big picture” view, you might ask yourself the following questions:

- At which communication ability level is this individual communicating as independently as possible (Emergent, Context-Dependent, and Independent)?
- Do AAC goals for this individual’s address all four areas of competency: Linguistic, Operational, Social and Strategic?
- Is this individual communicating as independently as possible operationally, strategically, socially and linguistically?
- What type of support do they require in order to be communicatively successful as independently as possible (e.g. chain of cues)?

- What goals are appropriate to address in order to communicate more independently at the current level?
- What goals, does the individual need to work on to achieve a higher level of proficiency in a particular competency area?
- What goals does the individual need to work on in order to transition to the next level (if it is determined that this is a potential goal)?

In the most current version of The Dynamic AAC Goal Grid, goals have been reorganized or added into each area of competency and corresponding communication ability level. In addition, many goals have been revised to be more descriptive or specific. Overall it is intended to be a guide to determine possible appropriate overall or broad goals within each communicative competency. Keep in mind that you may need to have smaller, incremental goals initially in order to reach a particular goal listed on the grid. You may also determine a particular goal is not appropriate for that individual.

The Goal Grid may be utilized as a tool in more ways than one. However, we would like to provide you with an example of how you might use it to determine communication ability level and potential goals within each area of communicative competence. Please review the following profile case study.

Laura

Laura is 10 years old. She has had a DynaVox Series 4 device since she was 5 and just received her new Vmax. Laura prefers to use pre-stored messages about a variety of topics which are primarily organized in a script. She is not very good at letting her communication partner respond after she speaks the first in a series of pre-stored messages. She communicates with a variety of partners but mainly those who know her well. She has difficulty meeting or talking to new or unfamiliar people independently. She would need someone to help her initiate or maintain a conversation in this situation. She has had access to core words and keyboards for about 3 years; however, she needs prompting from her communication partner to use them. When she does, she will use key words and try to spell a few words and actually can put together longer strings of words with decent grammar when really motivated.

INTERPRETATION

Given Laura's profile, you would most likely consider her overall communicative ability level to be Context-Dependent. Laura demonstrates the following characteristics for a Context-Dependent user:

- She demonstrates an understanding of clear and simple symbols and some abstract symbols given that she utilizes core word strategies and a keyboard.
- She appears to be independent using predictable topics, but most likely would not be able to answer unexpected questions about it or add any further information about it unless assisted by the communication partner.
- She does not initiate conversation independently.
- Her ability to communicate effectively depends on the environment, topic and familiarity of the communication partner.

Even though Laura is described as a Context-Dependent communicator, your assessment within the Goal Grid should start from the Emergent level. Again, the idea is to determine if she is as independent as possible within each competency for relevant goals. By starting with the Emergent level, you can better identify where variances in competencies occur and can include goals to perhaps bring up her skill level in a specific area to align more with the others. You may identify a goal that Laura has not actually worked on in her intervention that would promote independence. You may identify that for a particular goal, she requires a direct verbal cue (chain of cues) and your goal would be to demonstrate that goal with a natural cue yielding increased independence. Let's take a closer look at her performance within each level of communicative competence. The following example is intended to be a descriptive narrative.

LINGUISTIC COMPETENCE

Laura prefers to use her scripted social stories; however, since she has access to both a core word strategy and a keyboard, we would like to help her learn to be more efficient with these language tools to use them more flexibly and strategically to supplement current scripted messages. Once she is more familiar with the vocabulary, her confidence might increase and she would feel more comfortable talking with unfamiliar people. She would also be able to continue talking in a conversation more than 1 or 2 turns and she would be prepared to offer new information when needed not scripted on her device by generating her own messages. We would continue to build vocabulary skills especially with abstract words as well as grammatical skills as appropriate for her age (e.g. phonology, morphology, syntax). At the context-dependent level she will need support from the communication partner. Tomorrow goals might include decreasing cues or prompts and introducing her to word prediction on her keyboard as well as more complex language structures in her core word pages (e.g. adjectives, adverbs, articles, and tense).

OPERATIONAL COMPETENCE

Laura is definitely at the context-dependent level for operational skills. Laura could be more independent at the context-dependent level if she is able to control some voice output settings on her device. For example, if she could change the volume, she could “whisper” in the school library and “shout” in the cafeteria. Since her linguistic goals include increasing her vocabulary and expanding messages, she will need to learn to navigate to additional pages independently. As she continues to develop her spelling skills, we could also work with a keyboard that has word prediction so that Laura could help choose which words she would like in her dictionary. Eventually, she should be able to program buttons on her own – these would be her tomorrow goals. We might expose her to this process as we enter her new vocabulary words into her dictionary.

SOCIAL COMPETENCE

Although Laura is very social, she is not independent at the context-dependent level. As her linguistic skills progress to help increase the “depth” of her communication, her social goal would focus on increasing the variety of people and situations in which she communicates. Social skills would address this aspect of the interaction. At this level, we expect that she will need some assistance with most goals, but less prompting. Since she often runs through her scripted messages, today goals would focus on the art of conversation – turn taking, initiating, maintaining, shifting and ending. Tomorrow’s goals would expose her to the more social etiquettes of conversation and further independence to have a conversation without as much support from a communication partner.

STRATEGIC COMPETENCE

As Laura continues to develop skills to have a successful interaction, she will also need to learn strategies to help the communication partner. To prevent a communication breakdown initially, she could learn to express a few messages such as “Do you have time to talk?” or “Let me tell you how to communicate with me best”. During the conversation, there may be times that her communication partner doesn’t understand her. At this level, we would first need to address Laura’s awareness of a communication breakdown (e.g. confused expression). Then we can teach her how to repair the misunderstood message with strategies such as repeating her message or saying “Let me tell you another way” or “Try to guess”. Tomorrow goals would include using these strategies spontaneously and/or increasing the choices of strategies she might use in various situations.

IN SUMMARY

Since individuals with complex communication needs fall on a broad spectrum, we need to address goals for the specific needs within their communication ability levels: Emergent, Context-Dependent or Independent. Each communication ability level has its own set of unique characteristics. Knowing the characteristics helps us to determine what tools an individual will need within their communication system to best help them communicate as independently as possible as well as determine a systematic way to develop their language and literacy skills, and identify support needed from communication partners. In addition, we must look at the constellation of linguistic, operational, social and strategic skills across individuals using AAC. How we address these areas of communicative competence will vary depending on the communication ability level of the individual. The following overarching goal must guide all others:

The AAC users’ right to be able to communicate whatever they want, whenever they want, to whomever they want. The Dynamic AAC Goals Grid is intended to be one tool to help visualize this “big picture goal” by providing a framework for assessment and intervention planning of current and future communicative strategies which will meet the majority of an individual’s interaction needs given their communication ability level.

IMPLEMENTATION TOOLKIT RESOURCE LOCATOR GUIDE FOR THE DYNAMIC AAC GOALS GRID



Many supporting and additional resources for the Dynamic AAC Goals Grid can be found on the Implementation Toolkit (www.dynavoxtech.com). Below are descriptions of recommended learning paths. On the subsequent pages, we have listed individual resources that address specific competency areas, their Learning Path sequence and/or Search box criteria. Once the criteria or learning path is selected, search for the items alphabetically.

RECOMMENDED LEARNING PATHS

Learning Paths will present information on particular topics in pieces that are manageable for time and content.

COMMUNICATION PARTNER TECHNIQUES

Communication partners and assistants play an important role in enhancing independence in communication and encouraging use of more complex language skills. The five techniques presented in these resources can be used to expand communication skills in AAC users of varying ages and communication abilities in any environment.

TRAINING PLANS FOR COMMUNICATION PARTNER TECHNIQUES

Communication partners and assistants play an important role in enhancing independence in communication and encouraging use of more complex language skills. The five techniques presented in these resources can be used to expand communication skills in AAC users of varying ages and communication abilities in any environment.

INTRODUCTION TO THE INTERAACT LANGUAGE ELEMENTS

This learning path contains print and video resources introducing the language elements in InterAACT including Quickfires, My Phrases, Common Constructions with Visual Scenes, Core Word Strategies, Vocab Lists/My Words and Keyboards.

AAC MYTHS REVEALED

Beliefs about AAC exist among families, caregivers and professionals. Some are true, others are false. Our “AAC Myths Revealed” series discusses common myths about AAC and the research that proves them to be inaccurate.

TOOLKIT RESOURCE	TOOLKIT LEARNING PATH	SEARCH CRITERIA
THE FOLLOWING RESOURCES ADDRESS STRATEGIC COMPETENCY:		
Communication Breakdown Plan	Tools for AAC users	
Communication Breakdown Plan worksheet example	Tools for AAC users	
Multiple Communication Methods Overview	Tools for AAC users	
Multiple Communication Methods - Worksheet	Tools for AAC users	
Preplanning Communication Opportunities	Tools for AAC users	
THE FOLLOWING RESOURCES ADDRESS LINGUISTIC COMPETENCY:		
All tools in “Introduction to InterAACT Language Elements” learning path		
Interacting with In-terAACT— Overview of Language Elements	Opening the Box	
All resources in “Teaching Vocabulary in InterAACT” learning path	Teaching Vocabulary in InterAACT	
Language Use for (fill in the Age range) - Instructional Video		Introducing AAC and In-structional Video
Language Structure for (fill in the age range) - Instructional Video		Introducing AAC and In-structional Video

TOOLKIT RESOURCE	TOOLKIT LEARNING PATH	SEARCH CRITERIA
THE FOLLOWING RESOURCES ADDRESS SOCIAL COMPETENCY:		
Personal Narratives resources	Personal Narratives — Telling My Stories	
Behavior Supports for Individuals with Autism	Autism and AAC	
Behavior Supports in InterAACT	AAC in the Classroom	
THE FOLLOWING RESOURCES ADDRESS OPERATIONAL COMPETENCY:		
“Operational Skills” Learning path	Operational Skills	
THE FOLLOWING RESOURCES ADDRESS FORMULATING A PLAN FOR INTERVENTION:		
Communication Partner Preparation - Selecting Activities Worksheet	Opening the Box	
Communication Partner Preparation - Activities to InterAACT - (age range)		Introducing AAC and Handout
Communication Partner Preparation - Introducing AAC into an Activity Checklist	Opening the Box	

If you have questions or comments about the Dynamic AAC Goal Grid or would like to share stories about how you have used it and its impact, please contact Holly Schneider at: holly.schneider@dynavoxtech.com.

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