

DYNAMIC AAC GOALS

Planning Guide

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An Introduction to the Dynamic AAC Goal Grid

The Dynamic AAC Goals Grid was developed after the InterAACT framework came to life. The InterAACT framework became the foundation for the communication pages for DynaVox's dynamic display devices. The framework addresses communication ability levels (Emergent, Context-Dependent, and Independent) and provides the opportunity to transition dynamically through communication ability levels as well as throughout the lifespan. From a language perspective, the InterAACT framework also addresses the power of the INTERACTION providing access to tools to support day to day, real time interactions and language and literacy development. With the visual of the InterAACT framework grid and access to a balanced set of language tools, we began to think about how we can assess and set goals to address communicative independence at any ability or skill level. How do we get beyond eat, drink and potty to focus on the INTERACTION and independence?

If independence means to be able to say *whatever we want, whenever we want, to whomever we want*, we had to take another look at Janice Light's four goals for communicative competence: Linguistic, Operational, Social, and Strategic (1988). Light proposes the following definition for communicative competence: "the quality or state of being functionally adequate in daily communication, or of having sufficient knowledge, judgment, and skill to communicate" (1989). Communicative competence does not mean *mastery* of skills. Communicative competence is NOT inherent.

If competence is not inherent, we must teach it. We wanted a way to visualize a more holistic and systematic way to look at goals addressing communicative competence. We wanted a way to visualize addressing today and tomorrow goal and to be able to show measurable progress. We wanted a way to visualize:

- Into which communicative ability level does the individual currently fall
- What goals still need to be addressed in this level to achieve more independent communication?
- What goals to we need to address in order to possibly transition to the next level?

Basically, a way to visualize: where do we start, where do we go and how do we get there!

In short, the grid attempts to outline a proposed hierarchy of linguistic, operational, strategic and social competencies for the AAC user across communication ability levels.

Components

InterAACT Framework and Strategy (DynaVox Mayer Johnson)

Communication Ability Levels (Dowden/InterAACT)

Communicative Competencies (Light)

Chain of Cues/Prompting Hierarchy (Diener/Elders)

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 (we will call this Language Structure). These communication pages 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 setting.

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 growth 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

InterAACT framework	Components
Language Use	Quickfires, My Phrases, Common Constructions
Language Structure	Keyboards, Dictionary (My Words), Core Word Strategy (Gateway)
Age Ranges (Users)	Young Child, Child, Teen, Young Adult, Adult
Communication Ability Levels (Page Sets)	Emergent, Context-Dependent, Independent

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 were currently using to communicate.

In the 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.

An individual should always be evaluated from the Emergent level moving forward through the Independent level. Knowing where the individual is communicating as independently as possible helps to determine your starting point. How can we build the skills needed at the current

communication level to achieve independence? I need to know what level at which I am communicating most independently and be successful at this level in all areas of communicative competence before transitioning to the next level.

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 powerful 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. We must have an interaction to learn language. 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

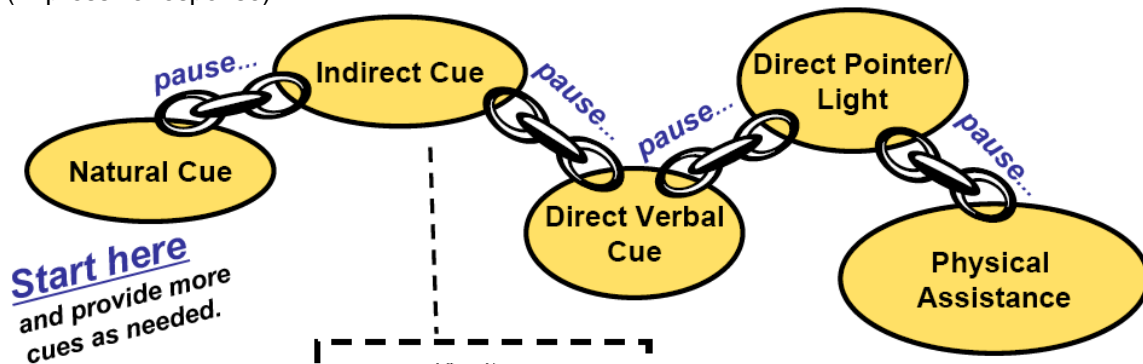
Strategic Competency

- 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*”)

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 or a natural cue 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 = comment) you might respond with “May I have some?” (Expressive response).



We recently added this element to the AAC Goal Grid in order to provide additional structure to measure progress for each goal in each area of competency. For example, if the Operational goal is “Bringing the device consistently to the activity”, you are able to record if the individual can do this successfully with only a natural cue versus requiring physical assistance. In addition, if the individual is closer to the end goal of natural cue, you might determine whether it is time to introduce (provide exposure) him/her to the next goal. Again, the overall idea of the grid is a way to visualize “where I am at and where I am going” as I become a more independent communicator.

Utilizing the AAC Goal Grid Case Study

The InterAACT framework provides characteristics of an individual’s communicative ability level (Emergent, Context-Dependent, or Independent). The intention of the Dynamic AAC Goal Grid is to help you determine whether this individual is communicatively competent at a given communication ability level across the four areas of communicative competence. You might ask yourself these questions: Is this individual communicating as independently as possible operationally, strategically, socially and linguistically? What type of support do they require within each area (e.g. chain of cues)? Do we expect him/her to always be at this specific communication ability level? What goals are appropriate to address in order to communicate more independently at this level? What goals, does he/she need to work on to achieve a higher level of competence in

a particular area? What goals does he/she need to work on in order to transition to the next level (if it is determined that this is a potential goal)?

In its present stage, the Dynamic AAC Goal Grid is a guide to determine possible overall or broad goals within each communicative competency. You may need to have smaller 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. For example, given physical challenges, it may not be possible to plug in the device to charge independently. However, consider that directing someone to charge the device when the battery is low is just as powerful as doing it oneself.

We feel that 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 so we have included the following profile case study.

Laura

Laura is 10 years old. She has had a 3100 DynaVox 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. 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 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, 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 the interaction. At this level, the expectation is 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.

Intervention Planning Part One: Schedules

The ultimate purpose in completing intervention planning is to provide a framework of communication strategies which will meet the majority of a person's interaction needs. It is a formidable task to consider all the potential communication demands a person will face during their week. In order to break down the task into manageable parts, we will assist the user in documenting their typical day, analyze the significant communication characteristics of the activities and prioritize their communication needs.

Task One: **Determine the type of day you are analyzing**

In order to get a comprehensive view of the AAC users communication opportunities we will look at a typical day, frequent special events and infrequent important events. Events which occur during a **typical day** are going to be most important due to their frequency. These are daily events such as getting out of bed, getting ready for the day, breakfast, riding the bus to school/work, completing work baskets etc. Effective communication during these daily activities is imperative. Routine daily events are not, typically the most motivating and exciting events for the AAC user. **Complete the first schedule grid in your packet using the guidelines below.**

More motivating events are those which are infrequent enough to be significant to the AAC user. **Frequent special events** are those events which occur less than once a week but are significant to the AAC user. Examples of frequent special events include community based intervention (field) trips, weekly trips to grandparents' home, church attendance, baseball practice etc. **Complete the second, smaller schedule grid in your packet using the guidelines below.**

Infrequent important events are those that are highly significant to the AAC user but which occur only occasionally. Examples of these include visits from favorite out-of-town family members, vacations, local festivals etc. **Complete the third, smaller schedule grid in your packet using the guidelines below.** (Goosens, Crain & Elder)

Task Two: **List the events of the day in chronological order in the first column.**

Interview significant informants to determine the specifics of the AAC user's day. Significant informants can include the AAC user, family members, care/respite care providers, teachers and friends. Consider enough detail to understand the context of the interaction. For example, morning routine may be documented as:

- Wake up
- Use the bathroom
- Wash face
- Get dressed

It is not necessary to break down each activity into minute details such as, "open cabinet," "get washcloth," "turn on water," "wet washcloth" etc. A good interview does offer the informant the opportunity to describe the activity in enough detail to provide the evaluator with a sense of the necessary vocabulary, the communication opportunities and any difficulties that currently exist.

Task Three: Note the partners involved and the environments in which the activity occurs. List these in the second column beside the activity.

For each activity document the significant partners and environment in which the activity occurs. Significant partners include the people with whom the AAC user is interacting, or potentially could interact with. Partners in the regular education classroom could include the teacher, the paraprofessional and the AAC user's peers. Partners during dressing might include a parent or assistant.

The environment is simply the location of the activity, for example, using the bathroom occurs in the bathroom, getting dressed occurs in the bedroom.

Task Four: Consider the significance of the activity in order to assist in later prioritization. Check off columns 4-7 that reflect the significance of the activity.

- **Individual education plan/individual family service plan goals** tend to illuminate areas of need that the team has recognized as significant. Activities that, when fluently accomplished, increase a person's independence are highly significant events which should be considered.
- **Motivating activities** are those during which the AAC user will be most engaged and focused. These provide very effective activities in which to teach challenging & unfamiliar AAC skills.
- **Frustrating activities** often demand the most skillful communication techniques. Fast, effective communication is imperative which allows the AAC user control of difficult, scary or uncomfortable situations. Effective communication can dramatically reduce the prevalence of inappropriate, dangerous and disruptive behaviors that often occur during these times.
- **Socially significant** activities are those during which the AAC user has the opportunity to engage and connect with important people in their lives. For families, this is one of the most essential requirements of a communication system. (Beukelman & Mirenda, 1992). Socially significant activities include those that allow positive engagement with family, peers and other people significant in the AAC user's life.

Task Five: Document the current communication techniques employed by the AAC user during the activity.

How does the AAC user currently interact during this activity? Remember to look for behavioral communication such as crying, screaming, pointing, and smiling. Other techniques the AAC user may employ include:

- Intelligible speech
- Unintelligible speech attempts/vocalizations
- Written communication
- Sign language
- Pointing to boards
- Activating device
- Auditory scanning (live voice)
- Gestures (pointing, body language, eye gaze)

(Beukelman & Mirenda. 1992)

Task Six: Prioritize the activities in order of most critical need for communication intervention.

Consider each activity compared to the others and determine your priority activities in numerical order. You can use a simple 1, 2, 3... numbering system. In order to decide on priority items, you compare individual activities with each other and determine relative importance.

Example: Selecting Priority One: Activity One= getting dressed, Activity Two= breakfast; Breakfast is more significant so discard "getting dressed" for now and compare "breakfast" to Activity Three= watching TV. and waiting for the bus. "Breakfast" is still more significant, so discard "watching TV." for now and compare "breakfast" to Activity Four...and so on. When you get to the end of your list, the activity you have not eliminated becomes Priority #1. Then start the process over again at the top of the list. Although this seems tedious, it actually is accomplished quite quickly and gives you a basic order of importance.

Factors to Consider in Determining Critical Communication Need:

Does this activity meet the following criteria?

- Individual education plan/individual family service plan goals
- Motivating activities
- Frustrating activities
- Socially significant
- Frequently occurring activity (daily activity)
- Increase positive responses from partners

Does the activity meet the following communicative objectives (identified by Janice Light, 1988)?

- Expression of needs & wants
- Sharing information
- Social closeness
- Social etiquette routines

Intervention Planning Part Four: Communication Targets

Establishing appropriate communication targets is the culmination of considering the context of communication for an AAC user and their individual skills. Goal selection is influenced by the priority times of day, noted on the individual's daily schedule and the distribution of skills on the goals grid. We need to consider horizontal growth across all of the goal grid competencies and, vertical growth into increasing independence.

Task One:

Using the information gained on the daily schedule, select 1-3 times of day that are a priority. Using the Goals Grid, determine competencies that need to be addressed and targets to increase independence. Goals should be attainable, measurable and relevant.

As a team, determine the goals to be addressed and write in the first column of the Targets sheet. Determine which of the communicative competencies are being addressed. The competencies are listed

as a reminder to consider developing horizontal growth at a user's individual level of communication independence.

Task Two:

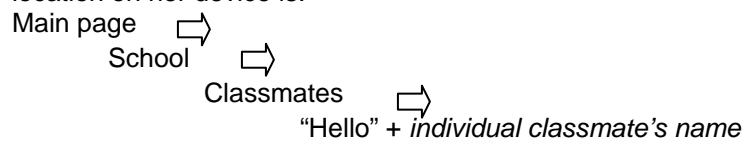
Determine the vocabulary necessary to address the goal and complete in the vocabulary column. Consider vocabulary for a variety of functions: requesting, commenting, responding etc.

Task Three:

Check off the communicative competency being addressed: linguistic, operational, social or strategic. Some goals may address more than one competency. This chart is provided to help remind the team to look across all competencies during goal development. An individual user may not need a goal in each area.

Task Four:

Map the location, on the SGD, of the vocabulary needed to address the goal. For example, the goal states, "Sarah will greet 3 of her classmates using her SGD independently for 3 consecutive days." The location on her device is:



This is a very important step of planning. It ensures that all partners know the exact location of the targeted vocabulary. Increasing partner comfort with the device is vital in the consistent presentation of the device and expectation for communication. Partner ease in locating vocabulary is imperative.

Task Five:

Determine the person who will facilitate the interaction. For example, for the above goal, the facilitator may be the user's teacher or paraprofessional. The facilitator is determined in order to clearly state the responsible party. It is helpful to have more than one team member responsible for the selected goals. This allows the entire team to focus on the user's communication in a manageable manner.

Intervention Planning Part Five: Custom Vocabulary

Although many speech generating devices ship with extensive, well organized vocabulary, it is crucial that the user have motivating individualized vocabulary added to these pages to personalize their device. In order to accomplish collecting individual vocabulary lists, the Custom Vocabulary worksheet is given to the AAC user's family, teachers and friends. These knowledgeable partners are asked to list vocabulary they deem important to the user in the categories listed.

The custom vocabulary is then programmed into the available page sets. In the more advanced communication devices, pages often already exist, in which to place the vocabulary. For example, the device ships with a preprogrammed "food page." It is not necessary to create a new "food page." Custom vocabulary would simply be added to available buttons on the existing food page or replaces irrelevant symbols currently on the preprogrammed page.

Custom vocabulary is valuable for motivating AAC users to access their device. Consider increasing the appeal of these symbols by using digital images as appropriate, in particular for familiar people, restaurants, stores and characters.