



Gateway for Snap

USER MANUAL

Child Functional Page Set

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2020© Communication Technology Resources

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Gateway© Child Functional Page Set

Overview

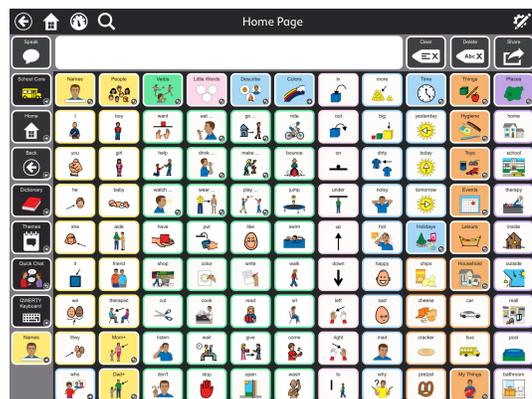
The Child Functional Page Set was designed for children who can benefit from a functionally based, high frequency core vocabulary to communicate their needs and wants and to actively participate in their educational program. Each grid size (e.g., 3*3, 4*5, 9*11) includes a set of core words combined with fringe vocabulary focusing on sensory-based actions and objects, commonly used reinforcers, as well as vocabulary to address basic needs and classroom activities. Pages can easily be customized if the Gateway vocabulary does not match the user’s needs, interests and/or abilities.

A *My Things* folder is available on all but the 3*3 grid size. This is an open page for each user to add their most frequently used “things”. As such, the “My Things” folder provides the user easy access to his or her preferred items. Accompanying theme pages can be used within the home and school environments to support educational goals and pragmatic language development activities.

There are seven (7) grid sizes within the Child Functional Page Set ranging from simplex to complex arrangements. Each grid size offers a HOME Core and a SCHOOL Core that share the same high frequency core words but offer different fringe vocabulary optimally suited to each communicative environment. The Child Functional Page Set includes the grid formats listed below

- 3*3 (9 vocabulary buttons);
- 4*5 (20 vocabulary buttons);
- 5*6 (30 vocabulary buttons);
- 5*8 (40 vocabulary buttons);
- 6*10 (60 vocabulary buttons);
- 8*10 (80 vocabulary buttons);
- 9*11 (99 vocabulary buttons);

This extensive number of grid sizes offers parents and practitioners a range of options to meet a wide range of skills. The 3*3, 4*5, 5*6 and 5*8 grid sizes can be selected for those who benefit from a small core vocabulary and larger button size. If indicated, these children can systematically and seamlessly move to more advanced level as language and or physical abilities progress. Alternatively, the 6*10 – 9*11 grid sizes target users who may benefit from a large static core from which one can rehearse consistent motor patterns to become proficient in use within a functional context. If needed, buttons can be hidden to initially create a simplified symbol array. New words can be revealed as the user is ready to handle more vocabulary.



Vocabulary Organization and Features

- Toolbar with a Dictionary
- HOME and SCHOOL Core
- Fitzgerald Key Arrangement
- Sentence Development Strips
- Semantic Power Strips
- Theme Pages

Toolbar with a Dictionary

All grid sizes within the Child Functional Page Set have a *Toolbar*, positioned on the left side of the HOME page and other key pages such as Themes and Dictionary. The items contained in the toolbar can easily be differentiated from the core vocabulary and are accessible from any vocabulary page. Using the *Hide* feature of Snap, these buttons can be hidden if they are deemed inappropriate for the user.

The contents of the Toolbar varies with the selected grid size. As the grid size becomes more complex and more buttons are available, additional folders and functions are available.

A Dictionary icon links to folders that are not represented on the HOME or SCHOOL core. It enables a user to efficiently access fringe vocabulary without needing to navigate through many pages. The number of folders in the dictionary varies with the number of buttons in the grid size. A keyboard with access to word prediction is available for grid sizes 5*6 and higher.



HOME and SCHOOL Core

The HOME page contains a set of research-based high frequently core vocabulary with each word accessed using a single key selection. It also contains folders linking to categories such as QUESTIONS, NAMES, PEOPLE, VERBS, LITTLE WORDS, DESCRIBE, THINGS, PLACES, and other categories such as EVENTS, HYGIENE, etc. Users may configure the Snap settings to activate its grammar function to access a range of morphological endings.

Each grid size also contains a SCHOOL Core that can be accessed by selecting the *school bus icon* from the Toolbar. The SCHOOL Core replicates contents of the HOME page for essential core vocabulary and grammatical category folders. The fringe vocabulary changes to reflect words or topics needed for use within the school setting. This strategy enables users to access topical school vocabulary without losing access to the core vocabulary of Gateway's HOME page.

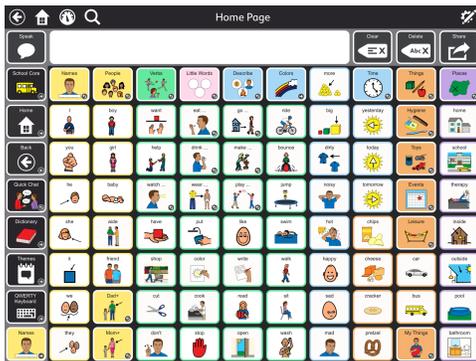
Knowing that many children with ASD often request foods, sensory objects, and actions such as jumping, bouncing, etc., these words have been included as space permitted throughout the various grid sizes on both the Home page and the School Core. Below is an example of the HOME and SCHOOL Core for the 8*10 grid size.

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Fitzgerald Key Arrangement

Each word and word category are color-coded according to the Fitzgerald Key format. As seen in the images above, People are yellow; Verbs – green; Little Words – pink, Descriptive Words – blue; Things – orange and Places – purple. Folders are solid colored and buttons have a colored border. This color-coding is consistent throughout all of the Gateway pages and helps ease the transition for a child moving from one grid size to a more advanced level of complexity. Within the Fitzgerald Key, “Little Words” are defined as prepositions, articles and conjunctions and “Descriptive Words” includes adjective, adverbs, and time words.

Sentence Development Link

All grid sizes include a Gateway© feature referred to as *Sentence Development Links* for the words, eat, drink, go, make, watch and wear. The purpose of these links is to help teach children to form multi-word sentences and to provide easy access to

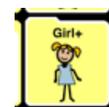
vocabulary logically associated with the verb. These verbs were selected since they are often the first verbs used by children when they are learning to request.

Sentence Development Links are used to provide a simplified approach to facilitate sentence formation. They are designated on the Home page using an ellipsis (i.e., ...). Selecting a *verb* results in automatically opening a page of associated objects or “things” that the child can use to complete a message. For example, after selecting “eat...”, a page with common foods is automatically opened.



Semantic Power Strips

Some grid sizes (e.g. 5*8; 8*10, etc.) use a Gateway© feature referred to as a *Semantic Power Strip*. *Semantic Power Strips* are sets of paradigmatically associated words, that enable a user to access related vocabulary without scrolling



through pages or popup screens. They are



represented by a “solid colored button with a +” following a word. *Semantic Power Strips* are used for words such as *girl+*, *boy+*, and for some *verbs*. For example, selecting “*girl+*” will open a semantic power strip containing – girl, mom, grandma, aunt, sister, etc. The number of related words varies with the grid configuration. That is, a 5*8 power strip may have fewer vocabulary options presented than an 8*10 power strip, as there are few buttons on the page.

Themes

All of the Child Functional grid sizes include a set of *Theme* pages to support pragmatic language development and functional device use within educational, leisure and community-based activities. An example is pictured to the right.

The *Themes* folder for this arrangement links to *topical pages including About You & Me, Comments, Questions, Time to Learn, Time to Play, and Time in Town*. The *About Me & You* page must be personalized for the child. It provides a means for a child to provide personal information. The *Questions* page provides some general questions and should be customized to enable the child to ask appropriate questions on an on-going basis. The *Comments* can help a child develop pragmatic skills as they learn to use language in a variety of communicative contexts.



The *Time to Learn* folder provides monthly theme pages, and blank pages that

can be customized for subjects used in the school environment. Several of these subject folders link to the SCHOOL Core so the topical vocabulary can also be accessed when the child may be expected to respond using more than a single word answer. The *Time to Learn* folder also provides access to the Common Core, Circle or Morning Meeting, as well as folders to support academic subjects.

The Time to Play folder contains activity folders and several blank pages. Depending on the grid size there may be a set of pages with activities such as *Play Cards*, *Baking* and a *Phone Call*. The *Time in Town* folder has pages that can be used within the community. Each of these requires some customization so they are most meaningful for the child to use within functional activities. Pages include topics such as: *At the Mall*, *McDonald's*, *Ice Cream*, *Vacation*, *Amusement Park* and *in the Park*. The *Scouts and Religion* pages are open for customization and there are an additional blank pages to support the personal activities of the user.

Why Gateway©

- Ease of Learning
- Organization and Contents Supports A Range of Intervention Approaches
- Vocabulary Placement Supports Learning through Motor Planning Principles
- Efficient Organization Results in Minimal Keystrokes Per Word

Ease of Learning

Children with ASD generally have language, communication, social, and cognitive impairments. As such, children with ASD often learn better through the use of visual aids, imitation and structured environments that accommodate their sensory needs and routines.

Gateway is easy to use. The cognitive demands associated with learning symbol meanings are minimized by the use of single-meaning icons and/or written words to represent vocabulary. For nouns and many other word classes, the selected symbols provide a transparent or intuitive means of representing vocabulary. Symbols for verbs, adjectives and adverbs are less transparent and may require instruction if they are to be understood by an individual who either is young or who demonstrates perceptual and/or cognitive limitations. Words can be replaced by text for literate users.

Organization and Contents Supports A Range of Intervention Approaches

There are a wide range of intervention approaches that can be used to teach communication skills to children with ASD. Some of these approaches include PECS, ABA, and LAMP. The Child Functional Page Set of Gateway has been organized to accommodate many of these approaches. Children who are transitioning from PECS to a voice output device could easily transition to Gateway. The Sentence Development Strips offer beginning users a simple way to make requests without requiring extensive navigation. Use of the "My Things" page can enable users to select items from a consistent location. Use of the Fitzgerald Key presents a categorical approach to access needed vocabulary.

Individuals who are communicating beyond requesting can benefit from a the high frequency HOME and School core pages. They can also benefit from the activity based pages for School, Leisure and Community as a tool for integrating device use into a functional setting and working to improve their pragmatic performance.

Vocabulary Placement Supports Learning through Motor Planning Principles

Individuals learning to communicate through the LAMP (Language Acquisition through Motor Planning) can also find the Gateway 8*10 through 9 * 11 grid sizes of benefit. These arrangements not only offer high frequency core words, but high frequency fringe vocabulary is included. This can aid in increasing the specificity of a users output. The Home Core and School Core include many words needed for routine everyday conversation.

How was the Vocabulary Selected?

- Frequency of Use
- Syntactical Development
- Promote Language During Leisure Activities
- Educational Goals

Frequency of Use

The vocabulary selected for use within each of the Gateway® page sets are based upon research and by analyzing the vocabulary used by young children with AAC systems, school programs for students with ASD, and within preschool classrooms (Beukelman, Jones, & Rowan, 1989; Bruno, 1989; Carlson, 1981; Raban, 1988). All Gateway® page sets contain a “core” of words such as eat, drink, go, want, and have. No matter what phase an individual is within their language development, these words are a part of one's core vocabulary. Books from a first grade curriculum were reviewed to analyze the vocabulary contents and enhance device use in literacy activities. Frequently occurring words were included as a part of this core vocabulary.

Some words may be important at one phase of an individual's life and not at another. For example, bubbles may be important to young children. A razor may be important to an adolescent or adult. Vocabulary selected for the Child Functional Level is intended to meet the needs and interests of young children with ASD.

Syntactical Development

It is recognized that many users of the Child Functional Page Set are not at an advanced level of syntactic development. For most children, this would not be an immediate goal. However, for those users who do have goals for syntactical development, the Snap *grammar support* can be turned on. Refer to the Snap User Manual for detailed information about this feature.

Promote Language During Leisure Activities

Children learn and develop language when they have opportunities to communicate in meaningful and functional activities. Social vocabulary and topic

pages have been designed to facilitate device use during recreational activities. Pages have been designed for typical leisure activities like cards and Bingo. This vocabulary can be found in the *Themes* folder.

Educational Goals

It is expected that the individuals who use the Child Functional Level of Gateway[®] are school-aged children or perhaps early teens. To enhance classroom participation all grid sizes within this level of Gateway contain requisite vocabulary for Morning Meeting and links to pages where targeted academic vocabulary can be added. The academic pages have also been designed to interface with the School Core page so that a user can respond using single words or multi-word messages.

Customization

Domains to Customize

- Understanding Functions and Features of Snap
- Understanding Gateway's Features
- Personal Information, Needs and Interests
- Educational and Social Information

Understanding the Functions and Features of Snap

Gateway was designed using the Snap App and as such, all customization is accomplished using the Snap procedures as described in the Snap User Manual and tutorials. Personalization or customization of Gateway[®] requires that the person assigned with this responsibility demonstrates a basic level of competency with Snap editing and operational functions. That is, a person needs to know how to edit a button. Minimally editing a button can involve changing the label, the symbol, or the text to be spoken.

Gateway's Functions and Features

The Gateway Vocabulary features such as *Sentence Development Links*, and *Semantic Power Strips*, were created using the programming features of Snap. The Sentence Development links are explained above and these do not require any special considerations when customizing.

Gateway uses Semantic Power Strips as a tool to provide the user access to semantically related words. After selecting a word from the semantic power strip, the popup automatically closes. This is done as a keystroke saving minimizing the need for a user to close the page after each word.

Personal Information, Needs and Interests

To customize Gateway for Snap the facilitator needs to consider personal user information (e.g. name, address, birthday, etc.) along with the needs and interests of the user. Changes considered appropriate need to be made within Gateway. The process of customizing Gateway requires knowledge of the vocabulary within

Gateway, the color-coding system used within Gateway, and the fundamental categorization of the vocabulary.

Often children with ASD are challenged when then need to provide basic information about themselves including their name, address, parent's phone number. They also lack the skills to share personal information about themselves and to engage a communication partner in a similar conversation. The *About Me & You* page offers children a way to address this need.

Unless Gateway's vocabulary matches the needs, wants, interests and "personality" of the user, it is unlikely that the user will maximize use of the program. A second step in customizing Gateway is to customize key vocabulary items and expressions. For example, the *Foods* page contains an assortment of foods and beverages considered representative of the typical foods people eat. This may or may not match the preferences of the individual using Gateway. Changes should be made to this page as needed to allow the user to communicate effectively. Family and user input should be considered in determining what changes, if any, are needed. Other pages such as *Things and Places* will require customization.

Educational and Social Information

In order to help an individual meet his or her educational goals, it is imperative that the child be able to express the vocabulary targeted for the range of spoken and written educational tasks associated with targeted core curriculum competencies. While it is recognized that Gateway does not contain all of the educational vocabulary needed by each user of this program, it is believed that Gateway does create a framework to enable a child to meet most educational competencies. Individuals working with a Gateway user (i.e., the teachers, therapist, aides) must take an active role in adding appropriate vocabulary to this program as needed. This requires that these individuals become familiar with the contents of Gateway. It also requires that they know what vocabulary is needed to complete daily lessons. Vocabulary that is needed, and that is *not* currently stored within the Gateway vocabulary, should be added if and when determined necessary by the child's team.

Implementation

- Where Do We Begin?
- Teaching Language Through Use of the Single Word Vocabulary:
- Therapist's Role and Responsibilities
- Evaluating the AAC User's Abilities
- Learning to Communicate with Gateway
 - Aided Language Stimulation as in Intervention Strategy
 - Expansion as in Intervention Strategy
 - Teaching Vocabulary Contents and Location.
 - Highlight the Organizational Structure.
 - Writing
 - Learning Gateway Through Traditional Language Intervention.
 - Communicating Through the Academic Pages
 - Using the Recreational Pages

Where Do We Begin?

The specific approach used to implement Gateway will vary with the needs and language abilities of the user. Gateway should be introduced to the user in a variety of functional contexts. Successful implementation requires a commitment on the part of the individuals working with the user (i.e., the facilitator, teacher, SLP, parents) to become familiar with Gateway's vocabulary contents and the location of these words. It also requires a commitment to personalize the page set to match the needs, interests and abilities of the user.

Teaching Language Through Use of the Single Word Vocabulary:

Each Gateway grid size contains a core of high frequency words and fringe vocabulary. Learning the contents and location of this core vocabulary is a first step in helping someone become a competent communicator. Variables such as cognitive/language abilities, behavior, attention, motivation and frequency of use of Gateway will all impact a user's ability to gain proficiency using Gateway to communicate. The key to helping a child become a successful communicator when using Gateway is to provide effective and appropriate language intervention. That is, if a child is communicating using single words, that child needs to have guided intervention to systematically learn to combine words to form more complex messages. The environment needs to be engineered to promote device use and strategically target various language forms.

Teaching language to an AAC user is not radically different from teaching language to a child who speaks. The major difference is that for an AAC user, the medium for expression is an AAC device as opposed to speech. This being the case - (1) the therapist must be knowledgeable of the vocabulary contents and location of words contained in the system, (2) the child must learn the contents and location of available vocabulary, and (3) words targeted for intervention activities or daily activities must be available within the communication device or the AAC user cannot express them.

With that in mind, the procedure for teaching language to an AAC user requires that the therapist: (a) evaluate the user's abilities; (b) define appropriate long and short term language intervention goals and (c) establish effective intervention activities to enable the AAC user to achieve the goals.

Therapist's Role and Responsibilities

Prior to initiating intervention with the child, the therapist must first become familiar with program's vocabulary. The therapist must know what words are included in the Gateway Vocabulary and how to access these words. Unless a therapist is competent in communicating with the child's vocabulary set, the therapist can neither develop appropriate therapy activities nor serve as a model in demonstrating or expanding the child's utterances.

Modeling, or aided language stimulation (ALS), is an appropriate and effective language intervention technique that a therapist can use when working with an AAC user. This technique can be used to teach the Gateway core word vocabulary. Using this technique, a communication partner interacts with the AAC user using the user's

AAC system. Use of aided language stimulation requires the partner to know the contents and location of the Gateway Vocabulary. The partner can model a simple sentence (e.g., I like candy.) or follow the statement with a question (e.g., I went to grandma's yesterday. Where did you go?).

Learning the vocabulary of each of the Gateway Page Sets and/or grid sizes can be best accomplished by personally using the device to create sentences. If your student is going to be using the 4*6 or 6*11 arrangement, go try reading a simple children's book using. This Functional activity will help provide a therapist with a working knowledge of the program's vocabulary. Books at this level contain words across all grammatical categories. The activity will teach the therapist how to navigate the system using words and word endings. It will also create an awareness of what words are *not* stored in the program.

Evaluating the AAC User's Abilities

While one may have a sense of a user's abilities and limitations, it is often helpful to formally assess a child's skills to set appropriate goals and to measure or document progress. This is often a challenge for child with ASD, who often are challenged by structured tasks. Efforts should be made to do this formally through available assessment tools or informally by observing the child's performance with non AAC apps. Two of the most important areas to assess, however, are field size and symbol number. It is in the child's best interest that the selected grid size have as many symbols that the child can handle. The more symbols on a grid, the less need to navigate to other pages and the more spontaneous communication may occur.

For some children larger symbols can help them in terms of visually recognizing the image. If this is the situation, a smaller grid size should be selected. If a child can handle a small image but a limited array, it may be optimal to select a grid size with many symbols, but to hide symbols reducing the complexity of the display. Once a child is familiar with an array, systematically exposing additional symbols should be a goal.

Learning to Communicate with Gateway

The general strategies used to teach Gateway are straightforward. The primary goals must be to insure that the user learns the vocabulary contents and organizational structure of Gateway. Once specific language intervention goals are identified, functional activities can be designed and implemented.

For an individual who has functionally used a communication board or other AAC App with a significant number of single words prior to receiving Gateway, introduction to this program should flow as a logical extension of his or her use of the manual board or App and to the teaching strategies already in place. That is, the individual will need to be oriented to where vocabulary is located, and what vocabulary is available, but it would be expected that the individual's performance with the Gateway program should eventually mirror or exceed his or her performance with his/her other system. As the individual learns more vocabulary, and is exposed to

advanced language features, it would be expected that the individual's language performance would improve. Strategies that have been used successfully to teach language should be continued.

Aided Language Stimulation As An Intervention Strategy. For a child who has not previously used a single word vocabulary system, an effective clinical intervention strategy is the use of aided language stimulation or modeling. In modeling system usage, the facilitator (e.g., parent, aide, teacher, therapist) takes a lead role in using the device to talk with the child. Using this approach the child is indirectly guided through the system. The child sees where specific vocabulary is stored, and what page links must be accessed to select targeted vocabulary. The child may also be exposed to a range of grammatical morphemes such as possessives or contractions that can be used in expressing different word forms (e.g., questions, statements, imperatives).

Aided Language Stimulation can serve an additional purpose for both the child using the system and the adults working and or interacting with him. It reveals what vocabulary *is* and *is not* available within the page set. It serves as an indirect approach to determining what vocabulary needs to be added or deleted to personalize and optimize the system for the user. Modeling demonstrates that the spelling and word prediction feature may be accessed to express words not in this vocabulary program. It can show a child how to select a word using word prediction.

Children typically find dynamic display systems easy to navigate. Page links lead the child to explore new vocabulary. Modeling lets the facilitator assume the role of "Tour Director". The facilitator shows the child which "locations" to visit and does so in the appropriate communicative context. Modeling may also serve to demonstrate new and more complex ways for the child to use language.

Expansion As An Intervention Strategy. Expansion is another strategy that can be used to improve a child's expressive language performance. The facilitator can use the vocabulary within Gateway to expand the complexity of the child's messages. For example, if the child says, "I want cookie." The facilitator can offer feedback, clear the display and model the expanded message, "I want big cookie." Expansion involves adding or expanding the message that the child originally generated. The goal of expansion is to help the child learn to create more complex messages than he or she is currently using.

Children considered to be candidates for this Gateway page set likely exhibit a language impairment. They may understand language, but they may not know how to form sentences or even what to say. Language intervention strategies and approaches typically used with speaking children who exhibit similar limitations, can be modified and implemented with children using Gateway.

Teaching Vocabulary Contents and Location. Teaching contents and location can be accomplished through focused intervention as well as through games and recreational activities. If the user does not know what words are available to him/her to create a message, unless the user can spell, he will not be able to formulate messages to express needs, wants, or ideas. Some strategies that can be used to teach the single word vocabulary include: (a) highlighting the organizational structure,

(b) using Gateway to “talk”, (c) creating opportunities to learn new words, (d) reading, (e) writing and (f) traditional language intervention

Highlight the Organizational Structure. Regardless of which Gateway grid size (e.g., 3*3, 4*5, 6*10, 8*10, 9*11) is selected for the user, to the degree possible, the augmented communicator should be systematically introduced to the MAIN page, which is the core of the single word vocabulary. Each of the color-coded word categories should be pointed out along with its corresponding color-coded page link. It is felt that the color-coding may help some augmented users learn to locate words more quickly.

Writing. Writing is also an excellent way to help a child master the Gateway core and also to build expressive language abilities. Writing activities can be as simple as having the child complete a fill in the blank activity, or it can be as complex as having a child write a sentence. Most importantly, the writing activity should match the child’s expressive language abilities.

Learning Gateway Through Traditional Language Intervention. For younger children, playing with a doll house can not only teach the names of family members and places within the house, it can be a wonderful activity for teaching a child to form two-word messages describing what they did with a doll or what they want you to do. Sentences such as “wash-baby”, “go-eat”; play-upstairs can be created using the Gateway program. A functional language activity helps to teach a child what vocabulary is in the device and where it is located, and it help teach the child language form as well as the power of communication.

The Gateway core contains many of the frequently used words of our language. As such, for somewhat older children many games and therapy materials can be used with only minimal modifications. Some materials may require more modifications than others. Two good examples of therapy materials that require little modifications are *Just for Me!* (Concepts) and “*SPARC for Grammar*” produced by LinguiSystems. Some commonly used games and therapy activities include: Chutes and Ladders; Jeopardy, Outburst, Jr., Secret Square; 1st grade level reading books, the Clifford book series, or single line storybooks. When an “off the shelf” game or activity contains words of little interactive value to the AAC user (e.g., kite, mouse, umbrella), it is suggested that the activity be modified rather than changing the vocabulary of the Gateway program to accommodate the program unless changing that vocabulary will ultimately increase device use long term.

There are many ways to teach Gateway. How it is taught can, and should, vary with the needs and abilities of the user. The suggestions provided here are just that, suggestions. The user’s speech language pathologist is key in the implementation process. A therapist or communication partner should communicate to the child while using Gateway, creating messages with the words of the Gateway program.

Communicating Through the Academic Pages. Enabling a child to master the core curriculum standards is a challenge for those using AAC devices. It is impossible to include all needed educational vocabulary in any page set. Even if the space was available to do so, recalling the location of the needed vocabulary would be extremely

difficult to achieve based the fast pace of a regular classroom setting. There are open pages tied to subject folders. These can be customized as needed.

For some simple areas such as Morning Meeting (e.g., Circle Time) the typically used vocabulary has been included in each of the page sets. That is, a child can describe the weather, and tell the day, week, or month.

Using the Recreational Pages. There is no question about the fact that children enjoy play activities. Children can and do learn through play. Within Gateway there are a variety of pages designed included to help children develop their language skills during play. Typically, a child would need help from their communication partner to access appropriate messages while playing the game.

Summary

Gateway is a powerful core word page set complemented with rich pragmatic pages. Since 1998, Gateway has helped many young children to become competent communicators and to achieve academic success. It has enabled competent communicator to efficiently and effectively meet their daily communication needs across environments. Success in using Gateway is highly correlated with how its user is supported in learning the contents of the page set and in having access to his or her device when appropriate.

The Child Functional Page Set is a tool that children with ASD can use to communicate at home, in school and within the community. It presents a sound clinical structure and organization. High frequency core and fringe vocabulary are included on each grid size, potentially saving parents, teachers and speech therapist hours of time spent on customization tasks. It must be recognized that each child is different so personalization of the vocabulary is critical to the child's ultimate success in using Gateway.

References

- Beukelman, D., Jones, R and Rowan, M. (1989). Frequency of word usage by nondisabled peers in an integrated preschool classroom. *AAC Journal*, 5, 243-248.
- Blackstone, S. (1993). Thinking a little harder about communication displays. *ACN* 6:1,1-3.
- Bruno, J. & Trembath. D. (2006). The use of aided language stimulation to improve syntactic performance during a weeklong intervention program. *AAC Journal* 22, 4, 300 -313
- Bruno, J. (1989). Customizing a Minspeak system for a preliterate child: A case example. *AAC Journal*. 5, 89-100.
- Bruno, J. (1994), Designing a vocabulary for a dynamic display system: A case example. In *Proceedings of the Sixth Biennial Conference of the ISAAC*, (p 455-457). Maastricht, The Netherlands
- Bruno, J. (1997) *Gateway to Language and Learning*. Pittsburgh, Pa. DynaVox Systems, Inc.
- Carlson, F. (1981). A format for selecting vocabulary for the nonspeaking child. *Language-Speech and Hearing in the Schools*. 12, 240-245.

- Fitzgerald, E. (1954). *Straight Language for the Deaf*. Washington, D.C.: Volta Bureau.
- Harris, M & Reichle, J. (2004) The impact of aided-language stimulation on symbol comprehension and production in children with moderate cognitive disabilities. *AJSLP*, 13, 155-167.
- Locke, J. (1995) Development of the capacity for spoken language. In P. Fletcher and B. MacWhinney (Eds.) *Handbook of Child Language* (Pp. 278-302). London: Blackwell
- Raban, B. (1988). *The spoken vocabulary of 5-year old children*. Reading, U.K.: The Reading and Language Information Center at the University of Reading.

Implementation Suggestions

The following is a sample lesson plan that can be used to generate some ideas of how to teach the Gateway vocabulary.

Therapy Resources for Teaching Gateway®
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Using I and Me Fun Deck™

Using I and Me Fun Deck™ is a card game, produced and distributed through Super Duper Publications (FD# -61) www.superduperinc.com. It is designed to teach the correct use of the pronouns I and me. The card deck contains 54 cards with each card of the pair depicting I as the subject and me as the object of the proposition. Since the game uses proper names for the characters depicted on the card, it is suggested that a pronoun be substituted for them when using any of the Gateway page sets. The *Using I and Me Fun Deck* is an appropriate therapy tool for children, aged 4 years and up, who use Gateway® 40 or 60. It comes with suggested activities for how the cards can be used.



Gateway® Intervention Goals:

- Vocabulary: Acquisition** –Pronouns I, me; with
- Expressive Language: Syntax** – I as Subject; me as Object of Proposition; Simple declarative sentences

Suggested AAC Intervention Strategies: Modeling Expansion Aided Language Stimulation

Subject	Gateway		Verb	Gateway		Lit Wd.	Gateway		Desc Wd.	Gateway		Object	Gateway	
	40	66		40	66		40	66		40	66		40	66
I	X	X	Am, are	X	X	On	X	X	Near		X	Trip (vacation)	X	X
Me	X	X	Will	X	X	Off	X	X	Next (Time)	X	X	Turtle		
We	X	X	Ask	X	X	The	X	X				Lion	X	X
My	X	X	Go	X	X	A	X	X				Snow	X	X
us	X	X	Stand	X	X	To	X	X				Party	X	X
Grandpa	X	X	Write	X	X	Beside	X	X				Tree	X	X
Brother	X	X	Sit	X	X	About	X	X				Cupcakes	X	X
Teacher	X	X	Play	X	X	At	X	X				Game	X	X
Sister	X	X	See	X	X	By	X					Soccer (football)	X	X
Friend	X	X	Give (receive)	X	X	From	X					Report	X	X
Cousin	X	X	Finish	X	X	With	X					Gift (present)	X	X
Mom	X	X	Eat	X	X							Table	X	X
It	X	X	Read	X	X							Ice cream	X	X
			Paint	X	X				PLACES					
			Walk (hike)	X	X				Pool (Place)	X	X	Book	X	X
			Help	X	X				Store	X	X	Cat	X	X
			Let	X	X							Picture	X	X
			Fall	X	X							Bus	X	X
												Dog	X	X