Information Package on Augmentative and Alternative Communication (AAC)

For Socially Valued Adult Roles

Michelle Lockett and Douglas Usiak
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We also acknowledge expert input from Dr. Diane Bryen during the preparation of this document.
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- HOW TO Use with Activity Row feature on the Pathfinder, Spring Board Lite, or ECO
- HOW TO Use with AAC devices or computers that use Mayer-Johnson PCS or other Digital Pictures/Photographs
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- Diane Bryen’s Original Research Paper: Vocabulary to Support Socially-Valued Adult Roles

**Vocabulary to Support Socially-Valued Adult Roles** by Diane Bryen ....................................................... 23
Wouldn’t it be NICE if you could communicate more effectively while......

- Participating in extracurricular clubs?
- Describing your symptoms to your Doctor?
- Interacting in office small talk?

Wouldn’t it be NICE if your AAC device allowed you to communicate fully with people so they would really want to listen to ALL that you had to say?

Many adult Augmentative and Alternative Communication (AAC) users have these very same thoughts. Many have actually been able to equally experience these situations with the help of Vocabulary Sets specifically created for Socially Valued Adult roles.

Until recently, most of the pre-programmed words and symbols available in popular AAC devices were geared towards children because this is what manufacturers and other experts deemed sufficient. Although much of these elementary words are adequate, it does not leave the mature adult with many choices for accurate and meaningful conversation.

Luckily, a researcher named Diane Bryen from The Rehabilitation Engineering Research Center on Communication Enhancement (AAC-RERC) out of Temple University recognized this problem and took action to solve it.

In her research, the AAC-RERC hosted online discussions with 27 adult users of various AAC devices and 34 professionals whose expertise centered on the specific adult roles being studied. The discussions focused on identifying needed vocabulary for Socially Valued Adult Roles, such as College Life, Sexuality, Intimacy and Sex, Reporting Crime and Abuse, Managing Personal Assistant Services, Managing Health Care and Using Transportation. From these discussions, Diane and her research team were able to generate FREE and easily accessible vocabulary sets for each of the above mentioned topics. For more detailed information pertaining to this study please refer to the enclosed article, “Vocabulary to Support Socially-Valued Adult Roles”.

Turn the page to find out where you can find these much needed socially valued adult vocabulary sets and how they can benefit you.
EIGHT VOCABULARY SETS FOR ADULT ROLES ARE AVAILABLE

Each set includes an extensive list of context specific vocabulary words (Figure 1). The available vocabulary sets are:

- College Life
- Emergency Preparedness
- Employment
- Sexuality, Intimacy, and Sex
- Reporting Crime and Abuse
- Managing Personal Assistance Services
- Managing Health Care, and
- Managing/Using Transportation

An example of some of the words contained in 6 of the sets is shown below.

<table>
<thead>
<tr>
<th>Vocabulary Sets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>College life</strong></td>
</tr>
<tr>
<td>Accommodation</td>
</tr>
<tr>
<td>Advisory</td>
</tr>
<tr>
<td>Application</td>
</tr>
<tr>
<td>Ballot</td>
</tr>
<tr>
<td>Calculation</td>
</tr>
<tr>
<td>Campus</td>
</tr>
<tr>
<td>Certificate</td>
</tr>
<tr>
<td>Requirement</td>
</tr>
<tr>
<td>Counselor</td>
</tr>
<tr>
<td>Curriculum</td>
</tr>
<tr>
<td>Deadline</td>
</tr>
<tr>
<td>Department</td>
</tr>
<tr>
<td>Dorm or dormitory</td>
</tr>
<tr>
<td>Drunk</td>
</tr>
<tr>
<td>Elective</td>
</tr>
<tr>
<td>Essay</td>
</tr>
<tr>
<td>Financial aid</td>
</tr>
<tr>
<td>Fraternity</td>
</tr>
<tr>
<td>Grade</td>
</tr>
<tr>
<td>Lab</td>
</tr>
<tr>
<td>Laptop</td>
</tr>
<tr>
<td>Lecture</td>
</tr>
</tbody>
</table>

Figure 1: Example of Vocabulary Sets – taken from Vocabulary to Support Socially-Valued Adult Roles by Diane Nelson Bryen, Ph.D., 2008 Augmentative and Alternative Communication, 24 (4). p298.
THREE EASY STEPS TO ACCESS THE VOCABULARY SETS ONLINE

1. Go to: http://disabilities.temple.edu/aacvocabulary/
   This is the website of the Institute on Disabilities at Temple University. There is a link to each vocabulary set on this webpage.

2. Click on the desired vocabulary set.
   (Example, click Personal Assistance Service)

   Scroll down to read information about the desired vocabulary set.

   Managing Your Personal Assistance Services

   For many individuals who use AAC devices, personal assistance services (also known as attendant care services) will be key to participating in many adult roles such as college, employment, travelling, and even managing your health care. In order to get the services and supports that you need and prefer, you will need to communicate precisely what you want. For example, if you want to be transferred from your bed to your wheelchair, you will need to tell your assistant exactly how you want it done so that it is done safely and comfortably. Without the vocabulary needed to effectively direct your personal assistance supports, it is likely that supports will not be provided in the way you want. The vocabulary and graphic symbols found in this vocabulary set should be helpful in effectively communicating with your personal assistant.

   Following you will find access to:

   - The full Personal Assistance Services vocabulary set
   - PCS symbols can be obtained from Mayer Johnson
3. Click link to the full vocabulary set (The full Personal Assistance Services vocabulary set).

(Example: If you clicked Personal Assistance Service, you will see information about Managing Your Personal Assistance Services, links to the vocabulary set, and the Mayer-Johnson PCS)

(Example: Click The Full Personal Assistance Services vocabulary set)
Scroll down the page.

All words in the vocabulary set are listed alphabetically.

Copy individual words to insert or program into your communication device or board being used.

The entire word list can be copied and pasted into a word processor for easy retrieval of the words when needed.
CORRESPONDING GRAPHIC SYMBOL SETS

Graphic symbols and icon sequences in two widely used symbol sets that correspond with some of the vocabulary lists are also available. The Socially Valued Adult Vocabularies Resources table in the Appendix provides information on the generated symbol sets that are currently available for each of the vocabulary sets on the website. These include:

- **Picture Communication Symbols (PCS)**
  
  PCS for the College Life vocabulary set (Figure 2) are posted at [http://disabilities.temple.edu/aacvocabulary/COLLEGE_PIC.shtml](http://disabilities.temple.edu/aacvocabulary/COLLEGE_PIC.shtml). PCS for the other vocabulary sets are available through Mayer-Johnson’s BoardMaker software or the Mayer-Johnson PCS 2008 Library Addendum. If you already have access to Boardmaker and it’s the PCS 2008 Library Addendum, just type in the desired word and you should be able to see the desired PCS. If the PCS symbol is not available for a particular word, you have 2 options.

  - **Option1:** Contact Mayer-Johnson at 1.800.588.4548 and ask them to illustrate the desired word.
  
  - **Option 2:** Use symbols other than PCS for words in which no PCS exists. For example, clipart can be found at [http://office.microsoft.com/en-us/clipart/default.aspx](http://office.microsoft.com/en-us/clipart/default.aspx) for personal, noncommercial uses and these can represent almost all of the words in the 8 vocabulary sets. More about the use of clipart will be provided later.

![Figure 2: Example of Picture Communication Symbols (PCS)™ for the College Life vocabulary set](image)

*The Picture Communication Symbols ©1981–2009 by Mayer-Johnson LLC. All Rights Reserved Worldwide. Used with permission. Boardmaker® is a trademark of Mayer-Johnson LLC.*
There are Unity 128 icon sequences for College Life (Figure 3), Health Care, Sexuality, Intimacy, and Sex, and Transportation. The Unity 128 symbol sets can be used with all Unity devices.

**E-mail address**

<table>
<thead>
<tr>
<th>KNOW</th>
<th>COMPUTER</th>
<th>HOUSE</th>
</tr>
</thead>
</table>

Know and Computer represent technology. HOUSE has an address.

**Equation**

<table>
<thead>
<tr>
<th>KNOW</th>
<th>HAMMER</th>
<th>WRONG</th>
</tr>
</thead>
</table>

Know and Hammer represent college work and assignments. You do equations for math WRONG assignments.

**Essay**

<table>
<thead>
<tr>
<th>KNOW</th>
<th>TV</th>
<th>NAME</th>
</tr>
</thead>
</table>

Know and TV represent finals, test, quizzes. You write essays.

Figure 3: Example of Unity 128 Symbol Set for the College Life vocabulary.
DEVELOP CUSTOMIZED COMMUNICATION BOARDS

Using Word, PCS, or other symbol sets including clip art, customized communication boards can be developed of any or all of the 8 vocabulary sets. In fact, given the recent awareness of the importance of communicating during times of emergency, Communication 4 All was developed in English, Spanish, and most recently Haitian-Creole. These communication aids were developed based on the Emergency Preparedness vocabulary set.¹ The symbol system used was PCS. The English communication aid appears below and all 3 versions can be downloaded FREE from http://disabilities.temple.edu/aacvocabulary/e4all.shtml#index

To the right is an example of PCS symbols used to create a board for participation in a class group project based on

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¹ For information about how the vocabulary was identified, see the evidence base published in 2009: Communicating during times of natural or man-made emergencies. Journal of Pediatric Rehabilitation Medicine: An Interdisciplinary Approach, 2 (2), 123-129.
some of the College Life vocabulary set. (Figure description: It is a table with 4 columns and 3 rows. The upper left square has the words “I have something to say”. In each square there are words with corresponding pictures.)

**What if PCS does NOT have symbols to represent this vocabulary?**

Here’s what you can do.

*Using Microsoft Clip Art*

1. Go to Microsoft Word and open a NEW DOCUMENT.

2. When using the Word 2007 version, click on the INSERT tab to find the TABLE drop menu. After you click on the TABLE button you can move your mouse cursor over the small grid until you highlight the number of squares you want in your table. The table will form in your document as you highlight the grid. See the screen shot on the bottom left corner of this page which illustrates how this looks. For our example we will want 4 columns and 4 rows yielding a grid size of 16. When using older versions of Word, use the INSERT function under the TABLE drop menu and then scroll across to TABLE. You will then be prompted to type in the desired number of columns and rows as shown in the right screen shot below.

4. Note that when you type a desired word in Microsoft Clip Art, you may not find any clip art to represent the word. However, think of a synonym and type it in. For example, the word “function” did not produce a picture. However, when the synonym “event” is typed in, several pictures emerge.

5. Once you COPY and PASTE the downloaded clip art onto your grid, you can then add the corresponding words by clicking inside each box and typing them either below or above the picture. You can add more space within the squares by hitting the enter key. Here is an example of a board created using words from the Employment Vocabulary Set and clipart for a conversation with co-workers and with personnel employees regarding a 401K plan.

<table>
<thead>
<tr>
<th>I have something to say</th>
<th>Portfolio</th>
<th>Forms</th>
<th>Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appointment</td>
<td>401K</td>
<td>Income</td>
<td>Money</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Paperwork</th>
<th>Confidential</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research</td>
<td>Retirement</td>
<td>Salary</td>
<td>Update</td>
</tr>
</tbody>
</table>

- NEWS FLASH!
IN SUMMARY...

Having the vocabulary you need is key to effective, efficient and satisfying communication. Regardless of your current AAC device, these vocabulary sets and available symbols will be a valuable resource in supporting your communication in these and many other socially valued adult roles.

Something to think about, of the three popular symbol sets at the time of Dr. Bryen’s study, Unity 128, Picture Communication Symbols and Dynasyms, close to half (45%) of the words identified from the online discussions were not available. The missing words were provided to the manufacturers in hope that they would develop matching symbols. Some were developed and some still remain to be created.

If you would like to see more relevant symbol sets within your AAC device, then contact your clinician/speech therapist or your manufacturing sales representative and let them know of your interest. The more requests a manufacturer receives for certain word/symbol associations the more likely they will produce them.
APPENDIX

- Socially Valued Adult Vocabularies Resources
- How to use with AAC devices that have word prediction
- How to use with communication software with word prediction
- How to use with unity – based devices, such as the Pathfinder and the ECO
- How to use with activity row feature on the Pathfinder, Spring Board Lite, or ECO
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- Manufacturer’s contact information
- Diane Bryen’s original research paper: *Vocabulary to support socially-valued adult roles*
### SOCIALY VALUED ADULT VOCABULARIES RESOURCES -

<table>
<thead>
<tr>
<th>Vocabulary Set</th>
<th>Component</th>
<th>Websites</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><em>Unity 128 Icon Sequences</em> (draft)</td>
<td><a href="http://disabilities.temple.edu/aacvocabulary/index.shtml">http://disabilities.temple.edu/aacvocabulary/index.shtml</a></td>
</tr>
<tr>
<td>Vocabulary Set</td>
<td>Component</td>
<td>Websites</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Health Care</td>
<td>Full Health Care vocabulary set</td>
<td><a href="http://disabilities.temple.edu/aacvocabulary/HEALTH.shtml">http://disabilities.temple.edu/aacvocabulary/HEALTH.shtml</a></td>
</tr>
<tr>
<td>Personal Assistance Service</td>
<td>Full Personal Assistance vocabulary set</td>
<td><a href="http://disabilities.temple.edu/aacvocabulary/ASSIST_FULL.shtml">http://disabilities.temple.edu/aacvocabulary/ASSIST_FULL.shtml</a></td>
</tr>
<tr>
<td>Sexuality, Intimacy, and Healthy Sex</td>
<td>Full Sexuality, Intimacy and Healthy Sex Vocabulary set</td>
<td><a href="http://disabilities.temple.edu/aacvocabulary/SEXUALITY_FULL.shtml">http://disabilities.temple.edu/aacvocabulary/SEXUALITY_FULL.shtml</a></td>
</tr>
<tr>
<td></td>
<td>Unity 128 Icon Sequences (Draft)</td>
<td><a href="http://disabilities.temple.edu/aacvocabulary/SEXUALITY_UNITY.shtml">http://disabilities.temple.edu/aacvocabulary/SEXUALITY_UNITY.shtml</a></td>
</tr>
<tr>
<td>Transportation</td>
<td>Full Transportation Vocabulary set</td>
<td><a href="http://disabilities.temple.edu/aacvocabulary/TRANS_FULL.shtml">http://disabilities.temple.edu/aacvocabulary/TRANS_FULL.shtml</a></td>
</tr>
<tr>
<td></td>
<td>Unity 128 Icon Sequences (draft)</td>
<td><a href="http://disabilities.temple.edu/aacvocabulary/TRANSUNITY.shtml">http://disabilities.temple.edu/aacvocabulary/TRANSUNITY.shtml</a></td>
</tr>
</tbody>
</table>
HOW TO USE THE SOCIALLY VALUED ADULT VOCABULARY SETS
HOW TO USE WITH AAC DEVICES THAT HAVE WORD PREDICTION

Picture1: Lightwriter35   Picture 2: LightwriterSL40   Picture3: Dynawrite   Picture4: Vanguard

Once the vocabulary sets are downloaded, words in each set can be entered into AAC devices that have Word Prediction. For most devices, individual words are learned by typing in the message box, or entered through a specialized feature in the device that enables adding new words to word prediction.

HOW TO USE WITH COMMUNICATION SOFTWARE WITH WORD PREDICTION

Picture of EZ Keys Software

For word prediction software already loaded onto your laptop computer, such as EZ Keys, individual words are learned by typing into a word processor or the message box in a text area. Words are learned after repeated entries. Once loaded, remember to check to be sure that the text–to–speech is accurate for a particular word for the particular speech synthesizer on your device.

HOW TO USE WITH UNITY – BASED DEVICES, SUCH AS THE PATHFINDER AND THE ECO

Picture of Pathfinder   Picture of ECO Device
Icon Sequences

Where Icon Sequences Have Been Developed:

Icon sequences for College Life, Health Care, and Transportation have been developed by the research team. The icon sequences for these 3 vocabulary sets were developed by a long-time user of Unity 128 and its predecessor, Words Strategy/Minspeak and appear on the website http://disabilities.temple.edu/aacvocabulary/index.shtml.

Steps for Using the Icon Sequences developed by the research team

1. Once at the website, click onto the desired vocabulary set (i.e., College Life, Health Care or Transportation).

2. Scroll down through the introduction until you reach the link to Unity 128 link and click onto it.

3. Once on the link scroll down and you will see the full vocabulary list. If there are no icon sequences provided, you will know that the icon sequences already exist in the pre-programmed Unity 128. If a desired word is not already preprogrammed on your device, the word, a suggested icon sequence, and its rationale are provided for your use.

4. What you will need to do is follow the directions for storing a new word under icon sequences.

Use the store feature on your device to program the icon sequence:

STORE: (Type in the desired Word)

SELECT ICON SEQUENCE:

SAVE:

If the icon sequence is already used to store a different word, you will have to choose another icon sequence.

Where Icon Sequences Have Not Been Developed.

For vocabulary sets Sex, Intimacy, and Sexuality; Reporting a Crime; Employment; and Communication during Times of Emergency, there are no icon sequences. Here you have 4 options:

Option 1: Contact Prentke Romich Company and request that they develop the desired icon sequences for the particular vocabulary set.

Option 2: Using the architecture of Unity, develop and store icon sequences for the desired vocabulary set. Here you will have to follow the steps for storing icon sequences for any desired word that is not already pre-programmed:

STORE: (Type in the desired Word)
SELECT ICON SEQUENCE:

SAVE:

Option 3: Develop an **Activity Row** for the desired vocabulary set. See below.

Option 4: If you have reasonable literacy skills, use the Word Prediction feature described earlier.

Option 5: If you are using the ECO communication device, you can develop a topic-specific page with picture symbols already stored in your device, many of which can represent a desired word in one of the vocabulary sets. Check with your support person or contact Prentke Romich to learn how to do this. It is actually quite simple.

**HOW TO USE WITH ACTIVITY ROW FEATURE ON THE PATHFINDER, SPRING BOARD LITE, OR ECO**

![Picture of Pathfinder](image1) ![Picture of ECO Device](image2) ![Picture of Spring Board Lite](image3)

The Pathfinder, ECO and Spring Board Lite have an additional feature called an Activity Row that can be used for topic- or context-specific vocabulary. Below are a few of the more than 70 preprogrammed Activity Rows available for Unity 84. They should be similar for Unity 128.2

<table>
<thead>
<tr>
<th>ADDRESS</th>
<th>FAMILY NAMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART CLASS</td>
<td>FOOD</td>
</tr>
<tr>
<td>CALENDAR</td>
<td>GOVERNMENT</td>
</tr>
<tr>
<td>CLASSMATE NAMES</td>
<td>MP3’S</td>
</tr>
<tr>
<td>DOCTORS AND NURSES</td>
<td>BOOKSHARE</td>
</tr>
<tr>
<td>LABOR DAY</td>
<td>SCHOOL</td>
</tr>
</tbody>
</table>

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2 Based on a conversation with Prentke Romich Company (April, 2010)
None of the 8 vocabulary sets are currently pre-programmed in any of these 3 devices. So you will need to create a new Activity Row for each vocabulary set. Based on information provided by the Prentke Romich Company, here is how you would do it on an ECO using “Baking Cookies” as an example.  

Creating an Activity using "Baking Cookies" as an example:

1. Go to the Toolbox and activate the CREATE ACTIVITY key.
2. Spell a name for your new Activity. For example you might spell, "Baking". Activate OK when you have finished spelling.
3. Choose an icon for the Activity from one of the Icon Categories. In this case, you might want to select an icon from the FOOD Category under DESSERT/PUDDING and select the food you are making.
4. Now you will see the screen that allows you to create the keys in your Activity. The second key in the Activity is highlighted in red. MORE ITEMS and Go Back are automatically added to the last keys in any row.
5. Select DECTalk or Recorded speech.
6. If you selected DECTalk select Spell Text for Message .

\[ How \text{ do I Create a New Activity on my ECO? } \text{ http://support.prentrom.com/article.php?id=387 } \]
HOW TO USE WITH AAC DEVICES OR COMPUTERS THAT USE MAYER-JOHNSON PCS OR OTHER DIGITAL PICTURES/PHOTOGRAPHS

Two of Prentke Romich products (Springboard Lite and Vantage Lite) and most of Dynavox Products (Dynavox IV, EyeMax, and VMax) can come with PCS as a symbol system. For these products, use of the socially-valued vocabulary is quite simple.

Make a page for one of the vocabulary sets and then type in the desired word and you should be able to see the desired PCS. If the PCS symbol is not available for a particular word, you have 2 options.

Option #1: Contact Mayer-Johnson at 1.800.588.4548 and ask them to illustrate the desired word and add this illustration to the PCS Library of symbols.

Option #2: Use symbols other than PCS for words for which no PCS exists. For example, clipart at http://office.microsoft.com/en-us/clipart/default.aspx is provided for personal, noncommercial uses and these can represent almost all of the words in the 8 vocabulary sets.
MANUFACTURER’S CONTACT INFORMATION:

**DynaVox Mayer-Johnson**

**Picture Communication Symbols (PCS)**
Mayer-Johnson PCS 2008 Library Addendum
Speaking Dynamically

2100 Wharton Street
Suite 400
Pittsburgh, PA 15203
800-
Fax: 866-585-6260
Web site: [www.mayer-johnson.com](http://www.mayer-johnson.com)

For purchase information for 2008 Library Addendum:
http://store.mayer-johnson.com/us/picture-communication-symbol PCS-addendum-libraries.html

For support related to adding and uploading vocabulary words and symbols or to request icons and symbols, contact:

Tech support phone: 800-588-4548
Email: [mayer-johnson.ussa@dynavoxtech.com](mailto:mayer-johnson.ussa@dynavoxtech.com)
For letters: Send letters to tech support and ask to forward them to the content team
Web inquiries: [http://www.mayer-johnson.com/contact/](http://www.mayer-johnson.com/contact/)
Symbol Request: [http://www.mayer-johnson.com/contact/symbols/](http://www.mayer-johnson.com/contact/symbols/)

**Prentke Romich Company**

**Unity Programs**

1022 Heyl Road
Wooster, OH 44691
800- 262-1990
Fax: 330- 263-4829
[www.prentrom.com](http://www.prentrom.com)

For support related to adding and uploading vocabulary words and symbols or to request icons and symbols, contact:

Tech support phone: 800-262-1990
E-mail: [service@prentrom.com](mailto:service@prentrom.com)
For letters: Send letters to Verda McGraw, Maps Manager
800-262-1984 ext 242
vmc@prentrom.com
Web inquires: [http://support.prentrom.com/contact.php](http://support.prentrom.com/contact.php)
Vocabulary to Support Socially-Valued Adult Roles

Copies of the research article "Bryen, D.N. (2008). Vocabulary to Support Socially-Valued Adult Roles. Augmentative and Alternative Communication, 24(4), 294-301." were provided in this section with previous permission from the publisher.