



Information Package
on
**Augmentative
and Alternative
Communication
(AAC)**

For Socially Valued Adult Roles

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FOREWORD

FOREWORD

This information package is brought to you because of your research interest in the field of Augmentative and Alternative Communication (AAC) and/or Communication Science in general. Acknowledging that your work is key to improving the lives of persons with significant communication disabilities, the package seeks to bring information relevant to your research, whether your research orientation is improving clinical practice, promoting/facilitating development of assistive technology solutions, or investigating any of a variety of applied research topics related to communication needs of individuals.

The purpose of the document is to present and discuss findings from an innovative research and development (R&D) project that generated vocabulary and symbol sets for adult users of augmentative and alternative communication approaches. The project was led by Dr. Diane Bryen, professor emerita at Temple University, and a researcher in the field of AAC. The document also presents subsequent development work and discusses implications for further research. Many of you might already be familiar with this work. For those who are not, the research addresses an unmet need of adult users of AAC. Currently available AAC technology may pose a barrier to adult users of communication devices, because these devices mainly carry the vocabulary or symbol sets appropriate for children under the age of 19. Situations in adult life, on the other hand, demand specialized vocabulary needed for a range of circumstances - from personal care management, to intimate relations, to transportation, and perhaps from attending college to becoming employed. Quick and effective communication is especially important in emergency situations whether due to disasters or crime. The research studies respond to this problem by filling some of the gaps in adult communication needs. The research identified AAC vocabulary lists that authentically reflect adult life that were generated by samples of AAC users themselves.

These studies can be described as research conducted within a larger perspective of research and development (R&D). In an extra step beyond research, the research project took the results into development stage; thus, in interaction with manufacturers it also generated samples of useful symbol sets and communication boards that might be used by clinicians and others such as college disability services that work with and support AAC users.

This research and development work opens up possibilities for further research in several directions. Much work remains ahead before all of the Vocabulary Sets and Symbols can become available to AAC users for independently customizing them into their devices. However, their current state of development still permits many applications and their use in research. It allows interested clinical researchers to investigate effectiveness of interventions designed with the Vocabulary Sets and Symbols. On the other hand, insights from the studies also created an opportunity for additional research and development activity. Those of you interested in applied research, including improvement of assistive technology solutions for persons with disabilities, might also find it meaningful to include such opportunities within your own work. You may wish to expand upon the current work by further articulating the needs of adult AAC users, or may wish to conduct your own applied research to expand the range of solutions to this important problem.

Whichever way you choose to advance knowledge based on the research findings, it is hoped that it will have a beneficial impact on the lives of individuals with significant communication disabilities.

Section I of this document presents and describes the AAC Vocabulary Sets for Socially Valued Adult roles generated from the research mentioned above. It also summarizes the research that led to these

vocabulary sets, including abstracts of three articles authored by Bryen. Taken together, the articles describe two research studies, the methodology used in generating the Vocabulary Sets and the findings, along with limitations and possibilities.

Section II describes the current state of development of the Vocabulary Sets, and discusses possibilities for use by consumers at this time. It then points out the opportunities for future research opened up by the research and development described in this package.

Section III, the appendix, presents copies of three research articles in full, that address the work described in this document (Bryen & Moulton, 1999; Bryen, 2008, 2009).

Additionally, enclosures in the back cover of this package include (i) a sample copy of a Communication 4 All Board prepared for emergency situations using the specific Vocabulary Set and (ii) a sample copy bookmark that serves as an informational resource. An electronic copy of this package in CD format is also enclosed in the back cover of this package for your convenience.

It is hoped that this package meets your professional interests and inspires your future work.

SECTION I

**Augmentative and Alternative Communication
(AAC) Vocabulary for Socially Valued Adult Roles:
Research, Vocabulary Sets and Promise**

(a) Research Abstracts

The abstracts presented below summarize three articles that describe research by Bryen (Bryen and Moulton, 1999; Bryen, 2008 & 2009). The first study was presented as part of a conference on employment in Pittsburgh in 1999 and later published in Hebrew in 2001. The second study generated AAC vocabulary sets in six areas of adult use and the third study focused on an additional vocabulary set – Emergency communication and the Emergency Communication for ALL communication aids. The two studies were published in peer reviewed journals. Full versions of all three research articles are presented in Section III. The abstracts below are for your quick reference.

Research Article 1: Socially-valued Adults' roles: Needed vocabulary for AAC Users. Why "Employment, Independence, Marriage and Sexuality?" Because...We Want it All!

Bryen, D. & Moulton, B. (1998). Why "Employment, independence, marriage and sexuality? Because ... We want it all!" *Proceedings of the 3rd Annual Pittsburgh Employment Conference for Augmented Communicators*, Volume 6, Pittsburgh, PA: SHOUT Press. Reprinted in (1999). *Issues in Special Education and Rehabilitation*, 14(2). Also reprinted in Hebrew in ISAAC-Israel (2001).

This paper treats content that laid the basis for the two studies presented next as Articles 2 and 3. It discusses the urgent need for age appropriate vocabulary for persons with complex communication needs in order to be able to participate in social roles as their fellow citizens do. The paper was first presented as part of the Pittsburgh Employment Conference and you may find the article posted on the Institute of Disabilities website at <http://www.temple.edu/instituteondisabilities/aacvocabulary/RESEARCH.shtml> last updated in March, 2008. It is also enclosed in this package in the Appendix.

Research Article 2: Vocabulary to Support Socially-Valued Adult Roles

Diane Nelson Bryen † *Augmentative and Alternative Communication* 2008, Vol. 24, No. 4, Pages 294-301, DOI 10.1080/07434610802467354

Abstract: Individuals who use augmentative and alternative communication (AAC) have new expectations for life after high school. However, the vocabulary needed to support socially-valued adult roles may not be available in their communication devices. This study explored whether vocabulary needed to participate in six adult roles currently existed in three widely used symbol sets. Electronic mailing lists were used to generate words needed for each adult role. From these vocabulary sets, discrepancy analyses were conducted to determine whether symbols or symbol combinations in each of the symbol sets studied could represent those words. Results suggest that, overall, an average of 55% of the identified words was currently available in these symbol sets. The need for easily accessible vocabulary that reflects socially-valued adult roles is discussed.

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Research Article 3: Communication during times of natural or man-made emergencies

Bryen D. N. ¹ (2009). Communication during times of natural or man-made emergencies. *Journal of Pediatric Rehabilitation Medicine: An Interdisciplinary Approach* 2, pp. 123-129.

Abstract: During man-made or natural emergencies, communication is essential. However, for millions of individuals worldwide who have significant communication disabilities, spoken language may not be effective or efficient. As a result, emergencies can quickly turn into life-threatening situations. Alternatives to spoken language or augmentative and alternative communication (AAC) may be necessary to ensure effective and efficient communication. The purpose of this study was to identify needed vocabulary for communication during times of emergency. In order to identify needed vocabulary, two online focus groups generated and prioritized this vocabulary. Based on the 209 words that were identified, we used 50 priority words to develop downloadable communication aids for use during times of natural or man-made emergencies.

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(b) The AAC Vocabulary Sets for Socially Valued Adult Roles

The above research generated vocabulary sets for 8 different social contexts that involve situations of socially-valued adult communication with others. Table 1 below lists these sets.

AAC users can select the needed vocabulary for use in their different modes of communication, and the selection involves two options – either spelling out the word or pointing to a graphic, text label or symbol associated with the word. For reasons of ease of use and speedier communication, the graphical option is often preferable (especially when spelling is a problem). Through the research project’s further efforts, parts of these vocabularies have become available within two of the currently existing symbol systems - Unity 128 and Picture Communication Symbols (PCS). The vocabulary sets, related symbols and related resource material can be downloaded for use from the Institutes of Disabilities website where they are posted. The table below has these links to the website corresponding to the 8 vocabulary sets.

Table 1. AAC Vocabulary Sets and Available paired Symbols

Vocabulary Set	URL	Available on Symbol System
1. College Life	http://www.temple.edu/instituteondisabilities/aacvocabulary/COLLEGE.shtml	Unity 128 and PCS
2. Emergency Preparedness	http://www.temple.edu/instituteondisabilities/aacvocabulary/EMERGENCY.shtml http://disabilities.temple.edu/news/stories/emergencyAAC.shtml	Downloadable Communication board available. (see also Section III c)
3. Employment	http://www.temple.edu/instituteondisabilities/aacvocabulary/EMPLOY.shtml	PCS
4. Intimacy and Sexual Relations	http://www.temple.edu/instituteondisabilities/aacvocabulary/SEXUALITY.shtml	PCS and Unity 128 (some vocabulary)

5. Reporting or Telling about Being a Victim or a Crime	http://www.temple.edu/instituteondisabilities/aacvocabulary/CRIME.shtml	PCS
6. Health care	http://www.temple.edu/instituteondisabilities/aacvocabulary/HEALTH.shtml	PCS and Unity 128 (some vocabulary included)
7. Personal assistance	http://www.temple.edu/instituteondisabilities/aacvocabulary/ASSIST.shtml	PCS
8. Transportation	http://www.temple.edu/instituteondisabilities/aacvocabulary/TRANS.shtml	PCS and Unity 128 (some vocabulary only)

Please visit the Temple University website for further details:

<http://www.temple.edu/instituteondisabilities/aacvocabulary/>

(c) Potential for Beneficial Impacts

The intended beneficiaries of the Vocabulary Sets are adult users of AAC, and others who need communication devices. What benefits to the intended end users can be expected to result from the vocabulary sets? And, why?

➤ *The Vocabulary Sets address an unmet need of adult AAC users:*

The research study (Bryen, 2008) showed that not all of the specialized vocabulary that adults need for communication was available in the currently existing symbol systems – the Unity 128 icon sequences, Picture Communication Symbols (PCS), and Dynasyms. Bryen’s Vocabulary Sets supply some of the missing vocabulary important in each of the eight situations. The following is a summary description of the eight Vocabulary Sets.

College Life Vocabulary Set includes specialized vocabulary related to attending college. It covers a wide range of college activities from registration to important social needs such as housing, transportation and accessible resources. **NOTE:** It was developed with the input of eight AAC users who are either currently attending college or who have attended college within the past 5 years. In addition, non-disabled professionals involved in college life as either faculty, advisors, or disability resources persons also participated in generating needed vocabulary.

Emergency Preparedness Vocabulary Set includes vocabulary needed for effective and efficient communication in times of man-made or natural disasters, and is useful for people with complex communication needs as well as emergency first responders who may not know how to communicate with such individuals. **NOTE:** The vocabulary set was developed using structured input from both AAC users and professionals who work as first responders in times of emergencies. For this set, an emergency communication board has been developed and is available in English, Spanish and Haitian Creole. See <http://disabilities.temple.edu/news/stories/emergencyAAC.shtml>

The following Vocabulary Sets were all developed by individuals who use AAC and have experience in the respective contexts, as well as professionals who work in these contexts.

Employment Vocabulary Set includes vocabulary needs for successful employment that cover interactions with boss, co-workers, supervisor, or customers. Quick access to such vocabulary and corresponding graphic symbols are important for AAC users, especially where pre-programmed vocabulary and corresponding symbols are not available on their communication device or where the user has limited spelling capability.

Intimacy and Sexual Relations Vocabulary Set: Intimate relationships are closely tied to communication, whether it is through gestures, facial expressions, touch and/or words (in person, via telephone, in writing). For individuals who use AAC, having the right words at their “finger tips” or on the AAC device can make all the difference in their relationships.

Reporting or Telling about Being a Victim of a Crime Vocabulary Set: Individuals with disabilities, especially those who have significant communication disabilities, are more likely than their nondisabled peers to be victims of a crime. Many victims of crime who rely on AAC devices do not have the vocabulary needed to describe what happened to them, and fail to tell or report a crime. This only reinforces the perpetrator’s belief that he or she can continue to hurt the individual. The vocabulary set should enable victims of crime or abuse to tell or report, thereby improving their personal safety.

Health Care Set supports efficiency of communication by an AAC user in situations such as visiting a doctor’s office, where one might have limited time with the health care provider; and addresses needs such as being able to describe symptoms or ask precise questions about health care.

Personal Assistance Set vocabulary and graphic symbols especially address an AAC user’s need to effectively communicate with personal assistants. Personal assistance services (or attendant care services) may be essential for their social participation at college, workplace or travel; and in general to get the services and supports that they need and prefer (e.g., getting transferred from bed to wheelchair safely and comfortably).

Transportation Vocabulary Set along with the symbol sets addresses an AAC user’s need for ensuring the accessibility and reliability of the mode of transportation (bus, train, plane...). It includes their transportation-related communication (communicate where they want to go, ask for directions when lost or simply chat with the person sitting next to them), which is important for their independence, comfort, and safety. This is especially critical if they use mobility technology in addition to communication technology.

➤ ***Potential Customers to the Vocabulary Sets go beyond the AAC users:***

Communication aids such as the Communication 4 All Board are essential in all public places as part of safety assurance. Since communication is a two-way process, these aids are just as useful to AAC users as they are for those who need to talk to them. These individuals include family and caregivers (personal assistance vocabulary; intimacy and sexual relations vocabulary); beyond it they can include policemen and other first responders who rescue them in emergencies (emergency preparedness vocabulary; reporting a crime vocabulary), healthcare workers such as physicians, nurses, pharmacists and counselors who interview them (health care vocabulary); workplace interactions (employment) and public transportation services (transportation vocabulary). Disability services in college, workers in organizations like FEMA, hospitals and other public places all have a stake in the use of the

communication aids.

Besides AAC users, the communication aids based on the adult vocabulary sets may be also useful for communicating with non-English speaking individuals in any of the situations that call for specialized vocabulary. Pictorial representations are more versatile in terms of facilitating universal communication. In fact, the emergency preparedness communication board is currently available in three languages – English, Spanish and Haitian Creole.

Thus, the use of communication aids expands to communicators in general, including victims, first responders and anyone who has a language barrier.

SECTION II

**AAC Vocabulary for Socially Valued Adult Roles:
Opportunities for Further Research**

What are future directions indicated by the work started by this research and development project on the Vocabulary Sets and Symbols? What opportunities does it open up for other researchers? As mentioned in the foreword, including the Vocabulary Sets and Symbols in their research design might appeal to investigators with varied research interests. As an AAC researcher, whether your research orientation is to promote evidence-based clinical practice, advance theory or promote development of technological solutions, the ultimate goal is to improve the quality of life of persons with significant communication disabilities. The following are a few suggestions for the three different research orientations mentioned above.

(a) Clinical Research

As part of your clinical research investigations, you might be addressing any or all of a variety of issues such as: outcomes assessment, treatment efficacy, evaluation of AAC interventions and of service provision and related programs. In all cases, designing your research centered on the Vocabulary Sets and Symbols is an opportunity to improve practice. Note that some of the Vocabulary Sets have already been transferred to manufacturers for commercialization, while others have made it to the development stage; which opens up the possibility of starting new clinical research projects. In fact, the work initiated by Bryen's research project makes some of the Sets and Symbols already suitable for use by AAC users, enabling them to participate in research, in some cases, with assistance by other professionals – such as clinicians, brokers (e.g., disability services in colleges) and manufacturers – who can work with end users on the use of the Vocabulary Sets. Resources for this purpose are currently available on the Temple University website (See Table 1). Also by contacting companies, (e.g., Meyer Johnson) users as well as clinicians and brokers assisting them can enhance the use of the sets and symbols as needed. Some research possibilities are suggested in the following paragraphs.

➤ ***AAC users can currently gain access to the needed Vocabulary Sets and Symbols in different ways:***

At this time there are several possibilities for AAC users to access and use the vocabulary sets:

1. Download the vocabulary sets by a simple “copy and paste” procedure from the Temple University website. If they have the capability, AAC users can insert or program the needed word into their communication device or other aid (a communication board, for example).
2. Additionally, access PCS symbols about College Life from the same website. For other sets, obtain PCS through Mayer Johnson's Boardmaker software or their PCS 2008 Library Addendum at <http://www.store.mayer-johnson.com/us/boardmaker-family/picture-communication-symbol-pcs-addendum-libraries.html>. For words with no PCS, use symbols from other sources such as clipart at <http://office.microsoft.com/en-us/clipart/default.aspx>
3. Access Unity 128 icon sequences (drafts) for College Life, Health Care and Transportation, and use them with all Unity devices. For other vocabulary sets,
 - i. contact Prentke Romich Company; or
 - ii. develop own icon sequence using the architecture of Unity; or
 - iii. develop an activity row for the set; or
 - iv. use the word prediction feature; or

- v. explore what different devices allow. For example, in the case of ECO, develop a topic-specific page with PCS stored in the device; [NOTE: Pathfinder, Spring Board Lite and ECO have pre-programmed activity rows available for Unity 84, but do not have the 8 vocabulary sets currently pre-programmed. Contact Prentke-Romich on how to create an activity row.]
4. Develop customized communication boards using Word, PCS, other symbol sets or clipart just like the Emergency4all communication board developed by the Temple University (see sample enclosed with this package). This board is downloaded free from this website.
5. Use the Prentke Romich products *Springboard Lite* and *Vantage Lite* or Dynavox products that can come with PCS; make a page for the needed vocabulary set. Alternatively, contact Mayer-Johnson for illustration and addition to the PCS library; or use Microsoft clipart.

Thus, all downloaded words, (and depending on the device, symbols, icon sequences and activity rows) can be used with:

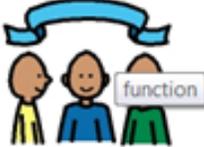
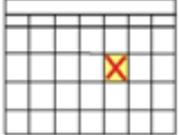
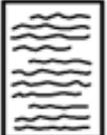
1. AAC devices that have word prediction (e.g., Lightwriter)
2. Communication software with word prediction (e.g., EZ Keys software)
3. Unity-based devices (e.g., Pathfinder and ECO)
4. AAC devices or computers that use Mayer-Johnson PCS or other digital pictures/photographs.

➤ ***Collaborating professionals can facilitate AAC users' access to the needed Vocabulary Sets and Symbols for research:***

Conducting clinical research involving AAC users often implies collaborating with clinicians and/or other professionals such as college disability services and school IEP teams; and they can help in the implementation of your research by:

1. Guiding the AAC users to the resources – the Temple University website, and alternatively to the companies, for obtaining the needed material;
2. Downloading the vocabulary and symbol sets to modify current adult AAC user's devices enabling them with newfound communication abilities, including choice of faster communication modes (e.g., spelling out versus using as *icon sequences* and *activity rows*.)
3. Developing customized communication aids/boards for any or all of the needed vocabularies for use in your research, using PCS or Clipart as appropriate. See the examples below.

Example 1: Mayer Johnson PCS symbols used to create board for participation in a class group project

I have something to say	group study area 	function 	explain 
project 	all nighter 	presentation 	criteria 
assignment 	due date 	swear words 	composition 

Example 2: College vocabulary used with clipart to create board for use during a Math exam.

I need	 Equation	 Extra time
Please	 Explain	 Final exam

➤ *Manufacturers can provide technical assistance to participating consumers:*

At the present time, researchers can consider the following possibilities in terms of manufacturer support:

1. At customer request, manufacturer can add the required word(s) or icon sequence to their existing symbol system (e.g., into PCS 2008 library or Unity 128);
2. Provide technical assistance for using the Vocabulary and Symbol Sets on the AAC device – e.g., help create an activity row
3. Over the longer term,
 - i. Collaborate with research by pursuing SBIR or other federal agency funding to create symbols for each of the vocabulary sets thereby transforming the new Socially Valued Adult Vocabulary Sets into products such as the Emergency Preparedness Board.
 - ii. Collaborate by developing and upgrading software to download into, and preprogram

the AAC devices with the needed vocabulary and symbol sets.

It is encouraging that the Vocabulary Sets permit use, even as partial solutions at this time, by consumers with complex communication needs. This makes clinical research focused on the use of the Sets and Symbols an immediate reality. Again, it may imply some collaboration with industry and practitioners, in order to conceptualize, develop and evaluate what works.

It should be pointed out that #3 presented above is also an opportunity of particular interest to researchers working in the area of product development, as discussed later.

(b) Research to Advance AAC Theory

If your research orientation is theory building, which seeks to close knowledge gaps related to conceptual and methodological issues, there are several opportunities that Bryen's studies open up for future investigations. Some of the future directions are pointed out by Bryen (2008) in the discussion section of her articles (see Appendix, Article 2). To the extent appropriate, you may address these as hypotheses in your own future studies. Some of them are listed below:

1. According to the study, approximately 55% of the vocabulary identified by the participants could be represented by the existing symbols or symbol combinations in the three widely used symbol sets studied. An empirical question remains: Is this sufficient for effective participation of the AAC users in various socially valued adult roles? What is an optimal proportion for effective participation?
2. As a basic recommendation, Bryen points out the importance of involving individuals who have used AAC technology in a wide variety of adult roles in research studies, as knowledgeable informants. The ultimate goal is to assist manufacturers in attaining an inclusive perspective for how to meet vocabulary needs. In this context, the study points out that there is a need for more specialized vocabulary sets for specific contexts and social roles than currently available through manufacturers – either in their standard packages or as downloadable addenda. For the methodological researcher, this points to several concerns that can be and need to be addressed. One critical need, for example, is to determine methodologically sound and feasible ways of obtaining these specialized vocabularies for the specific contexts, without compromising validity and reliability of the information collected. In terms of including AAC users as informants, what is the optimal strategy for collecting data – involving them in focus groups (face-to-face or electronic or mixed) or direct observation of AAC use in specific contexts (for example observe an AAC user at dentist visits)? As an example, one might conduct a cost-effectiveness investigation to compare the “meta-linguistic” approach used in the two studies (Bryen, 2008; 2009) with the more time-consuming analysis of spontaneous samples of actual communication in a particular context.

(c) Research for Development of Assistive Technology Solutions

As mentioned earlier, Bryen's work may be characterized as a research and development (R&D) activity conducted in view of products and services developed for the benefit of AAC users. For those of you

with a similar research orientation, Bryen's studies open up several opportunities to advance the work on the Vocabulary Sets and Symbols. For example, an important research concern relates to identifying ways to easily download specialized vocabulary in the form of relevant and culturally sensitive visual symbols, such as the WebCrawler mentioned by Bryen (See Article 2, Appendix) You may find other research concerns that your expertise might address and lead to development of technological solutions related to this important problem.

On a broader level, as R&D scientists, your interest in promoting assistive technology solutions may go beyond the Vocabulary Sets and Symbols, covering other AAC issues. Or, it may address solving problems related in general to persons with disabilities. As you may be aware, funders are increasingly recognizing the promise that your work holds for societal impacts through benefits to users. While it sets high expectations for R&D scientists, it is also an opportunity to raise the visibility of your research. For those who are interested in studies contributing to assistive technology development, the work presented in this document has two important messages and related opportunities:

1. A distinguishing aspect of Bryen's research studies is that consumers (the intended beneficiaries) were a fundamental source for identifying the needed vocabulary sets. Developing "solutions" having the "need" in mind helps ensure the relevance of the evidence generated, in addition to its quality. While this concept is not new to many researchers, it sends an important message for knowledge creators in general: an efficient way to achieve impact through R&D results is to start with a vision of the end product and to frame studies geared toward unmet needs of end users. This is true whether you enhance the knowledge base of AAC in particular or Communication Science in general. This is consistent with the concept of *knowledge translation* (CIHR, 2009), currently embraced by funding agencies. Interested researchers may find details relevant to knowledge translation for technology transfer at <http://kt4tt.buffalo.edu/knowledgebase/index.php>.
2. Another aspect of Bryen's research project concerns its initiative in taking the results to a successful end by networking with industry. Such a choice in your own future scope of work might imply collaborating with companies involved in product development. The experience of several researchers involved in technology transfer has shown that partnership with innovative companies can be a rewarding experience. Among other things, it may offer the following opportunities:
 - i. Leveraging resources through collaborative projects under funding mechanisms such as Small Business Industry Research (SBIR) that support both academia and industry.
 - ii. Valuable expertise from companies regarding commercial transfer of research results.
 - iii. Companies as a valuable source of research topics. Companies need data (for example, demographics of persons with disabilities, what works for specific product features, consumers' changing needs) which researchers can supply.
 - iv. Build capacity of graduate students by involving them in the company's work; and also through company staff participating as guest lecturers in researcher programs.
 - v. Companies can be an asset to implementation of research studies. For example, they can be a source for consumer samples, and help with technical know-how, email surveying and information dissemination, and access to in-house material.
 - vi. Enhance dissemination of research through co-authorship with the company on conference papers, articles and/or grant opportunities.

In general, expanding scope of research to include diverse/multiple professionals can lead to increased applications of research studies. Concrete products and services resulting from the studies, demonstrated

to benefit the target beneficiaries raise the visibility of the research work behind them by society at large.

(d) Resources and References

1. Bryen, D. & Moulton, B. (1998). Why “Employment, independence, marriage and sexuality? Because ... We want it all!” *Proceedings of the 3rd Annual Pittsburgh Employment Conference for Augmented Communicators*, Volume 6, Pittsburgh, PA: SHOUT Press. Reprinted in (1999). *Issues in Special Education and Rehabilitation*, 14(2). Also reprinted in Hebrew in ISAAC-Israel (2001).
2. Bryen D. N. (2008). Vocabulary to Support Socially-Valued Adult Roles. *Augmentative and alternative Communication*, Vol. 24, No. 4, Pages 294-301
3. Bryen D. N. (2009). Communication during times of natural or man-made emergencies. *Journal of Pediatric Rehabilitation Medicine: An Interdisciplinary Approach* 2, pp. 123-129
4. Canadian Institute of Health Research 2009. About knowledge translation. Retrieved from <http://www.cihr-irsc.gc.ca/e/29418.html>, last accessed 18 August 2010.
5. A practical Communication Aid developed in the form of a printed Board using the emergency preparedness vocabulary set. <http://disabilities.temple.edu/news/stories/emergencyAAC.shtml> (downloadable emergency4all tool). A sample copy is enclosed for your review and reference.
6. Important information developed for use by people with complex communication needs and first responders, posted on the website of the Rehabilitation Engineering Research Center (RERC) for AAC <http://aac-rerc.psu.edu/index-46053.php.html>. This resource was developed by the RERC and the United States Association for Augmentative and Alternative Communication (USAAC).
7. Interested researchers may visit the website of the Center on Knowledge Translation for Technology Transfer (KT4TT) and check out the knowledge base at <http://kt4tt.buffalo.edu/knowledgebase/index.php>

(e) Epilogue

It is hoped that the contents provided in this package will meet the information needs of your work as you continue to make a difference in the lives of persons with disabilities. The intent of the package is to disseminate the enclosed innovative findings and present relevant research opportunities for your consideration. Feel free to include it in your future scope of work in any way you think appropriate. For further questions and clarifications, stay tuned for a webcast on this important topic where Bryen will present her research project and demonstrate application of the Vocabulary Sets and Symbols.

Thank You !!!

STAY TUNED !

Await further information on ...

**... an upcoming
webinar**

by Prof. Bryen

**on AAC Vocabulary
for Socially Valued
Adult Roles**

Contact: Susan M. Arnold, KT4TT. smarnold@buffalo.edu

III. APPENDIX

Three Research Articles on AAC Vocabulary for Socially Valued Adult Roles

Copies of the research articles:

“Bryen, D. & Moulton, B. (1998). Why “Employment, independence, marriage and sexuality? Because ... We want it all!” *Proceedings of the 3rd Annual Pittsburgh Employment Conference for Augmented Communicators*, Volume 6, Pittsburgh, PA: SHOUT Press. Reprinted in (1999). *Issues in Special Education and Rehabilitation*, 14(2). Also reprinted in Hebrew in ISAAC-Israel (2001).”

“Bryen, D.N. (2008). Vocabulary to Support Socially-Valued Adult Roles. *Augmentative and Alternative Communication*, 24(4), 294-301.”

and “Bryen D. N. (2009). Communication during times of natural or man-made emergencies. *Journal of Pediatric Rehabilitation Medicine: An Interdisciplinary Approach* 2, 123-129.”

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IV. Enclosures

Sample Communication Board

Sample Bookmark

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