

SWAAAC Evidence-Based Practice

Core Vocabulary



The following is a collection of peer-reviewed journal articles addressing core vocabulary as an instructional intervention strategy for students with Complex Communication Needs. The intent of this document is to provide some foundational information for core vocabulary and evidence-based practice. Please contact the SWAAAC office if you would like to add an article to this resource.

**This document contains a variety of resources including, but not limited to peer-reviewed journal articles, magazine articles, academic papers, and conference proceedings. It is the responsibility of the reader to evaluate the sources and use their best judgment with regard to EBP applications.*

Summary of the Research

-A study of 50 toddlers found they all used nine common words across 2 routines, and that the list contained pronouns, verbs, prepositions and demonstratives for a variety of pragmatic functions. Nouns were absent from the list. Findings are consistent with similar studies into the core vocabularies of adults, adolescents, and preschoolers.

-The 50 most frequently used core words for 30 young children with Down Syndrome accounted for 67.2% of total word use. These data are consistent with similar studies related to the core vocabularies of preschoolers and toddlers with typical development.

- One study compared the core vocabulary used by 57 children who are monolingual, and bilingual. The analysis of language transcripts revealed that there were no important differences between the core words from the groups studied.

- The availability of basic concept words represented within 8 different AAC programs and symbol libraries varied but was limited across all programs. However, there was no significant difference in the accessibility of basic concept words because all of them required sophisticated motor and cognitive plans for access.

-Boenisch and Soto analyzed an inventory of oral core vocabulary of typically developing school-aged children. This inventory can be used as a source list for vocabulary selection for school-aged children with AAC needs.

- In a study using narrative story retells, of the total words available in the original story, only a small proportion were used. Some of the high frequency words overlapped with those included in existing wordlists. However, other words were unique to this study. The wordlists generated provide a useful resource that can be used alongside existing wordlists to guide decision making around vocabulary selection for children with complex communication needs.

-In a single subject design study, an 9 year old child with severe intellectual disabilities and deaf/blindness learned to use conceptually referenced words (core vocabulary: more, new, and done) using tactile symbols as an initial AAC vocabulary.

- A 2019 study generated and analyzed a list of words mothers used most frequently during storybook reading and compared it to three existing lists of vocabulary used most frequently by 65 toddlers and preschoolers with typical development. They found substantial overlap. Implications for vocabulary selection and Aided language Input.

Core Vocabulary and Descriptive Teaching in AAC

- Indigo.org

Abstract: Classes typically cover a wide range of topics each year. It can be useful to think about what words will be most useful for our students using AAC, and how we can support them to join in discussion about the varied topics that arise. A descriptive teaching approach has students participate and demonstrate learning using common words to describe (eg. green things), define (eg. eat plants), or predict (eg. not eat me). This approach has a focus on using high frequency, core vocabulary which is already available in a student's comprehensive AAC system. This develops a student's familiarity with navigating to existing vocabulary which will be reusable in a range of contexts, and significantly reduces the programming load for school staff. (Indigo, 2016)

Core Vocabulary Determination for Toddlers

- Mejer Banajee, Cynthia Dicarolo and Sarintha Bura Stricklin

Abstract: The aim of this study was to develop a core vocabulary list for toddlers. Naturally occurring (i.e., unprompted) vocabulary was collected for 50 toddlers, aged from 24 to 36 months, enrolled in five different preschools, during two different activities (play within interest centers and snack time). Results revealed that all 50 children used nine common words across both routines, and that the list contained pronouns, verbs, prepositions and demonstratives. Words representing different pragmatic functions (e.g., requesting, affirming, negating) were also included. Nouns were absent from the list. These data are consistent with similar studies into the core vocabularies of adults, adolescents, and preschoolers. (Banajee, Dicarolo, & Buras Stricklin, 2003)

Core vocabulary of young children with Down syndrome

- Stijn R. J. M. Deckers, Yvonne Van Zaalen, Hans Van Balkom & Ludo Verhoeven

Abstract: The aim of this study was to develop a core vocabulary list for young children with intellectual disabilities between 2 and 7 years of age because data from this population are lacking in core vocabulary literature. Children with Down syndrome are considered one of the most valid reference groups for researching developmental patterns in children with intellectual disabilities; therefore, spontaneous language samples of 30 Dutch children with Down syndrome were collected during three different activities with multiple communication partners (free play with parents, lunch- or snack-time at home or at school, and speech therapy sessions). Of these children, 19 used multimodal communication,

primarily manual signs and speech. Functional word use in both modalities was transcribed. The 50 most frequently used core words accounted for 67.2% of total word use; 16 words comprised core vocabulary, based on commonality. These data are consistent with similar studies related to the core vocabularies of preschoolers and toddlers with typical development, although the number of nouns present on the core vocabulary list was higher for the children in the present study. This finding can be explained by manual sign use of the children with Down syndrome and is reflective of their expressive vocabulary ages. (Deckers, Van Zaalen, Van Balkom, & Verhoeven, 2017)

Framework for Selecting Vocabulary for Preliterate Children Who Use Augmentative and Alternative Communication

- Allison Bean, Lindsey Paden Cargill, and Samantha Lyle

Abstract: Purpose: Nearly 50% of school-based speech-language pathologists (SLPs) provide services to school-age children who use augmentative and alternative communication (AAC). However, many SLPs report having insufficient knowledge in the area of AAC implementation. The objective of this tutorial is to provide clinicians with a framework for supporting 1 area of AAC implementation: vocabulary selection for preliterate children who use AAC. **Method:** This tutorial focuses on 4 variables that clinicians should consider when selecting vocabulary: (a) contexts/environments where the vocabulary can be used, (b) time span during which the vocabulary will be relevant, (c) whether the vocabulary can elicit and maintain interactions with other people, and (d) whether the vocabulary will facilitate developmentally appropriate grammatical structures. This tutorial focuses on the role that these variables play in language development in verbal children with typical development, verbal children with language impairment, and nonverbal children who use AAC. **Results:** Use of the 4 variables highlighted above may help practicing SLPs select vocabulary that will best facilitate language acquisition in preliterate children who use AAC. (Bean, Paden Cargill, & Lyle, 2019)

Monolingual and Bilingual Children With and Without Primary Language Impairment: Core Vocabulary Comparison

- Manon Robillard, Chantal Mayer-Crittenden, Michèle Minor-Corriveau and Roxanne Bélanger

Abstract: Core vocabulary is an important component of augmentative and alternative communication (AAC) systems for school-aged children who have complex communication needs. One method of identifying core vocabulary for these individuals is to study the vocabulary of speaking children. To date, the use of core vocabulary by speaking bilingual children has not been well documented. The present study compared the core vocabulary used by children who are monolingual (French), and bilingual (French – English; English – French). We also gathered and compared language samples from French-speaking children identified as having primary language impairment (PLI), with the goal of better understanding the language differences demonstrated by children with this disability. Language samples were collected from a total of 57 children within a school setting, in a region where French is a minority language. Contrary to the hypothesis, the analysis of language transcripts revealed that there were no important differences between the core words from the groups studied. (Robillard, Mayer-Crittenden, Minor-Corriveau, & Bélanger, 2014)

The availability and accessibility of basic concept vocabulary in AAC software: a preliminary study

- Jillian H. McCarthy, Ilsa Schwarz and Morgan Ashworth

Abstract: Core vocabulary lists obtained through the analyses of children's utterances include a variety of basic concept words. Supporting young children who use augmentative and alternative communication (AAC) to develop their understanding and use of basic concepts is an area of practice that has important ramifications for successful communication in a classroom environment. This study

examined the availability of basic concept words across eight frequently used, commercially available AAC language systems, iPad# applications, and symbol libraries used to create communication boards. The accessibility of basic concept words was subsequently examined using two AAC language page sets and two iPad applications. Results reveal that the availability of basic concept words represented within the different AAC language programs, iPad applications, and symbol libraries varied but was limited across programs. However, there is no significant difference in the accessibility of basic concept words across the language program page sets or iPad applications, generally because all of them require sophisticated motor and cognitive plans for access. These results suggest that educators who teach or program vocabulary in AAC systems need to be mindful of the importance of basic concept words in classroom settings and, when possible, enhance the availability and accessibility of these words to users of AAC. (McCarthy, Schwarz, & Ashworth, 2017)

The Oral Core Vocabulary of Typically Developing English-Speaking School-Aged Children: Implications for AAC Practice

- Jens Boenisch & Gloria Soto

Abstract: This study analyzes the core vocabulary used by typically developing school-aged English-speaking children in the United States while participating in a variety of school activities. The language of typically developing children, some of whom spoke English as a second language was recorded, transcribed and analyzed to identify the most frequently used words across samples. An inventory of oral core vocabulary of typically developing school-aged children resulted from this analysis. This inventory can be used as a source list for vocabulary selection for school-aged children with AAC needs. Implications for vocabulary selection are discussed. (Boenisch & Soto, 2015)

Words needed for sharing a story: Implications for vocabulary selection in augmentative and alternative communication

- Catherine-Ann M. Crestani, Sally A. Clendon and Bronwyn Hemsley

Abstract: This study examined the narrative vocabulary of typically developing children for the purpose of guiding vocabulary selection for children with complex communication needs. Method Eight children in their first year of schooling (aged 5 years 0 months to 5 years 8 months) and 10 children in their second year of schooling (aged 6 years 0 months to 7 years 2 months) generated story retell, personal, and script narratives. These were analysed using the Child Language Analysis (MacWhinney, 2008) program. Results Several words occurred with high frequency across all tasks. Other words were more specific to particular tasks and topics. In the story-retelling task, the majority of the unique words used were from the original story. However, of the total words available in the original story, only a small proportion was used. Conclusions Some of the high frequency words overlapped with those included in existing wordlists. However, other words were unique to this study. The wordlists generated will provide a useful resource that can be used alongside existing wordlists to guide decision making around vocabulary selection for children with complex communication needs. (Crestani, Clendon, & Hemsley, 2010)

Teaching Conceptually Referenced Core Vocabulary for Initial Augmentative and Alternative Communication

- Melinda R. Snodgrass, Julia B. Stoner & Maureen E. Angell

Abstract: Individuals with significant intellectual disabilities who use augmentative and alternative communication (AAC) often fail to acquire large vocabularies. To maximize the functionality of a small vocabulary, AAC users' initial vocabulary typically consists of words that can be used frequently across contexts and functions (i.e., core vocabulary). For many AAC users, core vocabulary often references

concepts rather than concrete items. For individuals with severe intellectual disabilities, however, initial AAC vocabulary often consists of concretely referenced words instead. There is little evidence that these individuals can learn to use conceptually referenced words in initial AAC. A variation of a single subject multiple baseline design across four stimuli was used to demonstrate that an individual with severe intellectual disabilities could learn to use conceptually referenced words as an initial AAC vocabulary. As a result of the intervention (a modified PECS procedure), a 9-year-old boy with multiple disabilities, including intellectual disability and deaf-blindness, learned to make appropriate use of three conceptually referenced tactile symbols for the concepts of more, done, and new as an initial communication vocabulary. (Snodgrass, Stoner, & Angell, 2013)

The most frequently used words: Comparing child directed speech and young children's speech to inform vocabulary selection for aided input

- Nancy Quick, Karen Erickson and Jacob Mcwright

Abstract: Transactional theories of communication development focus on the interplay among child, caregiver, and environmental variables. Typically, this interplay involves symmetry between receptive and expressive modes (i.e., speech), but is asymmetrical for children with complex communication needs who hear speech but use graphic symbols expressively. Aided input, during which a communication partner points to graphic symbols while talking, may increase symmetry, but it is challenging to determine which words to represent with graphic symbols to ensure adequate aided input is provided. In this study, secondary analysis of transcripts of 16 mothers who interacted with their children with typical development across six time points (between 9 and 15 months) revealed 267 words that comprised 80% of the 257,480 words the mothers used. This list of words that mothers used most frequently was compared to three existing lists of the expressive vocabulary used most frequently by 65 toddlers and preschoolers with typical development, indicating substantial overlap. The results suggest that there is a common set of frequently occurring words that mothers use in their daily interactions with infants and toddlers, and that these same words also comprise a significant proportion of the words most frequently used by young children. Implications for representing these frequently occurring words with graphic symbols on the communication systems of children with complex communication needs are discussed. (Quick, Erickson, & Mcwright, 2019)

References

- Banajee, M., Dicarolo, C., & Buras Stricklin, S. (2003). Core Vocabulary Determination for Toddlers. *Augmentative and Alternative Communication, 19*(2), 67-73.
- Bean, A., Paden Cargill, L., & Lyle, S. (2019). Framework for Selecting Vocabulary for Preliterate Children Who Use Augmentative and Alternative Communication. *American Journal of Speech-Language Pathology, 28*, 1000–1009.
- Boenisch, J., & Soto, G. (2015). The Oral Core Vocabulary of Typically Developing English-Speaking School-Aged Children: Implications for AAC Practice. *Augmentative and Alternative Communication, 31*(1), 77-84.
- Crestani, C.-A. M., Clendon, S. A., & Hemsley, B. (2010). Words needed for sharing a story: Implications for vocabulary selection in augmentative and alternative communication. *Journal of Intellectual and Developmental Disability, 35*(4), 268-278.

- Deckers, S. R., Van Zaalen, Y., Van Balkom, H., & Verhoeven, L. (2017). Core vocabulary of young children with Down syndrome. *Augmentative and Alternative Communication, 33*(2), 77-86.
- Indigo. (2016, 7). *Core Vocabulary and Descriptive Teaching in AAC*. Retrieved 05 2020, from indigosolutions.org.au: https://www.indigosolutions.org.au/docs/default-source/classroom-communication/core-vocabulary-descriptive-teaching.pdf?sfvrsn=31dc4056_2
- McCarthy, J. H., Schwarz, I., & Ashworth, M. (2017). The availability and accessibility of basic concept vocabulary in AAC software: a preliminary study. *Augmentative and Alternative Communication, 33*(3), 131-138.
- Quick, N., Erickson, K., & Mccright, J. (2019). The most frequently used words: Comparing child directed speech and young children's speech to. *Augmentative and Alternative Communication, 35*(2), 120-131.
- Robillard, M., Mayer-Crittenden, C., Minor-Corriveau, M., & Bélanger, R. (2014). Monolingual and Bilingual Children With and Without Primary Language Impairment: Core Vocabulary Comparison. *Augmentative and Alternative Communication, 30*(3), 267-278.
- Snodgrass, M. R., Stoner, J. B., & Angell, M. E. (2013). Teaching Conceptually Referenced Core Vocabulary for Initial Augmentative and Alternative Communication. *Augmentative and Alternative Communication, 29*(4), 322-333.