Implementation Program Review for the Multi-Tiered System for Augmenting Language

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Disclaimer

• Presenters are all full-time employees of the University of North Carolina at Chapel Hill.
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Project Core Overview

• Develop a comprehensive implementation program for the delivery of the multi-tiered system for augmenting language (mSAL).
Defining the Need

• Survey representing large sample of students with significant cognitive disabilities \(n=38,038\)
  
• 23% used aided AAC or sign language
  – 70% of aided AAC users and 84% of sign language users used only single symbols or signs for a restricted range of purposes.

• 9% were reported to have no symbolic system of communication
  – 45% used conventional gestures, 15% used unconventional gestures, 40% used reflexive, rather than intentional behaviors

Erickson & Geist (2016)
Beliefs About Students

All individuals, regardless of the severity of their disability, have the basic right to ongoing instruction that will help them develop versatile communication skills.
Beliefs About Teachers

Teachers have the ability to acquire the knowledge, skills, and dispositions needed to help students with significant cognitive disabilities acquire versatile communication skills using a core vocabulary approach.
Intended Outcomes

1. Improvements in student communication abilities and academic achievement.

2. Increases in frequency and quality of teacher use of Universal Core and other elements of mSAL.

3. Availability of a comprehensive implementation model to support mSAL use.
Multi-Tiered System for Augmenting Language (mSAL)

Tier 3: Individualized

Tier 2: Specialized

Tier 1: Universal Core Vocabulary
Multi-Tiered System for Augmenting Language (mSAL)

- Elements of each Tier:
  - a well-organized AAC system
  - core vocabulary and symbols
  - use of natural everyday environments for teaching
  - models of symbol use by partners
  - ongoing resource support and feedback

Informed by Mary Ann Romski and Rose Sevcik’s System for Augmenting Language (SAL) (1996)
What is Core Vocabulary?

• Limited set of highly useful words.
  • ~85% of spoken language is comprised of 250–350 words

• Vocabulary is primarily pronouns, verbs, descriptors, and prepositions. Very few nouns.
Why Emphasize Core?

• **MANY** opportunities to teach and model each day, all day.

• Useful across settings, topics, purposes and people.

• Specialized and personalized vocabulary provide important, but far fewer opportunities to teach and model (targeted in mSAL at Tier 2 and 3)
Universal Core Vocabulary

• 36 words
• Meaningful as single words
• Can be combined meaningfully
• Useful across environments, activities, and interactions
Universal Core Vocabulary Formats

• 36 location
  – Individual use
  – Classroom use

• 9 location X 4 pages

• 4 location x 9 pages 4 square (direct select)
  – 4 in-line (partner-assisted scanning)
  – 4 Square eye-gaze

• High contrast versions for all

• PCS & SymbolStix
3D Symbols from Universal Core

• Represent select core words

• Offer consistency

• Each symbol includes:
  – Unique raised element
  – Printed word
  – Braille
Other Core Vocabularies

If students are effectively using an existing communication system, it is our goal to leverage this system, not replace it.

Tobii DynaVox
Satillo
Prentke Romich
Everyone Communicates
Communication Matrix
by Dr. Charity Rowland of Oregon Health & Science University (original 1990, revisions in 1996 and 2004)

www.communicationmatrix.org

- Skills assessment
- Earliest stages of communication
- Any form of communication, with or without symbol use
- Basic reasons to communicate (refuse, obtain, social, information)
I. Pre-Intentional
II. Intentional Behaviors
III. Unconventional Communication
IV. Conventional Communication
V. Concrete Symbols
VI. Abstract Symbols
VII. Language
Pre-intentional to Intentional Pre-symbolic to Symbolic Communication
Teaching Principles

- Attribute meaning whenever possible.
- Use the Universal Core to model, repeat and expand.
- Encourage but do not require communication.
- Have the Universal Core with you and with the student at all times.
- Be patient, provide sufficient time for students to respond, and hold your point.
Maximize Opportunities: Daily Routines

- Shared Reading
- Predictable Chart Writing
- Independent Reading
- Independent Writing
- Alphabet Knowledge/Phonological Awareness
- Math
- Specials
- Vocational Ed
- Art
- Music
- Lunch
- Personal Care
- Arrival/Departure
Planning Support

- Lesson planning
- District decisions about professional development and coaching supports
- Community of practice at www.project-core.com
Self-evaluation & Observation Checklists

• Guide teachers’ self-assessment and reflection on use of mSAL and the Universal Core Vocabulary.
• Support peer/coach/administrator observations.
• Universal Core vocabulary format & 3D symbol files
  – Various formats
  – Decision-making tools
• 14 Professional Development Modules
  – Self-directed and facilitated formats
• Implementation Resources
  – Instructional Planning Guides & Checklists
• Project Publications
Guided Selection of Suitable Universal Core Formats

- Online and print version of tool.
- 5 questions about each student’s vision, physical access, and visual scanning abilities to identify an initial system.
Thank you for your interest in Project Core and the Universal Core vocabulary. This tool is designed to help you determine which of the common Universal Core vocabulary formats might be a good fit for the student(s) you support. After you answer the questions, you will be directed to the format that is likely a good place to start.

Universal Core Format Decision Making
http://www.project-core.com
Professional Development

• Library of self-directed modules & comprehensive materials to facilitate group
  – Video and transcript
  – Facilitator’s guide
  – Agenda
  – Handouts
  – PPT
  – Pre/post Assessments
  – CEU information
Implementation Resources

• Instructional Routines Planning Guide
  – designed to support inclusion of Universal Core vocabulary in instructional planning for common routines.

• Self-evaluation & Observation Checklists
  – Shared Reading
  – Predictable Chart: Writing
  – Phonological Awareness/Alphabet Knowledge
  – Independent Reading
  – Independent Writing

• 3D Symbol Use
  – Initial guidance to school teams on how to introduce and use the 3D symbols.
Review: Project Goal

• In collaboration with partner schools, develop, evaluate and refine tools for delivery of the multi-tiered system for augmenting language (mSAL).

• Gather data to inform design.
Descriptive Data
Year 1 Review
Professionals \((n=51)\)

On average, participating teachers have several years of experience \((n=16; M=13 \text{ years}; SD=8 \text{ years})\)

On average, participating teaching assistants are newer to the field \((n=11; M=3.5 \text{ years}; SD=2 \text{ years})\)
Students ($n=71$)

**Disability Category**
- Autism: 1
- Developmental Disability: 1
- Hearing Impairment: 20
- Intellectual Disability: 1
- Multiple Disabilities: 1
- Other Health Impairment: 1
- Unknown: 1

**Grade**
- PreK: 16
- Elementary: 16
- Middle: 7
- High School: 32

**Race / Ethnicity**
- American Indian or Alaskan Native: 1
- Asian: 1
- Black or African American: 6
- Hispanic / Latino: 20
- Multiracial: 4
- White: 4
- Unknown: 1

**Gender**
- Male: 26
- Female: 45
Communication Matrix

• Communication Ability Levels (1-7)
• 4 basic reasons for communicating
  – Refusing
  – Obtaining
  – Social connection
  – Providing or seeking information
Change in Average Ability Level

- *Refuse*
  - Pre: 3.1
  - Post: 3.46

- *Obtain*
  - Pre: 3.63
  - Post: 4.34

- *Social*
  - Pre: 2.9
  - Post: 3.7

- Information
  - Pre: 5.53
  - Post: 5.8

$n = 71$

$n = 15$

*p = < .05*
# Number of Students At Each Level

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<td>Total</td>
<td>71</td>
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Classroom Observations: Teacher Behaviors

* Number in parentheses is the total number of observations
Classroom Observations: Student Access and Use

- Student Uses Graphic Symbols
- Student has Access to Core

* Number in parentheses is the total number of observations
Teachers’ self-assessment: I understand how to use a core vocabulary approach with my students who need AAC. ($n=9$)
Teachers’ self-assessment: I feel comfortable and confident in my ability to use AAC with my students. 

(n=10)
Development & Dissemination Plan

1. Refine mSAL implementation model (years 2-4)

2. Scale up to 10 Dissemination Schools (year 5)

3. Build a community of practice and distribute all resources through [www.project-core.com](http://www.project-core.com)
Research Team

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Thank you for Attending!

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