Literacy Interventions that Work: From College to Elementary School and Back Again

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BEST PRACTICE IN MAINSTREAM EDUCATION OF DEAF AND HARD-OF-HEARING STUDENTS
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Agenda

1. Introduction
2. What is an evidence-based practice?
3. What do we know?
4. What do we suspect?
5. Where are we headed?
From college…

• Approximately 30% of students who are deaf or hard-of-hearing (DHH) do not meet grade-level expectations for reading (Easterbrooks & Beal-Alvarez, 2012).

• Reading ability is an important predictor of persistence and degree attainment in college (Cuculick & Kelly, 2003).

• Level of postsecondary attained influences future earnings, upward mobility, and job satisfaction (Walter & Dirmyer, 2013).
How do we change this?
What is an evidence-base practice?

Research design
◦ Causality preferred

Quantity of research
◦ More than one study

Quality of research
◦ Meets standards

Effect size
◦ Statistical significance paired with minimum effect size
**Shared Book Reading**

**Program Description**

Shared book reading is an interactive strategy that adults use to read with children, who are interested in seeing young children’s language and literacy skills. Shared book reading involves adults reading a book with children in a way that helps them learn about the meaning of words and the relationship between words and pictures. The adult may direct the children’s attention to illustrations, print, or word meanings. The adult may engage children in discussions focused on understanding the meaning of words or their language development, emergent reading, and comprehension. Importantly, the adult engages in interactive strategies to ensure that children are able to understand the story.

Specific type of shared book reading: dialogic reading is characterized by a series of questions that encourage children to participate in the reading process, thereby promoting vocabulary, language development, and comprehension. In this intervention, the adult engages in interactive strategies to ensure that children are able to understand the story.

**Research**

The WWC identified seven studies of shared book reading that met the inclusion criteria. All seven studies were considered to be of high-quality and met the WWC’s rigorous standards for evidence. The studies included 5,167 children aged 16 months to 4 years in 12 different classrooms.

The WWC concludes that the effect of shared book reading on the reading readiness of children is small to moderate. Children who receive shared book reading instruction are more likely to meet the reading readiness goals for preschool children.

**Effectiveness**

Shared book reading was found to have mixed effects on children's language and literacy development. However, it has no significant effects on vocabulary or general reading achievement for preschool children.
What do we know about DHH readers and the evidence-base practices in literacy for our population?
Overview

- Minimal change from 4th grade “glass ceiling.”

- 40 years of data and few results

- No support for common practices

- Smaller subgroup studies are much more hopeful

- More promising outcomes than previous studies
Characteristics of DHH readers

- Less aware of misunderstandings
- Rely more on pictures
- “Passive” readers
- Spend less than 12 minutes a day actively engaged in print
- Distinctly different DHH populations

- Age-appropriate when entering school

- Clear advantage

Language

Literacy
What do we know for sure about literacy?

Literacy Success

What do we know about…

- vocabulary
- reading comprehension
- fluency
- decoding or phoneme-grapheme correspondence
Vocabulary
“Tentative Evidence- Based Practices”

Using computers for vocabulary instruction
◦ Luckner & Cooke, 2010

Dialogic Reading
◦ Fung, Chow, & McBride-Chang, 2005; Trussell & Easterbrooks, 2014

Repeated readings or viewings
◦ Cannon, Fredrick, & Easterbrooks, 2009; Guardino, Cannon, & Eberst, 2014
Vocabulary
“Promising Practices”

• Repetition and pre-teaching

• Explicitly instruct all components of a word
  • Meaningful use in natural, contextual situations

• Tiered Vocabulary
  • Tier 3 - appear rarely
  • Tier 2 - appear frequently
  • Tier 1 - expect the students to know but they may not

• Chaining
  • fingerspell, point to word in print, give sign

Beck & McKweon, 2007;
Easterbrooks & Beal-Alvarez, 2013
Word Walls or Notebooks
Semantic organization and concepts

- land
  - train
  - motorcycle
  - bus
  - trolley
  - automobile, truck, van
  - foot
  - semi-tractor trailer

- transportation
  - water
    - ship
    - submarine
    - cargo/container ship
    - sailboat
  - air
    - airplane
    - glider
    - blimp
    - helicopter
    - hot air balloon
    - space shuttle

- transportation
  - land
Think – Pair - Share

• Think for 15 seconds about the following questions.
  • Have you used any of these vocabulary practices with your students? If not, what practice might you adopt?
  • Are these practices effective? OR Do you think they would be effective?
  • What would you do same or different next time you use the practice? OR How would you need to adapt the practice for use with your students?

• Turn to a partner and share your thoughts for a minute. (30 seconds each)

• Share with the group. (2 pairs to share what they discussed.)
Grammar

- Pieces of meaning
- Words, phrases, sentences

Reading comprehension

- Understanding the meaning conveyed by print
Reading Comprehension “Tentative Evidence-Based Practices”

• Explicit comprehension strategy instruction
• Teaching students story grammar
• Modified Directed Reading Thinking Activity - DRTA (Stauffer, 1969)
• Activating background knowledge
• Use of well-written, high interest texts
Reading Comprehension “Promising Practices”

- Bilingual Approach
- Read Aloud with purpose
- Writing to Read
- Technology

Easterbrooks & Beal-Alvarez, 2013
I petted a horse.

I fed the chickens.

I helped with hay.
## Contrastive Analysis

<table>
<thead>
<tr>
<th>Communication</th>
<th>English-Like</th>
<th>ASL-Like</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I want roller coaster</td>
<td>Tomorrow what go to six flags</td>
<td>Tomorrow, I will go to Six Flags.</td>
<td></td>
</tr>
<tr>
<td>We will eat hot dogs and French fries</td>
<td></td>
<td>We will eat hot dogs and French fries</td>
<td></td>
</tr>
<tr>
<td>I watch TV every Monday.</td>
<td></td>
<td>I watch TV every Monday.</td>
<td></td>
</tr>
</tbody>
</table>
Graphic Organizers - Story Maps

Story Map

- Name:
- Book Title:
- Characters
- Setting
- Problem
- Solution
- Layers of Learning

Story Map

- Title
- Author
- Setting
- Characters
- Beginning
- Middle
- End

Name: __________________
Date: ________________
Chunky Monkey

We derive meaning by decoding *chunks* of words, not by decoding individual words.

This is called “sentence parsing”
- Good parsers are good readers
- Poor parsers are poor readers.
“Parsing” example

The monkey playing with the yarn ball, which was old, looked silly.
Quick Write

1. Take 1-2 minutes and write what you could do on next year with your students regarding reading comprehension.

2. Decide if you need more information to implement the strategy.

3. How you might get that information?
Fluency

- Minimal Evidence
  - Luckner & Urback, 2011
  - Repeated readings of word lists
  - Repeated readings of passages
  - Repeated readings of word lists and passages

- More questions than answers
  - Oral reading fluency
  - Signed reading fluency
# Fluency

“Promising Practices”

<table>
<thead>
<tr>
<th>TIME ENGAGED IN TASK</th>
<th>REPEATED READINGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Mastery of decoding</td>
<td>• Independent reading level</td>
</tr>
<tr>
<td>• Fluent model</td>
<td>• Motivating and interesting books</td>
</tr>
<tr>
<td>• Independent reading time</td>
<td>• Student choice</td>
</tr>
<tr>
<td>• Integrated practice</td>
<td>• Goal-oriented</td>
</tr>
<tr>
<td>• Practice monitored by the teacher</td>
<td>• Self-graphing</td>
</tr>
<tr>
<td></td>
<td>• Read with other students</td>
</tr>
</tbody>
</table>

Easterbrooks & Beal-Alvarez, 2013
Decoding “Tentative EBPs”

Grapheme-Phoneme Correspondence

- Visual Phonics
- Lexicalized Fingerspelling and Chaining
- Iconic/Semantic Representation
  - Tucci, Trussell, & Easterbrooks (2014)
Decoding “Promising Practices”

• Morphographic or Morphological decoding
  • Trussell & Easterbrooks, 2015
  ◦ Highlight difference in meanings between similar root words with different morphemes
    ◦ ‘happy’ v. ‘unhappy,’ or ‘joke’ v. ‘joker’
  ◦ Fingerspelling movement patterns
    ◦ ‘er’ added to various root words (e.g., dancer, reader, writer, etc.)

Easterbrooks & Beal-Alvarez, 2013
Discipline-based Literacy

Latin and Greek affixes and roots

CLOSE reading

Reading across texts for connections and situating text in real events
Summarize using an Acrostic

L-
I-
T-
E-
R-
A-
C-
Y-
Teachers of the d/Deaf/hard of hearing should be using evidence-based practices.

The evidence-base in deaf education is inadequate.

Researchers need to engage teachers as active participants in research.
WHEN I DIE I HOPE IT’S DURING A TEACHER INSERVICE...

THE TRANSITION BETWEEN LIFE AND DEATH WOULD BE SO SUBTLE
Causal Factor

A good teaching practice, (not intervention, method, material or strategy) that leads to positive student outcomes

- Easterbrooks & Beal-Alvarez, 2013
What are the causal factors?

1. Higher order thinking skills (HOTS)
2. Communication (CO)
3. Visual Support (V)
4. Explicit Instruction (E)
5. Scaffolding (S)

HOTS & COVES

Easterbrooks & Beal-Alvarez, 2013, Easterbrooks, 2010
Higher Order Thinking Skills

Remembering
- Copy
- Show, tell
- Listen

Understanding
- Find
- Explain

Applying
- Use, change
- Apply

Analysing
- Compare
- Argue, classify

Evaluating
- Judge
- Compare

Creating
- Plan, modify

Adapt

Compare

Combine

Decide

Assess
Children whose teachers are better communicators learn more.

Hermans, et al 2008
Visual Support

Readers need to visualize what they are reading.
Explicit Instruction
Scaffolding
Consider a practice that you use:

What causal factors does your practice include?

How are you collecting data?

Can you use these two methods to defend your educational decisions?
Start at the beginning.....

Early Identification

Early Intervention

Early language access

Early access to reading and reading behaviors

What is early???
And back again….


Questions?

Please feel free to email questions or needs! Thank you so much for listening!

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