Improving Students’ Vocabulary and Listening Comprehension Through Read Alouds

David Chard
University of Oregon

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Oregon Project Staff

- Scott Baker, Ph.D., Principal Investigator, Pacific Institutes for Research
- David Chard, Ph.D., Co-Principal Investigator, University of Oregon
- Lisa Howard, Curriculum, Professional Development, Project Coordination
- Janet Otterstedt, Assessment, Data Analysis, Project Coordination
- Doris Baker, Curriculum Development
- Ben Clarke, Assessment
Pennsylvania Project Staff

- Lana Edwards, Ph.D., Co-Principal Investigator, Pacific Institutes for Research
- Eve Puhalla, Project Coordinator, Pacific Institutes for Research/Lehigh University
- Sabrina Terrizzi, Project Assistant, Lehigh University
Story Read Aloud Project

- 3-Year Project
  - Year 1: Develop and Pilot Curriculum
  - Year 2: Implement Curriculum
  - Year 3: Implement Revised Curriculum
    - Explore curriculum “enhancements”
      - Vocabulary
      - Academic Language
Conceptual Framework

Vocabulary Development

Comprehension Strategies

Text Talk
Project Goal

Enhance 1st grade students’ comprehension of text using:

A “read aloud” approach anchored in “repeated readings” of narrative and information texts

Focused comprehension instruction/practice
  Research-supported comprehension strategies
  Emphasis on higher level thinking skills

Targeted vocabulary instruction
  Tier 1, 2, & 3 words (Beck, McKeown, & Kucan, 2002)

Rich “student talk” about texts
  Dialogic interactions between teacher and students
  Structured interactions between students
Comprehension Strategies Supported by Research

Reader-orchestrated Strategies:
- Previewing/Predicting
- Making connections
- Monitoring and clarifying
- Question generation
- Summarizing/retelling

Teacher-orchestrated Strategies:
- Question asking/answering
- Cooperative learning
- Graphic/semantic organizers/story maps

National Reading Panel (2000)
Vocabulary

“Tiers” of vocabulary words (Beck, McKeown, & Kucan, 2002)

**Tier 1:** Strategic”/Basic words
  e.g., snore; curious

**Tier 2:** “Bonus” words
  e.g., slumbering; continue; peculiar

**Tier 3:** Domain-specific words (low frequency)
  e.g., predator; scutes; carnivore

Explicit instruction; “enriched” practice

Depending on the “tier,” instruction occurs before, during, or after reading
Tier 2 Selection
(Beck, McKeown, & Kucan, 2002)

- **Importance and utility**
  - Characteristic of mature language users; appear frequently across a variety of domains.

- **Conceptual understanding**
  - Provide precision and specificity in describing a concept which students understand.

- **Instructional potential**
  - Can be worked with in a variety of ways so students can build rich representations of them and of their connections to other words and concepts.
Promoting Student “Talk”

- **Group Responses**
  Thumbs up, Thumbs down
  Everyone, think to yourself ...

- **Follow-up Responses**
  Agree?/Disagree? Why?
  Who has a different idea?

- **Book Club Partners**
  Take 30 seconds and tell your partner
  Turn to your neighbor and tell. . .
Curriculum Structure

9 two-week Units (plus a Pre-Unit)

Thematic units (Science content: Living Things)
Pre-Unit: Frogs (AMPHIBIANS)
U1: MAMMALS U4: REPTILES U7: INSECTS
U2: Bats U5: Crocodiles U8: Ladybugs
U3: Elephants U6: Turtles U9: Butterflies

2 books per unit (1 information/1 narrative)
Narrative: Old classics as well as new favorites
Information: A variety of styles
Curriculum Structure

6 to 7 lessons per unit (3 lessons in Pre-Unit)

Information texts: 3 lessons
  Read/Discuss 200-300 words of text each lesson

Narrative texts: 3-4 lessons
  Read • Discuss • Discuss • Read

30-minute Lessons
  5-10 minutes of “before reading” activities
  10-15 minutes of “during reading” activities
  5-10 minutes of “after reading” activities

Suggestions for additional lessons
Organizing Frameworks

Information Texts
• KWL:
  • What do we think we know about the topic?
  • What do we want to know about the topic?
  • What have we learned about the topic?

Narrative Texts
• Story Elements/Personal Response
  • Who is the story about?
    Main Character/Character Clues and/or Setting
  • What happened first/next/end?
  • Did I like/not like the story? Why?
Curriculum Materials

- Books (20: 10 Narrative and 10 Information)
- Lesson Plans
  Detailed plans with “teacher talk” for lesson prep
  Abbreviated plans for lesson delivery
- Story Elements Chart
- Story Retell Sheets
  Student copies/Teacher transparencies
- KWL Chart
- Information Retell Sheets
  Student copies/Teacher transparencies
- Vocabulary Cards
“Repeated Reading”: Information Text

Lesson 1:
- Prepare to read (preview, purpose, prime--K, W of KWL Chart)
- Read 200-300 words (often selected portions of text)
- Review L of KWL Chart; Start retell practice

Lesson 2:
- Review info/vocab covered in Lesson 1 (with book/chart)
- Read another 200-300 words
- Review L of KWL Chart; Continue retell practice

Lesson 3:
- Review info/vocab covered in Lessons 1 & 2 (with book/chart)
- Read another 200-300 words
- Review L of KWL Chart; Do complete retell
“Repeated Reading”: Narrative Text

Lesson 4:
- Prepare to read (preview, purpose, prime)
- Read entire book (minimal stops)
- Practice personal response; Vocabulary introduction

Lesson 5:
- Discuss story (main character; what happened first)
- Start retell practice

Lesson 6:
- Discuss story (what happened next; what happened end; character)
- Continue retell practice

Lesson 7:
- Read entire story
- Do a complete retell
Two Studies: One Per Year

**Study One Major Question**
- Does the read aloud intervention work in a whole class instruction format?

**Study Two Major Question**
- Do pull-out booster sessions work for at-risk students?
Study One Sample

- Oregon
  - 7 intervention classrooms (3 schools)
  - 5 comparison classrooms (3 schools)

- Pennsylvania
  - 15 Intervention classrooms (4 schools)
  - 15 comparison classrooms (3 schools)

- Five students per classroom
  - 3 low performers
  - 2 average performers

- **TOTAL: 110 Intervention and 100 Comparison Students**
Study One Measures

- Narrative retell (SNAP) PROXIMAL
- Expository “retell” PROXIMAL
- Intervention vocabulary test PROXIMAL
- Gates-MacGinitie Level PR: Listening Comprehension & Reading Comprehension subtests DISTAL
- TOLD-P:3 Oral Vocabulary subtest DISTAL
Study One Hypotheses

Proximal Measures

Distal Measures

Treatment Students

Comparison Students

Significant

Not Significant but Positive Trend
Study One Analysis
Procedure

- HLM: three levels (student, teacher, school)
  - School was the unit of random assignment

- Two covariates: Phonemic Segmentation Fluency and Comprehension Total
Study One Results

**PROXIMAL**
- *Narrative retell: \(0.38\) ES
- Narrative Comprehension Total
- *Expository retell: \(0.39\) ES
- Expository Comprehension Total
- Content Vocabulary (\(p = 0.07\))

**DISTAL**
- *Gates Reading Comprehension: \(0.36\) ES
- Gates Listening Comprehension
- Told Oral Language
S: (…) had a little frog, came in a little package, and when the big frog was mean to him…And he keep doing mean things to him, and the kid kept saying, “Don’t do mean things to him,” and then he keeps doing it, and then he keeps saying that, and then when he did it again he said to go home. And then when he, um, mmmmm…
S: Uh...the big frog, the big frog was mad at the little frog... he kicked him off in the water... and the boy cried for him they looked everywhere for him. They couldn’t find him, he went back home, he laid on his bed and he heard a little frog sound, then it was him jumpin’ on... in the window, onto the big frog’s head. He picked up the box and he opened the box and there was a baby frog and he... and... the big frog was mad at him, and they went outside to play, and they went sailing away... mmm... and they (...) and they, the big frog kick him off, and then they were and he couldn’t find him, and the boy cried, and the frog felt bad, and the little boy went home crying, and he went to... uh... his room, and... uh... he heard a little frog sound, and it was him jumping into the window and he jumped onto the big frog’s head. And that’s the end.
Purpose of Study Two

- Implementation of instructional enhancements (Booster sessions)
  - Strong vocabulary emphasis

- Effectiveness of revised Read Aloud Curriculum (still in the process of analysis)
  - Tighter curriculum
  - Tighter study controls
Sample Study Two

- Five Schools in Northeastern Pennsylvania
  - 11 Intervention Classrooms
  - 5 Comparison Classrooms
- Seven Students per Classroom
  - 4 low performers
  - 3 average performers
11 Classrooms (Intervention)

Formal Use of Read Aloud Curriculum

- 33 average
- 44 at-risk

- 22 Vocabulary Booster
- 22 No Vocabulary Booster

5 Classrooms (Comparison)

Independent Access to Read Aloud Materials (e.g., texts)

- 15 average
- 20 at-risk

- 20 No Vocabulary Booster
Vocabulary Booster Session

- Explicit Instruction
  - COBUILD approach (Stahl, 1999)
- Instructional Intensity and Depth
  - “Bringing Words to Life” (Beck, McKeown, Kucan, 2002)
- Systematic and frequent review
## Booster Session Format

<table>
<thead>
<tr>
<th>First day of unit</th>
<th>Day 2 and Day 3</th>
<th>Day 4 and Day 5</th>
<th>Day 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>No booster</td>
<td>Introduce and reinforce target words from the information book</td>
<td>Introduce and reinforce target words from the narrative story</td>
<td>Provide integrated and frequent review of previously taught words</td>
</tr>
</tbody>
</table>
Measures

- SNAP
  - Comprehension Skills
  - Number of Utterances
  - Story Grammar
- Storybook Vocabulary Assessment (SVA) – researcher developed
  - Target Vocabulary
Procedures for Booster Sessions

**Teacher Training**
Two teachers were trained to implement the Booster Sessions and administer/score the SVA.
- 1 teacher = 2 schools
- 1 teacher = 3 schools

**Fidelity**
- 14 lessons, 7 per teacher (46.6%)
- Overall fidelity = 95.57% (77%-100%)
Study Two Hypotheses

- **Vocabulary Measures**
  - Significant

- **Other Proximal Measures**
  - Significant

- **Proximal Measures**
  - Significant

Legend:
- Orange: Booster Students Experimental
- Blue: Non-Booster Students Experimental
- Orange: Comparison Students
## Results

**Booster vs. No Booster (SVA)**

- Statistically significant interaction between time and group $F(1,42) = 36.41; p = .0001$
- Effect size = **.46** (moderate) (Cohen, 1988)

<table>
<thead>
<tr>
<th></th>
<th>Booster</th>
<th>No Booster</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pretest</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>10.64 (8.03)</td>
<td>7.41 (6.80)</td>
</tr>
<tr>
<td><strong>Post-test</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>44.68 (18.87)</td>
<td>17.23 (14.20)</td>
</tr>
</tbody>
</table>
Results
Booster vs. No Booster (SVA)

Mean Vocabulary Score

Time of Testing

Booster vs. No Booster

ES = +0.46
Results
Booster vs. Peer Comparison (SVA)

- Statistically significant interaction between time and group F(1,41) = 15.84; p = .000
- Effect size = .28 (small) (Cohen, 1988)

<table>
<thead>
<tr>
<th></th>
<th>Booster</th>
<th>Peer Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest Mean (SD)</td>
<td>10.64 (8.03)</td>
<td>18.55 (10.06)</td>
</tr>
<tr>
<td>Post-test Mean (SD)</td>
<td>44.68 (18.87)</td>
<td>35.18 (15.68)</td>
</tr>
</tbody>
</table>
Results
Booster vs. Peer Comparison (SVA)

When lines cross it usually represents an interaction

Peers were higher at the beginning

Boosters were higher at the end

Time of Testing

Mean Vocabulary Score
Other Proximal Measures (SNAP)

- Booster vs. No Booster
  - No effects for other proximal measures (comprehension, utterance count, story grammar)

- Booster vs. Peer Comparison
  - No effects for other proximal measure (comprehension, utterance count, story grammar)
And Did They Like it!

What the Students Said
- Students liked it — they liked knowing the information in advance because it allowed them to participate in class discussion
- Some students didn’t think it was fair that they knew the “stuff” before the other kids did

What the Teachers Said
- Very excited and wanted to know “what was going on” in the Booster Sessions
- Students participated more often in whole class
- Students understood concepts better
Limitations/Future Directions for Research

- Limited number of students.
- Target student identification primarily based on beginning reading measures.
- Booster Sessions took place outside of the classroom.
- Standardized assessments for language not as sensitive
- Relatively short intervention (6 weeks)
Conclusions

- Evidence of impact
- Does increase teacher-student interactions and student-student interactions
- School constraints on time is an issue
- Lack of connection to the rest of the instructional day is an issue
Thank You and Questions