

READING INTERVENTIONS
FOR ELEMENTARY-LEVEL
ENGLISH LANGUAGE
LEARNERS: A REVIEW OF
RESEARCH

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Outline



- Rationale for reviewing the literature
- Methodology of literature review
- Discussion of language of instruction
- Instructor-directed interventions
- Peer-mediated strategies
- Computer-based interventions
- Conclusions
- Limitations of the literature
- Future research directions

Rationale

Why elementary-level reading?

- Importance of literacy to academic, social, economic, and vocational prosperity
- Early reading achievement tends to predict later performance

(National Research Council, 1998; Francis et al., 1996; McCardle et al., 2005; National Center for Educational Statistics, 2005; Espinosa, 2005; Figueiroa, 1989; Baker & Gersten, 1997)

Why this population?

- English language learners (ELLs) are the fastest growing subgroup in US public schools
- Hispanics are the largest group of students developing English as a second language
- ELLs tend to be at-risk for reading difficulty, as demonstrated by national standardized assessments
- Previously reported dearth of empirical research on interventions for students of Hispanic background across all instructional domains

Methodology



- Peer-reviewed journal articles from Psych-info and ERIC databases & ancestral search
- Published between 1997 and 2007
- Studies had to include students:
 - ▣ Identified as at-risk/struggling/low-performing readers
 - ▣ Elementary level (K-5)
 - ▣ Spanish as primary language
 - ▣ Not already diagnosed with LD or have other special needs label
 - ▣ Receiving school-based interventions supplemental to or more intensive than the core curriculum

Language of Instruction

- Reading research is immersed within a larger debate about general programming & how much support to provide for the primary (L1) & secondary (L2) languages.
- 5 programming options include:
 - Structured immersion
 - Partial immersion
 - Transitional bilingual
 - Maintenance (developmental)
 - Two-way immersion

(Ovando, 2003)

Language of Instruction (Cont'd)

- Most interventions tailored to fit the current core language of instruction
- General assumption that acquisition of L1 literacy skills will facilitate acquisition of L2 literacy skills.
- Even prior to receiving formal English literacy instruction, intensive Spanish intervention may help improve performance on foundational English literacy skills
- Preliminary research suggests providing concurrent Spanish and English phonological awareness instruction may be beneficial

(Gerber et al., 2004; Escamilla et al., 1998; Vaughn, Linan-Thompson et al., 2006; Vaughn, Cirino et al., 2006; Quiroga et al., 2004)

Instructor-directed Intervention

Grouping format

- While maintenance of performance may be compromised by large groupings (i.e. 1:10) 1:1 format has not been more beneficial than small groups (i.e.1:3)

Length of Intervention

- Much variability in literature
- Shorter interventions tend to be more focused/less comprehensive in terms of content
- Research (i.e. Gunn et al., 2001) suggests added benefits of longer term interventions.

Response to Intervention

- Instead of using a pre-determined intervention length, some researchers have terminated intervention once individual students reach a predetermined level of proficiency on dependent measures of reading skill
 - ▣ This research suggests that students progress at different rates, which is not dependent upon level of oral language proficiency
- In general, the research indicates that level of English language proficiency does not reliably predict response to intervention

(Healy et al., 2005; Linan-Thompson & Hickman Davis ,2002; Leafstedt at al., 2004; Moore-Brown et al., 200; Vaughn, Mathes et al., 2006)

Content of Instruction

- Phonological Awareness
- Fluency-focused
- Multi-component Interventions

Instructor-directed Intervention (Content of Instruction)

Phonological Awareness (PA)

- Intensive PA interventions have helped ELLs close the achievement gap between themselves & monolingual peers & can prevent special education referral
- Can be relatively short in duration (as few as 300 minutes)
- Outcomes affected by model of PA instruction (i.e. developmental vs. non-developmental)
- Preliminary research suggests that segmentation fluency scores, acquisition of strategy use to solve rime and segmentation tasks, & number of responses provided during instruction may differentiate responsive and unresponsive students with similar pretest scores

(Leafstedt et al., 2004; Gerber et al., 2004; Healy et al., 2005, Richards et al., 2006)

Instructor-directed Intervention (Content of Instruction)

Fluency

- Only one study examined a fluency-based curriculum.
- Results failed to demonstrate any positive effects. However, experiment was not controlled for core language of instruction (within the transitional bilingual program, amount of English reading instruction in the classroom varied across subjects).
- Implication for the use of more comprehensive interventions

(Denton et al., 2004)

Instructor-directed Intervention (Content of Instruction)

Multi-Component Interventions

Typical Components:

- Phonemic/phonological awareness
- Fluency
- Letter-sound correspondence
- Word/text reading with added comprehension-building.
- Vocabulary-building

Outcomes:

- Gains demonstrated in areas of phonological awareness, decoding, fluency, reading comprehension, listening comprehension, and reading vocabulary.
- Improvement from the at-risk range & avoidance of special education referral
- Benefits maintained over time

(Vaughn, Cirino, et al., 2006; Vaughn, Mathes, et al., 2006; Linan-Thompson et al., 2003; Quiroga et al., 2002, Denton et al., 2004, Gunn et al., 2000; Gunn et al., 2002; Gunn et al., 2005)

Instructor-Directed Intervention (Adaptations)

Strategies used:

- Visuals, gestures and facial expressions in teaching vocabulary
- Clarifying meaning of content
- Explicit instruction in English language use
- Opportunities to give elaborate responses
- Opportunities to acquire new skills & vocabulary in isolation & practice in context
- Redundancy
- Student-directed activity/conversation about learning material
- Explicit acknowledgement of differences between English & Spanish phonology
- Oral discussion of vocabulary & comprehension
- Slower-paced learning trials

(Denton et al., 2004; Linan-Thompson et al., 2003; Vaughn, Cirino, et al., 2006; Vaughn, Mathes, et al., 2006; Gilbertson & Bluck, 2006)

Peer-mediated Strategies

Reciprocal Peer Tutoring

- Research on this strategy has demonstrated benefits on reading comprehension, sight word reading, phonological reading fluency, & spelling

Dyad Reading Instruction

- Shown to benefit ELLs' reading fluency and reading comprehension

(Greenwood et al., 2001; Saenz et al., 2005; Calhoun et al., 2006; Almaguer, 2005)

Computer-Based Instruction



Fast Forward Language

(Troia, 2004)

- Limited outcomes
- May be more beneficial for lowest-performing ELLs'
- Considering cost of implementation (site license cost of \$40,000), may not be a worthwhile alternative

Conclusions



- Recent research attention in this field is apparent
- Intervention decisions affected by general programming (language of instruction)
- Spanish reading performance may predict later English reading outcomes
- Benefits of instructor-directed, intensive intervention may not depend upon oral language proficiency
- Interventions based upon those developed for monolingual English speakers may be applicable for ELLs as well
- Shorter term interventions & more focused interventions may have benefits, but more comprehensive interventions may be more beneficial for teaching higher-level reading skills
- Unclear how much intervention is necessary, but this may be idiosyncratic to each individual student
- Interventions may help avoid special education identification

Limitations



- ❑ Not all studies used experimental designs (i.e quasi-experimental, single case study designs were included)
- ❑ Some had small number of participants
- ❑ Results may not be generalizable to students with other primary languages
- ❑ Studies used different methodologies for identifying at-risk/low-performing students

Future Research Directions



- More longitudinal research needed
- Further examination of long-term effects of L1 intervention on L2 outcomes
- Compare more and less comprehensive interventions & identify the most necessary components to include
- Further exploration of the response to intervention model for use in this domain
- More research to examine the benefits of peer-mediated strategies and computer-assisted technology

The End!