How to Improve Reading Achievement

Timothy Shanahan
University of Illinois at Chicago
www.shanahanonliteracy.com
So what matters in learning?

- Children’s experience
Experience

- Amount of experience
- Content of experience
- Quality of experience
Amount of Instruction

- The “immediate, powerful” positive impact of amount of instruction and study time on learning is the most “consistent finding of all psychological research on academic learning” (Walberg, 2002)
Children with the most academic experience make the most progress in reading -- as instructional time increases learning tends to rise, too.
The more words spoken to young children by adults is associated with early language development (Hart & Risley, 2003; Gilkerson, et al., 2015)
Full-day kindergarten leads to higher literacy achievement than half-day kindergarten, but it appears to fade (Kay & Pennucci, 2014; Durkin, 1974-75)
Amount of Instruction

- Lengths of school year are correlated with school learning internationally — more days/hours of schooling related to more learning (TIMMS, 2003) and increasing length of school year in primary grades in the U.S. improves literacy learning (Frazier & Morrison, 1998)
Amount of Instruction

Studies of Academic Learning Time find large differences in amount of potentially productive instruction (Fisher, Marliave, Filby, 1978)

Effective teachers (K-3) have students on task/engaged 96% of the time, students of less effective teachers only 63% (Taylor, 1999, 2006).
Amount of Instruction

- Annual Growth for All Students... Catch-up Growth for Those Who are Behind by Lynn Fielding, Nancy Kerr, and Paul Rosier – Kennewick WA schools

- Managed to get 95% of third-graders to grade level by providing low achievers with extra teaching
Other relevant data on amount of instruction

- Preschool
- Reading First
- Absenteeism
- After-school programs
- Summer school programs
- Summer reading
- Snow days
- Days with unplanned teacher absences
What we teach matters
One of the great research findings is that students learn what is taught (Walker & Schefarzik, 1967)
This is particularly important in reading because science has shown that particular learning is essential
Focus here is on those abilities that research has identified as leading to improved reading achievement
PA is the ability detect, manipulate, or analyze the auditory aspects of spoken language independent of meaning (e.g., word separations, syllables, rhymes, phonemes).

Studies show that students can be taught to perceive the phonemes in spoken words in preschool, kindergarten, and grade 1 (Adams, 1990; National Reading Panel, 2000; National Early Literacy Panel, 2008)
Studies show that explicit and systematic phonics instruction in preschool, kindergarten, and Grades 1-2 leads to improved reading of nonwords and words, oral reading fluency, spelling, and reading comprehension (Adams, 1990; NRP, 2000; NELP, 2008)
Oral reading fluency refers to the ability to read text accurately, with sufficient speed, and proper expression. Research shows that oral reading fluency instruction improves word reading, oral reading fluency, and reading comprehension in Grades 1-4 and with struggling readers Grades 1-12 (National Reading Panel, 2000; Kuhn & Stahl, 2003).
Vocabulary

- Vocabulary refers to knowledge of the meanings and meaningful parts of words
- Research shows that explicit teaching of vocabulary can improve reading comprehension (Stahl & Fairbanks, 1986; National Reading Panel, 2000)
Reading Comprehension

Reading comprehension is a process in which the reader constructs meaning from the information included in the text and the reader’s knowledge.

Research shows that students can be taught strategies (e.g., summarization, questioning, monitoring, visualization, prior knowledge) that improve reading comprehension ability (National Reading Panel, 2000).

Research also supports training in inferencing (Bos, et al., 2016) and making sense of text cohesion (Lachner, et al., 2015) and structure (Hebert, et al., 2016; Pyle, et al., 2017).
Writing is important in its own right, but here we are interested in its relationship with reading achievement. Research shows that having students write about text improves reading comprehension and learning (Graham & Hebert, 2010).
Quality of Instruction refers to those aspects of lessons that improve the effectiveness or efficiency of learning without altering the content to be taught or the amount of instruction to be provided.

There are two types of quality features—those specific to the content to be taught and those that are more general.
Quality of Instruction

- PA instruction is most powerful when it includes letter instruction and is kept simple
- Phonics instruction needs to be systematic
- Oral reading fluency is best taught through guided oral reading practice with repetition (and texts the students can’t read well)
- Vocabulary instruction is most effective when students have opportunity to explore rich definitions of words and relationships among words
- Reading comprehension strategies are best taught through gradual release of responsibility
- The amount, challenge level, and content of reading/writing within instruction matters
Quality of Instruction

- Teaching is most effective when the purposes of the lessons are clear to teachers and students.
- Direct instruction is more effective than discovery (explicit instruction, modeling, collaborative use, guided practice, independent practice, review).
- It is important to maximize social interactions within instruction (teachers/students, students/students).
How to Raise Achievement

- Nurture strong instructional leadership (state, district, school)
- Maximize instructional time
- Provide high quality teacher education and professional development
- Provide high quality textbooks and programs
- Provide high quality and sensible assessment of student learning
- Provide special programs for students who need more
- Encourage and support parent involvement
- Motivate at all levels