

Research Proven Strategies in Literacy/Language Arts

Difficulties: Prevalence

- 36% of students below “basic” reading proficiency (NAEP, 2002)
- 20% of all children have reading disability (Shaywitz et al., 1992)
- 70-80% of students with LD have reading impairment
- 74% of students with difficulty in 3rd continue to have difficulty in 9th (Francis et al., 1996)

The Evidence Base: Reading

Recommendations from the field in 5 main areas (NRP, 2000):

1) Phonemic Awareness (manipulating sounds)

- Best when connection between letters and sounds is explicit
- Not a complete program
- System is complicated; teachers’ skills need to be developed (Moats, 2001)
- Need to ensure that materials are carefully constructed

2) Phonics (Connection between letters and sounds, familiarity with patterns)

- Best when systematic and explicit; but not memorization
- Teach speech to print (Moats, 1998)
- Not a complete program
- System is complicated; teachers need more awareness (e.g., Moats, 2001)
- Teaching materials not always consistent (Stein, Johnson & Gutlohn, 1999)

3) Fluency (Accurate and quick reading of text)

- Repeated, monitored, & modeled oral reading is best mode of achieving (Chard, Vaughn, & Tyler, 2002)
- Passages need to be at independent-reading level

4) Vocabulary

- Mostly learned indirectly: gleaned through oral language, reading, listening to reading
- Some must be taught directly: extended instruction, repeated exposure, word substitution
- Multiple methods work best

5) Comprehension (Purposeful, active, monitoring self: “how to think while reading” (Gersten, Fuchs, Williams, Baker, 2001))

- Use of graphic organizers
- Question answering/generation
- Structure--fiction and expository (Gersten, Fuchs, Williams, & Baker, 2001)
- Summarization
- Mixed methods work best

Older Readers

- Reading skills crucial because of need to transact with text (Peterson, Caverly, Nicholson, O’Neal, & Cusenbary, 2000)
- There is evidence of late-emerging reading disability (Leach, Scarborough, & Rescorla, 2003)
- Students still need basics; higher level decoding (Moats, 1998)
- They also need ways to engage with complex ideas even if they cannot read it yet

The Evidence Base: Writing

- As with comprehension, students need to be taught how to complete a process and regulate themselves through the process
- 5 step writing process still thought to be best (Harris & Graham, 1992)
- Higher achievement outcomes for teachers who adhere *consistently* to process and quality (Whaton-MacDonald, Pressley, & Hampston, 1998)
- Use of comprehension techniques “in reverse” (graphic organizers, story structure tools) (Harris & Graham, 1992)
- Handwriting and spelling can be significant barriers for students with disability and need assistance
 - Written and computers tools to accommodate for handwriting
 - peer-assisted learning, mneumonics, strong phonics program to help with spelling (Mastropieri & Scruggs, 2004)

Literacy and Verbal Competency

- General linguistic competency accounts for more of literacy outcomes as students acquire the basics (e.g., reading (Shankweiler et al., 1999))
- General verbal skills need to be taught and reinforced in many content areas
 - Metalinguistic awareness
 - Background knowledge (Shankweiler et al., 1999)
 - Engagement with complex ideas (Beck, McKeown, Hamilton, & Kucan, 1998)

Overall

- There are more conclusive findings on general strategies than programs/curricula
- Expertise of teachers and fidelity of strategies seem to be key issues
- Rigor of instruction time important to consider (Chard & Kameenui, 2000; Vaughn, Levy, & Coleman, 2002)
- Metacognitive strategies, ways to integrate skills especially important for special needs (Vaughn, Gersten, & Chard, 2000)
- More research is needed, especially in the area of writing and adolescent literacy

References

- Beck, I.L., McKeown, M.G., Hamilton, R.L., & Kucan, L. (1998). Getting at the meaning. *American Educator, Spring/Summer, 66-71, 85.*
- Chard, D. & Kameenui, E. (2000). Struggling first-grade readers: The frequency and progress of their reading. *Journal of Special Education, 34, 28-30.*
- Chard, D., Vaughn, S., & Tyler, B (2002). A synthesis of research on effective interventions for building reading fluency with elementary students with learning disabilities. *Journal of Learning Disabilities, 35, 386-406.*
- Fletcher, J.M., & Lyon, G.R. (1998). Reading: A research-based approach. In W.M. Evers (ed), *What's gone wrong in America's classrooms.* Stanford, CA: Hoover Institution Press.
- Francis, D.J., Shaywitz, S.E., Stuebing, K.K., Shaywitz, B.A., & Fletcher, J.M. (1996). Developmental lag versus deficit models of reading disability: A longitudinal, individual growth curves analysis. *Journal of Educational Psychology, 88:3-17.*
- Gersten, R. Fuchs, L.S., Williams, J.P., Baker, S. (2001). Teaching reading comprehension strategies to students with learning disabilities: A review of the research. *Review of Educational Research, 71, 279-320.*
- Graham, S. & Harris, K.P. (1994). The effects of whole language on writing: A review. *Educational Psychologist, 29, 187-192.*
- Leach, J.M., Scarborough, H.S., & Rescorla, L. (2003). Late-emerging reading disabilities. *Journal of Educational Psychology, 95, 211-224.*
- Mastropieri, M.M. & Scruggs, T.E. (2004). *The inclusive classroom: Strategies for effective instruction, 2nd ed.* Upper Saddle River, NJ: Pearson Education.
- Moats, L.C. (1998). Teaching decoding. *American Educator, Spring/Summer, 42-49, 95.*
- Moats, L.C. (2001, October 27). A blueprint for professional development for teachers of reading and writing: knowledge, skills, and learning activities. Presentation at A Symposium on the National Reading Panel Report and Teacher Presentation. Los Angeles, CA.
- National Assessment for Educational Progress (2002). The nation's report card [online]. Retrieved September 25, 2003 from <http://nces.ed.gov/nationsreportcard/>.

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- National Reading Panel (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. Rockville, MD: NICHD.
- Peterson, C.L., Caverly, D.C., Nicholson, S.A., O'Neal, S., & Cusenbary, S. (2000). Building reading proficiency at the secondary school level: A guide to resources. Retrieved September 25, 2003 from <http://www.sedl.org>.
- Shankweiler, D., Lundquist, E., Katz, L. Stuebing, K.K., Fletcher, J.M., Brady, S., et al. (1999). Comprehension and decoding patterns of association in children with reading difficulties. *Scientific Studies of Reading*, 3, 69-94.
- Shaywitz, S.E., Escobar, M.D., Shaywitz, B.A., Fletcher, J.M. & Makuch, R. (1992). Evidence that dyslexia may represent the lower tail of the normal distribution of reading ability. *New England Journal of Medicine*, 326, 145-150.
- Snow, C.E., Burns, S., & Griffin, P. (1998). Preventing reading difficulties in young children. Retrieved September 22, 2003 from www.nap.edu/readingroom/books/prdyc
- Stein, M., Johnson, B., & Gutlohn, L. (1999). Analyzing beginning reading programs: The relationship between decoding instruction and text. *Remedial and Special Education*, 20, 275-288.
- Vaughn, S., Gersten, R., & Chard, D. (2000). The underlying message in LD intervention research. *Council for Exceptional Children*, 67, 99-114.
- Vaughn, S., Levy, S., & Coleman, M. (2002). Reading instruction for students with LD and EBD: a synthesis of observation studies. *Journal of Special Education*, 26, 2-13.
- Wharton-McDonald, R., Pressley, M., & Hampston, J.M. (1998). Literacy instruction in nine first-grade classrooms: Teacher characteristics and student achievement. *The Elementary School Journal*, 99(2), 101-128.