

## **Research on Closing the Achievement Gap in Reading**

There is growing consensus about those elements of reading acquisition for young children that are most fundamental and susceptible to instructional intervention (Snow, Burns, & Griffin, 1998). However, implementing these principles at the elementary level will not eliminate the need for an extensive and effective focus on literacy at the secondary level. Some of the key findings from the research on closing the achievement gap in reading and language arts at both the elementary and secondary level are summarized in this document.

### **Elementary Grades**

Scientifically based reading research indicates that those students at risk for reading difficulties made significant progress when they were provided with the following instructional elements.

- Systematic and explicit small group instruction that focuses on building skills in phonemic awareness, phonics, fluency, vocabulary, and comprehension (U.S. Department of Health and Human Services, 2000).
- Early intensive reading interventions and additional instructional time (Fletcher & Lyon, 1998; Snow et al., 1998; Torgeson, Mathes, & Grek, 2002).
- Evidence of cross-linguistic transfer between English and Spanish phonological awareness tasks (Vaughn et al., 2003)
- Daily one-to-one intervention enabled most of the first graders who were in the bottom 10% for reading ability to move into the average range (Torgeson, 2000).

All but 2% of children attained reading levels within the average range by the end of first grade when high-quality classroom instruction and intensive small group intervention were paired (Mathes, Denton, & Ware, 2005).

- Repeated reading and guided oral reading consistently influence comprehension by developing fluency (U. S. Department of Health and Human Services, 2000).
- Interventions must be aligned with current research on developing oral language, vocabulary, and comprehension skills (Beck, McKeown, & Kucan, 2002).
- Students who began at levels below the 20th percentile on early screening received direct, explicit, systematic instruction from 1st grade through 4th grade. At the end of 4th grade the students scored between the 50th and 65th percentile on reading outcome measures, including comprehension (Foorman, 2003).

Schools closing the achievement gap in literacy were compared to a group of schools that were not closing the gap. Elementary schools successfully closing the achievement gap were reported to have the following characteristics in common: (1) a schoolwide focus on literacy; (2) use of assessment data to inform instruction; (3) school leadership that encouraged inquiry into the

achievement gaps; (4) teacher collaboration; (5) high expectations for low achieving students; and (6) a focus on inside-school factors instead of outside-school factors (Symonds, 2004).

### **Middle and High School Grades**

Research strongly indicates positive correlations between adolescent literacy development and the deliberate and frequent use of cognitive and metacognitive strategies (Rosenshine, 1997). Weaker readers can learn the metacognitive strategies that stronger readers use (Alvermann & Moore, 1991). A student-centered classroom supports reading comprehension and the development of positive literacy identities (Langer, 1999). Integration of speaking and listening into content-area classrooms improves reading comprehension and writing skills (Wilkinson & Silliman, 2000).

A multimethod analysis of an adolescent literacy initiative reinforced the following points about effective reading and language arts programs for secondary students:

- The implementation of intensive intervention for struggling readers using challenging materials;
- The role of engagement and motivation in literacy development;
- The requirement that students be actively involved in making meaning from text;
- The interconnectedness of reading, writing, speaking, listening, and thinking; and
- The need to integrate both generic and discipline-specific literacy strategies throughout the content areas (Diamond, Corrin, & Levinson, 2004).

### **References**

- Alvermann, D. E., & Moore, D. (1991). Secondary school reading. *Handbook of Reading Research, Vol. II* (pp.951-983). White Plains, NY: Longman.
- Beck, I. L., McKeown, M. G., & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction*. New York: Guilford Press.
- Diamond, J. B., Corrin, W. J., & Levinson, J. (2004). *Challenging the achievement gap in a suburban high school: A multimethod analysis of an adolescent literacy initiative*. Naperville, IL: Learning Point Associates. Retrieved September 1, 2005, from <http://www.ncrel.org/gap/studies/msanreport.htm>
- 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?* (pp. 49-90). Stanford, CA: Hoover Institute Press.
- Foorman, B. (Ed.). (2003). *Preventing and remediating reading difficulties: Bringing science to scale*. Baltimore: York Press.

- Langer, J. A. (1999). *Beating the odds: Teaching middle and high school students to read and write well* (Research Report No. 12014). Albany, NY: University at Albany, SUNY, National Research Center on English Learning & Achievement.
- Mathes, P. G., Denton, C., & Ware, P. (2005). *Unpublished data from scaling-up effective interventions for preventing reading difficulties*. [U.S. Department of Education, Institute of Educational Science (IES) (Grant # R305W03257)].
- Rosenshine, B., Meister, C., & Chapman, S. (1996). Teaching students to generate questions: A review of the intervention studies. *Review of Educational Research*, 66(2), 181-221.
- Snow, C. E., Burns, M. S., & Griffin, P. (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press.
- Symonds, K. W. (2004, August). *After the test: Closing the achievement gaps with data*. Naperville, IL: Learning Point Associates. Retrieved February 21, 2006, from <http://www.ncrel.org/gap/studies/basrc.htm>
- Torgeson, J. K. (2000). Individual differences in response to early interventions in reading: The lingering problem of treatment resisters. *Learning Disabilities Research & Practice*, 15, 55-64.
- Torgeson, J. K., Mathes, P. M., & Grek, M. L. (2002). *Effectiveness of an early intervention curriculum that is closely coordinated with the regular classroom reading curriculum*. Paper presented at the Pacific Coast Research Conference, San Diego, CA.
- U.S. Department of Health and Human Services. (2000, December). *Teaching children to read. An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. (Report of the National Reading Panel, NIH Pub. No. 00-4754). Washington, DC: National Institutes of Health, National Institute of Child Health & Human Development. Retrieved March 30, 2006, from <http://www.nichd.nih.gov/publications/nrp/report.pdf>
- Vaughn, S., Linan-Thompson, S., Mathes, P. G., Cirino, P. T., Carlson, C. D., Pollard-Durodola, S. D., et al. (2006). Effectiveness of Spanish intervention for first-grade English language learners at risk for reading difficulties. *Journal of Learning Disabilities*, 39(1), 56-73
- Wilkinson, L. C., & Silliman, E. R. (2000). Classroom language and literacy learning. In M. L. Kamil, P. B. Mosenthal, P. D. Pearson, & R. Barr (Eds.), *Handbook of Reading Research, Vol. III* (pp. 337-360). Mahwah, NJ: Lawrence Erlbaum Associates