Rethinking Learning Disabilities
by G. Reid Lyon

On Tuesday, May 21, 2002, several members of the Schwab Learning team sat in on this teleconference, presented by The Urban Special Education Leadership Collaborative. The speaker was G. Reid Lyon, Ph.D., Chief, Child Development and Behavior Branch, National Institute of Child Health and Human Development, National Institutes of Health. Following is a summary of the points most important to the families we serve.

Learning Disabilities
A “common sense” view of learning disability (LD): LD is unexpected underachievement in children of average or above-average intelligence, who have had ample opportunity to learn, and who don’t have visual or hearing disabilities.

Identification of Learning Disabilities (LD)

- **Current model of LD identification:** Most states interpret the definition of learning disability under the Individuals with Disabilities Education Act (IDEA) as the discrepancy between ability and achievement (called the “wait to fail” model by critics). This approach fails to identify kids until they are 9 years old or older. Most kids identified with LD today are aged 12 to 17. By then, they’ve lost ground academically and emotionally.

- **Proposed (improved) model of LD identification:** Screen children (especially for reading problems) in kindergarten and first grades. Provide specialized instruction as needed. Experts predict (and have proven at multiple test sites) that effective early intervention could reduce the number of children who are poor readers by up to 70%. This model would help kids who don’t have LD get off to a good start and would clearly identify the remaining kids who have true learning disabilities.

Reading Problems, Reading Research
Why is there so much emphasis on early reading today?

- Reading looms as the largest problem in the realm of LD. 90% of kids identified with LD have trouble reading.

- Reading is the most critical skill for learning in all subject areas. Children must learn to read so they can read to learn.

- The science of reading is the most developed of all learning disabilities. It can be effectively applied to methods such as screening, reading program development, and teaching.

The Science of Reading: What have researchers learned?
Researchers at the National Institutes of Health (NIH) have studied the science of reading for the past 20 years. Their most compelling findings are the result of prospective, longitudinal, epidemiological studies of 39,608 students at 44 sites across the United States. Kids have been followed from age 5 for a minimum of five years (often longer). Their individual reading growth curves are tracked along with the reading interventions given.

Researchers, educators, and parents have posed four key questions regarding learning to read:

1. **How do kids learn to read?**
   Predictors of early reading success - or failure - have been identified. The critical skills involved in reading are:
   - phonemic (sound) awareness
   - phonics skills
   - reading fluency
   - reading comprehension
   - ability to actively strategize (put in context, summarize) while reading

2. **What goes wrong for the kids who struggle with reading?** Research is underway to pinpoint the causes of reading difficulties. So far, key factors appear to be:
   - family history
   - neurobiological functioning
   - inappropriate/incomplete reading instruction
   - lack of exposure to language at home. When parents talk to their young children and read to them regularly, kids naturally learn about language, vocabulary, and pre-reading.
3. **How can we prevent reading problems early in a child’s life?** In essence, early reading screening intervention is good for all kids.
   - Early screening helps identify kids who have true reading disabilities. Early intervention provides specialized instruction to help them build reading skills and self-esteem early.
   - Early screening and intervention also starts kids who don’t have LD off on the right track as successful readers.

4. **How should we remediate older kids who struggle with reading but who are past the age for early intervention?**
   These kids require reading programs that are structured, clear, and systematic. Their instruction must be intensive and include lots of practice with decodable text at a level they can read.

**Reading Programs: The Good, Bad, and the Unproven**
Researchers have clearly identified the elements of effective reading programs. They are measuring various reading programs accordingly. While the government research team can’t endorse or oppose any reading program, it can publish objective evaluations of them.

Many educators - and parents - have asked where they can access such evaluations. According to Dr. Lyon, databases of program evaluations will be available within the next year and is being developed by Dr. Grover Whitehurst of the Office of Educational Research and Improvement at the U.S. Department of Education.

Given the recent passage of federal legislation, states applying for federal education funding will have to indicate what reading programs they plan to implement; this allows the federal government to make sure the programs meet the criteria for research-based programs. The federal government will also help states identify and remedy weaknesses in their reading programs.

**Reading Programs Don’t Teach Kids - Teachers Do!**
Even the best research-based reading program is only as effective as the teachers who deliver the instruction. Teachers must be trained not only how to use a particular program but to recognize each child’s unique needs and individualize the program to address those needs. While most research-based reading programs include good "teacher training" modules, educators will need to be trained to assess individual student needs and tailor reading instruction accordingly. This will require training and re-training throughout a teacher’s career to keep up with the research findings and practices.

**For more information:**
The full report is available online in PDF format [http://www.edexcellence.net/library/special_ed/index.html](http://www.edexcellence.net/library/special_ed/index.html), courtesy of the Thomas B. Fordham Foundation.