

When Older Kids Can't Read

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Both students and educators become frustrated when students beyond 3rd grade display reading difficulties. Research-based reading strategies can build a foundation for reading success in students of all ages.

Since 1996, state and federal reading initiatives have focused on the problem of reading failure at kindergarten and the primary grades. The focus on early intervention is well-conceived, given the strong evidence that research-based instruction beginning in kindergarten significantly reduces the number of children who experience reading difficulty (National Institute of Child Health and Human Development, 2000). If children receive instruction in phonological and alphabetic skills and learn to apply that knowledge to decoding words, they are very likely to succeed at reading. Once children fall behind, they seldom catch up, a reason that such states as California, Virginia, and Texas promote early intervention to prevent reading problems. Reading level in 1st grade, moreover, is an astonishingly good predictor of reading achievement into high school (Catts et al., 1999; Cunningham and Stanovich, 1997; Fletcher et al. 1994).

Reading failure begins early, takes root quickly, and affects students for life.

Improvements in reading education in the lower elementary grades, however, are coming too slowly to affect the huge numbers of students beyond third grade who have been the victims of misguided reading instruction and scarce resources. Many people know that about 42 percent of 4th graders score below basic in overall reading skill on the National Assessment of Educational Progress (NAEP). In Washington, D.C., where I am

currently studying reading intervention, the proportion of students beyond 3rd grade who cannot read well enough to participate in grade-level work is between 60 and 70 percent, depending on the grade and year of assessment. Too few children can compete in higher education and about half fail to complete high school. In this community, the rate of adult illiteracy -- reading below 4th grade level -- is 37%, the highest in the nation. Nationally, 25% of all adults are functionally illiterate.

The Older Struggling Reader

What can be done? Plenty, if we are committed to applying best practices supported by reading research. Converging evidence from psychological studies of reading explains the nuts and bolts of learning to read at any age and in any alphabetic language (Lyon, 1998). Most reading scientists agree that a core linguistic deficit underlies poor reading at all ages (Catts et al., 1999; Shaywitz et al., 1999). At any age, poor readers as a group exhibit weaknesses in phonological processing and word recognition speed and accuracy, as do younger poor readers (Stanovich & Siegel, 1994; Shankweiler et al., 1995). At any age, when an individual's reading comprehension is more impaired than his or her listening comprehension, inaccurate and slow word recognition is the most likely cause (Shankweiler et al., 1999).

To complicate matters, the older student has not practiced reading and avoids reading because reading is taxing, slow, and frustrating (Ackerman & Dyckman, 1996; Cunningham & Stanovich, 1997). Therein lies the most challenging aspect of teaching older students: they cannot read so they do not like to read; reading is labored and unsatisfying so they have little reading experience; and, because they have not read much, they are not familiar with the vocabulary, sentence structure, text organization and

concepts of academic “book” language. Over time, their comprehension skills decline because they do not read, and they also become poor spellers and poor writers. What usually begins as a core phonological and word recognition deficit, often associated with other language weaknesses, becomes a diffuse, debilitating problem with language -- spoken and written.

Effective Instruction

Several principles drive effective instruction in reading and language. Such instruction is intensive enough to close the ever-widening gap between poor readers and their grade-level peers as quickly as possible. Reading intervention grounded in research imparts to older readers the skills they missed in primary grades and can bring them to grade level in one to two years (Torgesen, Wagner, Rashotte, Alexander & Conway, 1997; Torgesen et al., in press). The intervention must match the students' level of reading development, because each stage of growth requires a special focus (Curtis & Longo, 1999).

Very poor readers must have their phonological skills strengthened because the inability to identify speech sounds erodes spelling, word recognition, and vocabulary development. For less severely impaired readers, educators must often target text reading fluency. If students can decipher words, educators must aggressively address vocabulary deficiencies with direct teaching and incentives to read challenging material in and out of school. If students do not know the words they are reading and cannot derive meaning from context, they must expand their vocabularies and learn a repertoire of comprehension strategies (Williams, 1998). Students cannot and should not bypass any

critical skills necessary for fluent and meaningful reading just because of their chronological age.

Instruction that works stimulates language awareness. Language-deficient children often miss the subtle differences in speech sounds that distinguish words from one another (*pacific/specific; goal/gold; fresh/flesh; anecdote/antidote; cot/caught*). Direct work on speech sound identification pays off. If students cannot efficiently decode words by using phonic relationships, syllable patterns, and structural analysis (morphemes), they benefit from learning the organization of English orthography at various levels. If students are unfamiliar with the features of written text, such as subtitles, paragraph structures, connecting words and phrases, embedded clauses, idiomatic usages, and figures of speech, these can be taught. If students' written sentences are short, incomplete, or stilted, they can learn sentence expansion and construction. Each of these challenges, moreover, can be met in age-appropriate ways, in inter-woven curricular strands that progress along a developmental sequence (Greene 1996).

Phonological Awareness and Decoding

Recognition of printed words depends on the ability to map speech sounds to letter symbols -- *the alphabetic principle* -- and to recognize letter sequences accurately and quickly -- *orthographic processing*. The majority of poor readers who read below the 30th percentile in the intermediate and upper grades have either pronounced or residual needs for instruction in these basic skills. The techniques for teaching older students, however, differ from the techniques of teaching younger students.

Older students have experienced reading failure from an early age so they must be convinced that a renewed investment of energy will be worthwhile. In the Washington

Literacy Council program, for example, adult students who have recently developed the ability to match speech sounds to letter symbols speak to incoming students about the helpfulness of the structured language instruction they are about to receive. Phonological awareness, decoding, spelling, grammar and other language skills can be taught as a linguistics course in which instructors use adult terminology such as “phoneme deletion” and “morphemic structure”. Phonemic drills are short tune-ups that include games such as reverse-a-word (Say *teach*; then say it with the first sound last and the last sound first –*cheat*.) Students identify speech sounds before they spell words by using the tapping technique -- touching the thumb to successive fingers as they segment and pronounce the speech sounds (Wilson, 1996).

Teachers can teach sound-symbol correspondences in the context of syllable types. Short vowels occur before one or more consonants in closed syllables. Students read the syllables and immediately spell them in longer, age-appropriate vocabulary: for example, *fab*, *fabulous*; *pel*, *compel*; *com*, *accomplish*. As they master six or seven syllable types, students learn to visually chunk sequences of letters and understand spelling patterns. For example, the word *rifle* has one “f” and the word *ruffle* has two “f”s” because of the syllable structure. *Rifle* begins with an open syllable that ends with the long vowel (*ri*), and *ruffle* begins with a closed syllable (*ruf*); each syllable is attached to the final syllable unit –*fle*. To develop an eye for printed syllable units, students can arc under syllables with a pencil before reading a word.

As students’ syllable recognition and spelling progress, teachers can emphasize morphemes -- prefixes, roots, and suffixes, mostly from Latin and Greek (Henry 1997). Beginning with inflections that may change the spelling of a base word (*fine*, *finest*;

begin, beginning; study, studied), students analyze words into units that often link meaning and spelling -- *designate, signal, and assignment*, for example, share a root). Instruction must be cumulative, sequential, and systematic, so that students overcome the bad habit of relying on context and guessing to decode unknown words.

Reading Fluency and Word Recognition

Sound-symbol associations and word recognition are usually fast and automatic in good readers – such readers employ little conscious attention when they identify words. Third graders typically read at more than 100 words per minute; adults typically read at more than 300 words per minute. Poor readers are usually too slow, even after they become accurate. Slowness generally reflects lack of practice with reading.

For some poor readers, slow word retrieval appears to be an unyielding, constitutional characteristic. These children do not easily develop whole word recognition, but instead decode each word as if it were seen for the first time. Older poor readers can usually increase speed with a great deal of practice at several levels: sound-symbol association, word reading, and text reading at an easy level. Quick speed drills, conducted as challenge games to achieve a goal, can build automatic recognition of syllables and morphemes. For example, students can graph their progress reading several lines of confusable syllables such as *pre, pro, per* or *can, cane, kit, kite, pet, pete*. (Fischer, 1999). Alternate oral reading of passages in small groups, reading with a tape-recording, choral reading of dramatic material, and rereading familiar text can all support text reading fluency. Above all, however, students must read as much as possible in text that is not too difficult in order to make up the huge gap between themselves and other students.

Vocabulary and Phrase Meanings

Normally progressing students can read most of the words in their listening vocabulary by 4th or 5th grade. From then on, they learn new vocabulary --primarily by reading-- at the rate of several thousand new words per year. Older poor readers are at least partially familiar with more spoken words than they can read, but because they do not read well, their exposure to the words in varied contexts is limited. Students who are poor readers often have “heard of” a word, but lack depth, breadth, or specificity in word knowledge (Beck & McKeown, 1991). For example, one student of ours defined *designated* as *sober*, from the association with *designated driver*. Many poor readers must overcome a huge vocabulary deficit before they will be able to read successfully beyond the 5th grade level.

Effective vocabulary study occurs daily and involves more than memorizing definitions. Teachers deliberately use new words as often as possible in classroom conversation. They reward students for using new words or for noticing use of the words outside of the class. Such strategies as using context to derive meanings, finding root morphemes, mapping word derivations, understanding word origins, and paraphrasing idiomatic or special uses for words are all productive. If possible, word study should be linked to subject matter content and literature taught in class, even if the literature is being read aloud to the students.

Teaching Comprehension

Increasing emphasis on more advanced reading strategies is appropriate as students reach the 4th or 5th grade level of reading ability. Students who have not read a great deal often lag in their knowledge of genre, text structure, text organization, and literary

devices. They are unused to reading for information, or reading to grapple with the deeper meanings of a text. The internal questioning that occurs in the mind of a good reader must be explicated, modeled, and practiced many times in group discussions. Probing and using open-ended questions about issues significant to the students are most likely to stimulate language. Great texts such as fables, poems, oral histories, and adapted classics promote student engagement. Even if students are working on word recognition, they will benefit from daily opportunities to discuss meaningful material.

The teacher of comprehension must simultaneously teach students about sentence structure, text cohesion, punctuation, phrasing, and grammar because comprehension can break down at the most basic levels of language processing. For example, students who are poor readers may fail to identify the referent for a pronoun, the figurative use of a word, the significance of a logical connective, or the tone of a phrase.

Written Response to Reading

Written response to reading can greatly enhance comprehension, but poor readers must have their writing skills developed sequentially and cumulatively. Writing improves when students practice answering specific question types, elaborating subjects and predicates, combining simple sentences, constructing clauses, and linking sentences into organized paragraphs. These are the building blocks of clear expository writing.

Even as students develop the building blocks for writing, shared and modeled writing helps them transcend the daunting challenges of generating and organizing their thoughts. Rather than turning students loose to face a blank piece of paper, the instructor models and demystifies the composition process. First, the class generates and sorts ideas. Then it decides on an outline and topic sentence. Next, the teacher talks the class

through each step of a shared composition, modeling decisions about what and how to write. Finally, the teacher models the editing process, pointing out sentences that need elaboration, combination, or reordering, and replaces words as necessary. Students are thus prepared to compose independently.

Instruction That Works

Older poor readers can often learn to read with appropriate instruction. Joseph Torgesen and his colleagues at Florida State University have brought very poor readers at grades 3 to 5 up to grade level and documented the maintenance of those gains over two years (Torgesen et al., in press). Students in Torgesen's study received instruction for two hours each day for a total of 80 hours. Two approaches, varying in amount of time spent on decoding and text reading, proved effective.

In Sacramento and Elk Grove, California, several schools have achieved significant gains with 6th through 10th graders using Jane Greene's LANGUAGE! curriculum with classes of nonreaders and very poor readers. Mary Beth Curtis and Anne Marie Longo, at the Boys Town Reading Center in Nebraska, report strong efficacy data for their program based on stages of reading development.

All of these approaches assume that older poor readers can learn to read if they are taught the foundation language skills they missed and they have ample opportunity to apply the skills in meaningful text reading. Each approach teaches language structure explicitly to match the developmental needs of the students and uses systematic, structured, and cumulative methods applied to age-appropriate text. These approaches teach language at all levels: sound, word, sentence, and passage. They unpack the

building blocks of words, ensuring that students process them accurately, build fluency through ample practice, and teach students to engage actively the meanings in text.

Beyond 3rd grade, poor readers can be taught if the program has all necessary components, the teacher is well prepared and supported, and the students are given time, sufficiently intensive instruction, and incentives to overcome their reading and language challenges. Given the right approach, students will buy in. In fact, they'll ask why they were allowed to go so far without being taught to read.

References

- Ackerman, P.T. & Dykman, R.A. (1996). The speed factor and learning disabilities: The toll of slowness in adolescents. Dyslexia, 2, 1-21.
- Beck, I.L., & McKeown, M.G. (1991). Conditions of vocabulary acquisition. In R. Barr, M. Kamil, P. Mosenthal, and P.D. Pearson (Eds.), Handbook of reading research, Vol. II (pp. 789-814). White Plains, NY: Longman.
- Catts, H.W., Fey, M.E., Zhang, X., & Tomblin, J.B. (1999). Language basis of reading and reading disabilities: Evidence from a longitudinal investigation. Scientific Studies of Reading, 3, 331-361.
- Cunningham, A.E. & Stanovich, K.E. (1997). Early reading acquisition and its relation to reading experience and ability 10 years later. Developmental Psychology, 33, 934-945.
- Curtis, M.E. & Longo, A.M. (1999). When adolescents can't read: Methods and materials that work. Cambridge, MA: Brookline Books.

- Fischer, P. (1999). Concept Phonics: Objectives and Activities, levels One and Two. Farmington, ME: Oxtan House Publishers.
- Greene, J.F. (1996). LANGUAGE !: The effects of an individualized structured language curriculum for middle and high school students. Annals of Dyslexia, 38, 258-275.
- Henry, M. (1997). The decoding/spelling continuum: Integrated decoding and spelling instruction from pre-school to early secondary school. Dyslexia, 3, 178-189.
- Lyon, G. R. (1998). Why reading is not a natural process. Educational Leadership, 55 (6), 14-18.
- National Institute of Child Health and Human Development (2000). Report of the National Reading Panel, Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and Its Implications for Reading Instruction. Washington, DC: NICHD. (1-800-370-2943)
- Shankweiler, D., Crane, S. Katz, L., Fowler, A.E., Liberman, A.M., Brady, S.A., Thornton, R., Lindquist, E., Dreyer, L., Fletcher, J.M., Stuebing, K.K., Shaywitz, S.E., & Shaywitz, B.A. (1995). Cognitive profiles of reading-disabled children: Comparison of language skills in phonology, morphology, and syntax. Psychological Science, 6, 149-56.
- Shankweiler, D., Lundquist, E., Dreyer, L.G. & Dickinson, C.C. (1996). Reading and spelling difficulties in high school students: Causes and consequences. Reading and Writing: An interdisciplinary journal, 8, 267-294.
- Shankweiler, D., Lundquist, E., Katz, L., Stuebing, K.K., Fletcher, J.M., Brady, S., Fowler, A., Dreyer, L.G., Marchione, K.E., Shaywitz, S.E., & Shaywitz, B.A.

- (1999). Comprehension and decoding: Patterns of association in children with reading difficulties. Scientific Studies of Reading, 31, 69-94.
- Shaywitz, S.E., Fletcher, J.M., Holahan, J.M., Shneider, A.E., Marchione, K.E., Stuebing, K.K., Francis, D.J., Pugh, K.R., & Shaywitz, B.A. (1999). Persistence of dyslexia: The Connecticut Longitudinal Study at Adolescence. Pediatrics, 104 (6), 1351-1359.
- Stanovich, K. & Siegel, L. (1994). The phenotypic profile of reading-disabled children: A regression-based test of the phonological-core variable difference model. Journal of Educational Psychology, 86, 24-53.
- Torgesen, J.K., Alexander, A.W., Wagner, R.K., Rashotte, C.A., Voeller, K., & Conway, T. (in press). Intensive remedial instruction for children with severe reading disabilities: Immediate and long-term outcomes from two instructional approaches. Journal of Learning Disabilities.
- Torgesen, J.K., Wagner, R.K., Rashotte, C. A., Alexander, A.W., & Conway, T. (1997). Preventive and remedial interventions for children with severe reading disabilities. Learning Disabilities: A Multidisciplinary Journal, 8, 51-61.
- Williams, J. (1998). Improving the comprehension of disabled readers. Annals of Dyslexia, 48, 213-238.
- Wilson, B. (1996). Wilson Reading System, Instructor Manual (3rd Ed). Willbury, MA: Wilson Language Training Corporation.
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