Reading is a challenge for approximately 60 percent of our nation’s children (Patton and Holmes, 2002). For 20 to 30 percent of these children, reading is the most difficult skill they will ever have to master. In Illinois, 38 percent of 3rd graders do not meet Illinois Learning Standards in Reading, as well as 40 percent of 5th graders and 32 percent of 8th graders.

There has been considerable effort in the education research community to investigate and describe best practices in reading instruction. In this paper, we summarize the latest reports on reading and the related issue of teacher preparation. We provide an overview of reading programs and certification in Illinois. Illinois is making a significant commitment to student literacy and changes in teacher certification that will strengthen learning outcomes. In October 2003 all candidates for initial certification will be required to pass the Assessment of Professional Teaching. This test will include items relating to core language arts standards for all teachers.

**Recent Research Findings in Reading**

A summary of recent research findings in reading is made easier because of two national reports that have been issued in the past five years. These reports by the National Research Council and the National Reading Panel represent the consensus judgements of two diverse groups of experts in reading research and reading instruction. We follow descriptions of the two reports with summaries of papers included in a report from The Council for Basic Education that help to provide a fuller picture of what a well-balanced approach to literacy can look like.

Together, these bodies of work suggest that the realm of reading instruction, or literacy (both reading and writing instruction) as some more accurately refer to the topic, would be best served if it was a more inclusive model of instruction rather than a dichotomy of opposing views. It is not a question of phonics or whole language, but a question of how best to integrate the imperative to teach children the decoding skills they need to read words with the exposure to vocabulary, books, discourse, and contextualized language that allows them to make sense of ideas that are about something beyond their current environment.

Each document also addresses the shortcomings in current teacher preparation with regard to reading instruction. What we gleaned from reading these seminal reports is that the 1990s saw a swing towards ‘whole language’ instruction that stresses the process of extracting meaning from written language – at the expense of phonics (that stresses the rules for relating letters to sounds) and phonemic awareness (the segments of sound that the letters of the alphabet represent). Some teachers who are now in the classroom have little knowledge of the theory and instructional methods associated with phonemic awareness and phonics. But there is now a danger that the pendulum might swing too much in the opposite direction – towards a unitary focus on phonemic awareness and phonics to the exclusion of context. This emphasis takes its lead from the report of the National Reading Panel, which does indeed emphasize the importance of phonemic awareness and phonics and related skills. But the
Panel also acknowledges the importance of a balanced program by saying that:

Programs that focus too much on the teaching of letter-sound relations and not enough on putting them to use are unlikely to be very effective. In implementing systematic phonics instruction, educators must keep the end in mind and ensure that children understand the purpose of learning letter sounds and that they are able to apply these skills accurately and fluently in their daily reading and writing activities (p. 10).

The topics that received focused attention from the National Reading Panel have become the basis of program requirements for funding under the Reading First component of the No Child Left Behind Act. While the research evidence is clear that the skills components of reading programs are critical to literacy, it would be unfortunate if in ten years we find ourselves needing to reel in skills instruction because we have lost sight of the end purpose – expanding children’s knowledge of the world, appreciation of literature, and ability to express themselves cogently in writing.

None of the reports give full attention to whether programs such as The Comer Approach, Success for All, Reading Recovery and Hirsch’s Core Knowledge are successful. Pressley (2000) reports that Hirsch’s Core Knowledge is boosting elementary language arts achievement in initial evaluations, while mixed impacts have been found in Comer Approach schools. Success for All also shows mixed outcomes. What does seem clear from the current research is that scripted reading instruction programs are most useful for teachers who are not trained in phonemic awareness and phonics instruction, especially those new to teaching, and for children with low skill levels who benefit from the structured help to make gains in reading. The reports do talk about the importance of creating and maintaining professional environments where teachers can use their expertise to identify and adapt to different student learning needs.

1. NRC’s Report on Preventing Reading Difficulties in Young Children

In 1998 the National Research Council (NRC) Committee on Preventing Reading Difficulties in Young Children issued its foundational report that identified and summarized research relevant to the critical skills, environments, and early developmental interactions that are instrumental in the acquisition of beginning reading skills (Snow, Burns, and Griffin, 1999). The report did not address the teaching of critical reading skills to this young population of students, nor how or whether approaches might vary according to students’ varying abilities.

The report is perhaps best summarized by quoting the Press Release that was issued on March 18, 1998 to announce the release of the report (National Academies, 1998). We provide the lengthy summary because of the useful specificity of the document.

WASHINGTON — Widespread reforms are needed to ensure that all children are equipped with the skills and instruction they need to learn to read, according to a new report from a committee of the National Research Council. An ongoing debate over which teaching method is best has diverted attention from the most important factors affecting how a child learns to read. Children need language-rich preschool opportunities, and teachers need better preparation and support to be able to guide students through the complex mix of skills that go into learning to read, the report says.

“‘We know what factors help prevent reading difficulties,’” said committee chair Catherine Snow, Henry Lee Shattuck Professor of Education at Harvard Graduate School of Education, Cambridge, Mass. “‘We need the will to ensure that every child has access to excellent preschool environments and well-prepared teachers. Because reading is such a complex and multifaceted activity, no single method is the answer. It is time for educators, parents, and everyone else concerned with children’s education...”

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to make sure that children have all the experiences that research has shown to support reading development.”

The majority of reading problems faced by today’s adolescents and adults could have been avoided or resolved in the early years of childhood, says the report, Preventing Reading Difficulties in Young Children. The committee outlined critical components of a child’s education from birth through third grade. For example:

> Children must arrive in first grade with a strong basis in language and cognitive skills, and be motivated to learn to read in order to benefit from classroom instruction. Preschool children need high-quality language and literacy environments in their homes and in out-of-home settings.

> Kindergarten should focus on understanding that words have letters and that letters relate to sounds; the recognition of letters; knowledge of writing concepts; and familiarity with the basic purposes and mechanisms of reading and writing. It should be designed to stimulate verbal interaction and build vocabulary.

> First-graders should be taught to identify words using their letter-sound relationships. To achieve fluency they should practice reading familiar text, sometimes aloud. Those who have started to read independently, typically at second grade and above, should be encouraged to sound out and identify unfamiliar words.

> Beginning in the earliest grades, instruction should promote reading comprehension by helping children develop a rich vocabulary and the knowledge to use it. Curricula should include explicit instruction on summarizing the main idea, predicting events and outcomes of upcoming text, drawing inferences, and other skills.

> Students should perform writing exercises every day to gain comfort and familiarity with writing. Instruction should be designed with the understanding that invented spelling does not conflict with teaching correct spelling, but can actually be helpful for developing understanding of the sounds that different combinations of letters create. Conventional spelling should be developed through focused instruction and practice, and primary-grade children should spell previously studied words correctly in their final writing products.

Children at Risk

Children who have successfully learned to read by elementary school have mastered three skills: They understand that letters of the alphabet represent word sounds, they are able to read for meaning, and they read fluently. Disruption of any of these components can throw off a child’s development, the report says, and could lead to difficulties that ultimately will reduce the chances that the child will finish high school, get a job, or become an informed citizen.

Success in reading builds on the same complex set of skills for all children. Those running into difficulties do not need different instruction from other children, the report says, though they may need more focused, intense, and individual application of the same principles. Any special services they receive should be integrated into high-quality classroom instruction.

Reading problems are disproportionately high among minorities, non-English-speaking children, and those who grow up in poor or urban environments. A particularly thorny political problem has centered on how to educate children whose first language is not English. The report says that these children should first learn the skills of reading in their initial language — the language in which they will best be able to discern the meaning of words and of sentences. If such instruction is not feasible in a given school system, the child should not be rushed prematurely into English reading instruction, but should be given an opportunity to develop a reasonable level of oral proficiency in English before learning to read. Children at risk of reading difficulties because of hearing impairment, language problems, or for other reasons must be identified quickly by pediatricians, social workers, and other early childhood practitioners.
To address these children’s needs, the committee called for an increase in affordable, language-rich preschool programs. Programs designed as prevention for children at risk should focus on social, language, and cognitive development, not just on literacy. Organizations and government bodies concerned with the education of young children should target parents, care givers, and the general public in a campaign to promote public understanding of the way young children learn to read. The program should address ways of using books and creating opportunities for building language skills and literacy growth through everyday activities.

Teacher Preparation

Because major responsibility for preventing reading difficulties is borne by early childhood educators and elementary school teachers, it is critical that they are sufficiently trained for the task. However, many teachers are not adequately prepared, the report says. Practitioners dealing with children under the age of eight need better training in reading development, and primary school teachers need ongoing professional development and continuing opportunities for mentoring and collaborating with reading specialists.

State certification requirements and teacher education curricula should be changed to incorporate key concepts about the way language relates to reading, as well as information about the relationship between early literacy behavior and conventional reading, the report says. Local school officials need to improve their staff development opportunities, which are often weakened by a lack of substantive, research-based content and systematic follow-up.

Schools that lack or have abandoned the use of reading specialists should re-examine their need for them and provide the functional equivalent of these well-trained staff members. These specialists’ roles should be designed to ensure an effective two-way dialogue with regular classroom teachers. Volunteer tutors can be helpful in giving kids practice in reading for fluency, but are unlikely to be able to deal effectively with children who have serious reading problems.

2. The National Reading Panel

In 1997, the National Reading Panel (NRP) was commissioned by the National Institute of Child Health and Human Development (NICHD) and the U.S. Secretary of Education to assess the status of research-based knowledge on the effectiveness of various approaches to teaching children to read. The intention of this report was to build upon and expand the work of the NRC Committee. The NRP focussed on a set of selected topics judged to be of “central importance in teaching children to read,” based on oral and written testimony from 125 reading experts, organizations, parents, educators, and policymakers across the country. The Panel emphasized that the topics that they chose for examination did not represent an exhaustive repertoire of program components that might constitute a well-balanced reading program. Topics that they recognized as beyond the scope of their narrow examination included: the effects of predictable and decodable text formats on beginning reading development, motivational factors in learning to read, the effects of integrating reading and writing “to name a few.”

The NRP report entitled Teaching Children to Read: An Evidence-Based Assessment of the Scientific Research Literature on Reading and its Implications for Reading Instruction was published in April 2000 (NRP, 2000). Overall, the panel concluded that no single approach to reading instruction is superior. To get the most effective outcome, numerous strategies centered on the needs of particular classroom settings are necessary. The Panel concluded that research demonstrates the importance of the following components of reading instruction:

- Phonemic awareness (the manipulation of phonemes or sounds) and phonics skills (the blending of letters and sounds) are of critical importance in early reading instruction. Without the acquisition of these initial skills, the development of future reading abilities is severely hindered.
Systematic phonics instruction improves reading and spelling, and to a lesser extent, comprehension.

Guided oral reading instruction and repeated reading of texts encourages fluency and expression in reading.

Various types of age-appropriate vocabulary instruction and comprehension strategies are effective in generating a better understanding of what is read as well as improving summarization abilities.

Instruction in specific comprehension strategies improves understanding of text and summarization.

There is little research to inform what are the best approaches to pre-service and in-service teacher education in reading instruction.

While it is possible to use computer technology for reading instruction, the Panel concluded that computers are most useful when they are used as word processors given that reading instruction is most effective when combined with writing instruction.

3. The Council for Basic Education

The Council for Basic Education (CBE), a Washington D.C. based organization that advocates for high academic standards and the promotion of a strong liberal arts education for all children, recently released a report entitled Keys to Literacy (Patton and Holmes, 2002). Unlike the NRC and NRP reports, which used strict review standards before research findings were included, the CBE report consists of five review papers written by various experts. The chapters include contributions by G. Reid Lyon, chief of the Child Development and Behavior Branch of the NICHD at the National Institutes of Health, and Grover J. (Russ) Whitehurst, Assistant Secretary of the Department of Education’s Institution for Educational Sciences (formerly the Office of Educational Research and Innovation).

The first article, by G. Reid Lyon, provides an overview of reading and literacy research. He begins by reminding us that reading below basic levels cannot simply be attributed to poverty, immigration, or learning English as a second language. He tells us that 49 percent of the fourth-grade children in California reading below basic levels were from homes where the parents had graduated from college. Given the psychological, social and economic consequences of reading failure, NICHD considers reading failure to reflect not only an educational problem, but a significant public health problem as well. The NICHD has supported research to understand normal reading development and reading difficulties since 1965.

Lyon reaches conclusions from current research that are consonant with those of the National Reading Panel, which is not surprising given the NICHD was a co-convener of the Panel. Lyon explains that NICHD research has taught us that:

In order for a beginning reader to learn how to connect or translate printed symbols (letters and letter patterns) into sound, the would-be reader must understand that our speech can be segmented or broken into small sounds (phoneme awareness) and that the segmented units of speech can be represented by printed forms (phonics). This understanding … is absolutely necessary for the development of accurate and rapid word reading skills (p. 9).

Lyon talks about the importance of reading fluency – the speed of reading words accurately is essential to ensuring that children understand what they read.

The ultimate goal of reading instruction is to enable children to understand what they read, and good comprehenders also have good vocabularies, a knack for summarizing, predicting and clarifying what they have read, and frequently use questions to guide their understanding (p.11).

He goes on to say that:

Without a doubt, children who have learned to recognize and print most letters as preschoolers will have less to learn upon entering school….
Ultimately, children’s ability to understand what they read is inextricably linked to their background knowledge. Very young children who are provided opportunities to learn, think, and talk about new areas of knowledge will gain much from the reading process. With understanding comes the clear desire to read more and to read frequently, ensuring that reading practice takes place (p.12).

This article highlights the importance of early intervention programs provided by well-trained teachers to increase reading skills to average reading levels. By nine years of age, children with reading difficulties will continue to have difficulties learning to read throughout high school. Lyon says that “while older children and adults can be taught to read, the time and expense of doing so is enormous.”

He concludes by noting some teachers lack basic knowledge about the structure of the English language, reading development, and the nature of reading difficulties. He calls on colleges of education to possess the expertise and commitment to foster expertise in teachers at both preservice and in-service levels.

Whitehurst’s article adds an important dimension to our understanding of the development of pre-reading skills. He talks about ‘outside-in’ and ‘inside-out’ domains. The inside-out domain represents children’s knowledge of the rules for translating the particular writing they are trying to read into spoken words – phonemic awareness and phonics. The outside-in domain represents children’s understanding of information outside of the particular printed words they are trying to read. It depends on knowing the meanings of words, having conceptual knowledge of the subject of the written text, and understanding the print that has come before the word being read. It is this aspect of learning that is absent from the National Reading Panel’s review of reading instruction. Children cannot comprehend what they are trying to read if the words are outside their vocabulary, or if they have limited experience with the world. By first grade, linguistically advantaged children are likely to have vocabularies that are four times the size of their linguistically disadvantaged peers. Children who do not have support in their environments for learning outside-in and inside-out skills fall behind.

Preschoolers from low-income homes are particularly prone to these deficits, but we are told that the problem is not confined to a single social stratum, and many low-income parents do an excellent job. Whitehurst concludes that “weaknesses in pre-reading are not a reason to give up on any child. If children are not ready for what the school has to offer, then the school will have to change to meet those children’s needs.”

The Council for Basic Education report (Patton and Holmes, 2002) also contains an article by Louisa Moats on Teachers. She notes that California has instituted a Reading Instruction Competency Assessment for all candidates for the general elementary teaching credential and these requirements are leading to program changes at institutions of higher education. Moats also addresses an often-unrecognized need – that of professional development for university professors who may not be current in their fields.

In June 2002, the Illinois State Board of Education submitted its Illinois Reading First proposal to the U.S. Department of Education for funding under the Reading First component of No Child Left Behind Act. As part of that application, the ISBE provided an overview of current reading initiatives and identified gaps. The Illinois Reading First document contains four tables describing various reading initiatives (ISBE, 2002a). The overview covers the special emphasis
on reading that began in 1997 with the launch of the Right to Read project – with five-year goals to improve reading performance. The overview notes the creation of the Illinois Office on Literacy, the Governor’s Advisory Council on Literacy, and the Illinois Reads initiative. The latter aligns literacy programs to leverage resources, and assures that all agencies’ efforts are aligned with the Illinois Learning Standards. In October 2002, the Advisory Council on Literary issued its *Illinois Reads: A Report on Literacy In Illinois* (Illinois Office of Literacy, 2002).

The Federal Reading First program focuses on K-3 reading development. It incorporates the five components of reading instruction first identified in the National Reading Panel report and subsequently incorporated into the Reading First guidelines. These include phonemic awareness, phonics, vocabulary development, reading fluency and reading comprehension strategies (USDE, 2002).

Federal funding and the state’s proposal call for an external evaluation of the Illinois Reading First program. The Illinois State Board of Education will publish a Request for Proposals for $1,050,000, including development and baseline determinations in FY 03 for $250,000 and ongoing costs of $400,000 in FYs 04 and 05, to assess and evaluate local programs, review the collaborative development of state annual, midterm and final reports, and review assistance concerning responses for national external evaluation.

**Certification and Reading in Illinois**

There are no specific course requirements for Illinois teacher preparation programs to receive approval from the Illinois State Board of Education. However, in practice, programs usually have specific requirements. At SIU Edwardsville, for example, undergraduates in the elementary teacher education program are required to take four courses – an introductory course to the language arts, a reading methods course, a course in children’s literature, and a reading course. More importantly, beginning in October 2003 all candidates for initial certification will be required to pass the Assessment of Professional Teaching. This test will include items relating to core language arts standards for all teachers (ISBE, 2002b). The first standard reads “All teachers must know a broad range of literacy techniques and strategies for every aspect of communication and must be able to develop each student’s ability to read, write, speak and listen to his or her potential within the demands of the discipline.” Tests will vary depending upon whether certification is sought at the Early Childhood, Elementary, Secondary or K-12 level.

Illinois awards Reading Specialist certification to those who complete an approved graduate preparation program. Six public and seven private Illinois universities have approved Reading programs. These programs must demonstrate that their graduates master eight Standards that are each defined by a set of knowledge and performance indicators (ISBE, 2002b). Reading specialists are best used when they provide direct instruction to individuals or in small groups, demonstrate effective literacy instruction and strategies in the classroom or during in-service training, provide observation and constructive feedback to improve regular teachers’ literacy instruction, provide leadership for curriculum development and the selection of instructional materials, and engage in parent education. Unfortunately, using reading specialists as ‘teaching aides’ is less than satisfactory.
The Illinois State Board of Education sponsors six professional development opportunities in reading statewide. One example is ‘Meeting the Challenge’ where reading specialists in the Regional Offices of Education deliver workshops using nine research-based modules on early reading and training. More than 5000 teachers have been trained in the past two years. Another example is the distribution of Reading Kits for Pre-K through third grade to every classroom teacher and reading specialist in the state. These kits contain a collection of research-based articles, professional books, instructional materials and children’s books.

REFERENCES


ABOUT THE ILLINOIS EDUCATION RESEARCH COUNCIL

The Illinois Education Research Council was established in 2000, with support from the Illinois Board of Higher Education. Its mission is to foster education research and evaluation, policy analysis and reviews to further the state’s P-16 efforts. The Council works closely with the Joint Education Committee, a state-level entity that includes the executive officers and designated board members of the Illinois State Board of Education, the Illinois Community College Board, and the Illinois Board of Higher Education, as well as the Illinois Student Assistant Commission and the Illinois Workforce Investment Board. The IERC also assists the work of the Governor’s Council on Educator Quality, and other initiatives that further Illinois’ efforts to provide a seamless system of educational opportunities for its citizens.