This newsletter covers educational issues affecting schools in the Western Regional Educational Laboratory's 4-state region (Arizona, California, Nevada, and Utah) and nationwide. The following articles appear in the Volume 4, Number 1 issue: (1) "The Roots of Reading"; (2) "Breaking the Code: Reading Literacy in K-3"; (3) "Improving Secondary School Reading through Strategic Literacy"; and (4) "Reid Lyon on Improving Students' Reading Ability." The first article discusses activities in daycare which are potential precursors to literacy, since a child's ability to read is guided by skill development that begins in infancy. The second article contends that teachers must know and understand the reading process and be able to recognize where each student is on the continuum. The third article considers some of the metacognitive strategies, such as "think aloud," which promote the understanding of texts rather than simply the memorizing of facts. The last article presents some of the findings of the National Reading Panel (NRP) which reviewed reading research literature. (NKA)
To some, these disparate activities appear unrelated and largely unremarkable. To early child development experts like Ron Lally, Director of WestEd's Center for Child and Family Studies (CCFS), these activities are potential precursors to literacy — early experiences and skills that can prepare children for a lifetime of reading.

A child's ability to read is guided by skill development that begins in infancy. L showing's ability to track the rolling ball is the beginning of a process that, with guidance and encouragement, will enable her to focus on words and images in books. Orlando's "ba, ba" is evidence of his ability to connect labels with objects — a skill integral to reading.

(continued on page 3)
You are engaged right now in a profoundly human and sometimes hotly debated activity — reading.

For accomplished readers, the task of drawing meaning from text may seem transparent. But for researchers, policymakers, and practitioners, the question of how best to help children develop this ability has been the subject of long-standing controversy.

The teaching and learning of reading — a fundamental concern to those of us interested in healthy human development and education — is the focus of this issue of R&D Alert. In the space of a newsletter, it is not possible to cover all of the range nor the depth of issues relevant to this topic, but we offer information based on our research and experience at a few key points in a child's development.

Helping children learn to read is not merely an issue for schools. Our focus begins with families. The first article, covering the earliest years of life, points out that the precursors to reading can easily be seen in infancy. The article offers suggestions for how families and caregivers can nourish prereading skills to help young children prepare for learning to read as they grow older.

We then move to early elementary school, noting some of the important considerations for the transition to independent reading. This piece provides sobering statistics on how many children face difficulty in learning to read, and presents information on what schools can do to help them.

A third feature emphasizes that learning to read does not end in elementary school. Many students are able to "decode" words on the page, but they are seriously challenged by the increasing demands of reading that they face in school and in life. WestEd's Strategic Literacy Initiative, highlighted in this article, has been very successful in helping these students.

We also provide an excerpt of a statement to Congress by Reid Lyon, whose work serves as a basis for the current administration's view of reading instruction and will be evidenced in many of the guidelines coming out of the U.S. Department of Education.

Obviously, there is much more we could say on this important topic, but we hope you find the information in this issue of R&D Alert useful in your own work.

Glen H. Harvey
Chief Executive Officer
Children are no more innate readers than adults are innate teachers. On the surface, this conviction is hardly controversial, but, at its core, it has fueled one of the most long-standing and intense debates in education — often dubbed the "reading wars."

On the one hand are those who advocate the “child-centered” classroom, where student interest and motivation are paramount in the early years, resulting, the argument goes, in students who excel because they feel positive about their abilities and about learning. On the other are those who favor a “content-focused” classroom, which provides greater structure and explicit instruction in the building blocks of language.

While the debate is so impassioned that in some circles to speak of “balance” is heresy, many cry for a cease-fire in this war of dueling pedagogy. Much evidence, in fact, suggests that a purposeful approach also mindful of student motivation is most appropriate for most students. Comprehension, knowledge, and pleasure are fundamental in learning to read, but to get there, children must also be able to break the code.

**Reading is the gatekeeper**

This enormous fuss about instructional approaches to reading has arisen after recent reading assessments have revealed disturbing trends. The latest reading results for grade 4 from the National Assessment of Educational Progress reveal that while overall achievement has stayed about the same, the gap...
between high-achieving and low-achieving students has actually widened. The American Federation of Teachers reports that while the rate of reading failure for students from college-educated families hovers at 33 percent, that of African American, Hispanic, limited-English proficient, and poor children ranges from 60 to 70 percent.

“Reading literacy is the gatekeeper,” says Basha Millhollen, Literacy Projects Director for the Northern California Comprehensive Assistance Center (NCCAC) at WestEd. “It opens the door to the rest of the curriculum, and can offset many of the challenges faced in a system that is, unfortunately, uneven in its successes.”

In part, the outputs of the system are uneven because the inputs are uneven. Children come from a variety of backgrounds and with varying degrees of support for the learning process. “The idea that most children can make order out of disorder is based on a fiction of family life and society in America. We need to give kids the right tools to decode and comprehend the world that surrounds them,” says Millhollen.

**CHILDREN MUST LEARN TO LEARN**

To provide these tools, the movement in reading education is toward explicit, systematic instruction, which also recognizes that student motivation must be maintained. The National Reading Panel’s 2001 meta-analysis of reading research found that effective instruction includes five elements: phonemic awareness, phonics, fluency, vocabulary, and text comprehension. And none is sufficient alone.

Thus, a kindergarten classroom might emphasize phonemic awareness (discriminating among and manipulating the smallest units of sound in a spoken word) in addition to phonics (the connecting of sounds to letters). In the process, children begin to recognize that language has predictable patterns that will enable them to decode unfamiliar words as they move toward increased fluency and comprehension.

The importance of these processes is bolstered by recent brain research that reveals differing neural patterns that respond to different types of teaching methods. Ultimately, building phonemic awareness allows children to make more immediate connections between sound and print.

**AND TEACHERS MUST LEARN TO TEACH**

But the child is only part of the equation. Teachers must also learn explicit reading education strategies and concepts, and this has been perhaps the most neglected aspect of the field. “Teachers must know and understand the reading process,” says

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**PROVIDING READING SUPPORT TO SCHOOLS**

WestEd’s federally funded Northern California Comprehensive Assistance Center (NCCAC) supports schools’ efforts to implement the research-based practices described in the article above. Among others, NCCAC’s Literacy Projects staff work with:

- 19 elementary and middle schools as part of the Reading Success Network;
- 47 elementary schools with Reading Excellence Act grants from the U.S. Department of Education;
- 23 elementary schools as part of the Reading Standards-Based Accountability Network; and
- 8 middle and high schools participating in NCCAC’s Secondary Literacy Support Network.

Evaluation of these projects is ongoing, but national evaluation results on over 200 schools are encouraging. In the latest evaluation of SAT 9 results, schools that had fully implemented these research-based practices had an average growth of 7.8 percentile in total reading points — three times what has been considered to be adequate yearly progress for Title I programs.
Millhollen, “and be able to recognize where each student is on the continuum.”

Such recognition requires teachers to understand reading psychology and development in addition to the structure of the English language. They must be exposed and have access to the best practices in reading instruction. And they must engage in continuous assessment to determine appropriate interventions for struggling readers — and appropriate challenges for those who are succeeding. An understanding of these concepts and their classroom applications will also enhance teacher acceptance — critical to the success of any reading program.

Further, research must continue to explore the reading comprehension element of instruction. Though this skill has historically been assumed to follow naturally from exposure to a variety of texts, mere exposure has been proven insufficient; much remains to be learned about best practices. Finally, because reading comprehension is key to the rest of the curriculum, it stands to reason that all teachers, not just English teachers, should understand and be engaged in its instruction.

CONCLUSION
We have seen the outline of a truce in the “reading wars,” and it is neither the “drill and kill” predicted by the extreme of one camp nor the “laissez-faire approach” feared by the other. Rather, what has emerged is a research-based, rigorous program that should challenge all students to achieve their highest potential. The winners should be our children.
It wasn’t too long ago that Bertha Gosha had given up assigning reading homework to her eighth-grade students.

“They couldn’t read the textbook, or, if they did, they didn’t understand it,” recalls Gosha, a veteran teacher at Central Junior High School in Northern California’s Contra Costa County.

Gosha wasn’t alone in her assessment. For many secondary school teachers across the country, students’ difficulties with academic texts and their lack of sophisticated reading comprehension skills are formidable roadblocks to learning almost any subject, be it biology, economics or, in Gosha’s case, history.

“Some students continue to read in ways that were just fine when they were in third or fourth grade,” says WestEd Senior Research Associate Jane Braunger. “They may not have been presented with and guided in materials that require them to be fluent and flexible readers.”

Tired of having to “spoon-feed” textbook material to her pupils, Gosha began using reading exercises to promote true understanding of the texts rather than allowing students to simply memorize facts.

One of the techniques Gosha continues to use is “Think Aloud,” which prompts students to verbalize their methods of deciphering texts. By keeping a tally of questions, predictions, and points of clarification that arise in reading passages, students are, in effect, “thinking about thinking” — a metacognitive process that is at the crux of WestEd’s Strategic Literacy Initiative (SLI).
BUILDING KNOWLEDGE TOGETHER

Born out of a 1995 literacy task force, the SLI engages teachers and students in inquiry to discover how they read in particular contexts and content areas. The initiative then makes these processes available to educators through publications and professional development programs. Under the guidance of Ruth Schoenbach and Cynthia Greenleaf, SLI's director and associate director, respectively, the endeavor has reached more than 2,000 teachers nationwide, from the Matanuska-Susitna Valley in Alaska to Trenton, New Jersey. San Francisco Bay Area teachers take part in professional development networks during the school year; and an eight-day National Institute in Reading Apprenticeship prepares teacher leaders from around the country.

“We think of ourselves as engaging these various communities of educators and building knowledge together,” says Greenleaf. “One of the things that we’re learning is how well our professional development tools translate into a variety of settings where people’s situations and their mandates are different.”

APPRENTICING WITH EXPERT READERS

What might work in an English class in Tucson, Arizona, might be different from the techniques used by a mathematics teacher in Oakland, California. In virtually every case, the individual teacher’s own experiences and reading methods dictate the approach the teacher will take in his or her own classrooms. In a sense, the students become apprentices to the expert readers, the teachers.

“We’re not giving teachers a blueprint that tells them to do ‘x’ in September, ‘y’ in October, and ‘z’ in November,” says Greenleaf. “These teachers aren’t blank slates that need to be told everything, but they do need to have access to their own knowledge in ways that will serve students.”

“This program gives you words to talk about how you learn, and you can pass those words down to the kids,” says Lisa Krebs, who described herself as a “very typical, middle-of-the-road teacher” before she took part in SLI training two years ago. Today, one of Krebs’ freshman English classes is the focus of one of many case studies that SLI is conducting in order to develop future learning strategies.

At the beginning of the school year, “a lot of the kids were not particularly confident readers,” says Krebs. “Now their writing is better, and part of that is because they’re understanding the text better. They’re starting to feel like they’re actually pretty good readers now, and we’re only in December.”

One of Krebs’ students, Karli Sauza, says she used to “space out” while reading and have no idea what the text was about.

“But if you’re required to take notes, that helps you become more focused on what you’re doing,” says the 14-year-old.

IMPROVEMENTS FOR ALL STUDENTS

While assessment data collected by such standardized tests as the Degrees of Reading Power point to gains for all types of students across the curriculum, the SLI researchers have noticed that readers who previously ranked in the bottom two quartiles are making the greatest improvements.

“These are students who would otherwise be taken out of a learning environment where they have access to academic ideas and language which they need to become good readers — to work solely on skills,” says Greenleaf.

“We also see English language learners making the most gains, so what these trends say to us is that this approach is working for all of these kids, especially the kids that we’re most concerned about.”

By enabling students to make sense of everything from a chemistry textbook to their local newspaper, Braunger and her colleagues believe their work is nurturing a society capable of making better-informed decisions on everything from environmental issues to the next president of the United States.

“The idea that reading, once learned, makes you a competent reader is inaccurate,” says Braunger. “Understanding how we read, why we read, and how we become better at reading is a necessity.”

For information about the SLI, visit www.WestEd.org/stratlit or contact Jana Bouc, SLI Program Coordinator, at 510.302.4245 or jbouc@WestEd.org.
rowed or disciplined too early. In preparing infants to learn to read, it is essential that caregivers are aware of and honor children's natural curiosity, motivations, relationships, and behaviors. As Lally stresses, "We absolutely need to engage in early cognitive language and reading development that leads to good reading, but it is imperative that we do so while considering a child's interest and both adapting to and expanding that interest."

It is the process of exploration — whether it be watching a flock of seagulls in the sky, studying the veins on a fallen leaf, or turning the pages of a book — that develops an infant's interest. With sensitivity, guidance, and nurturing, this interest can be channeled later into the more mature and disciplined process of reading.

This approach is different from the more structured reading instruction advocated for older children — those in preschool or later.* In fact, forcing structured literacy preparation too early can have a detrimental effect on the developing infant and may ultimately diminish his or her interest in reading later, says Lally. Insisting that a child look at a book sequentially, for example, rather than allowing his or her interests to guide exploration of the images and pages, may inadvertently instill the impression that what interests the child is unimportant, thus associating the reading experience with negative feelings of disregard. Rigorous and early, systematic educational tactics also have the potential to push the infant away from other important developmental domains, endangering full intellectual development.

Following an infant's cues in terms of language education and providing a provocative expansion of the child's interests help lay the foundation necessary for reading. So, too, does rich conversational interaction like storytelling, rhyming, and labeling. Caregivers must strive to include these elements in the everyday experience of infants. Reading readiness initiatives must be sensitive to and protect the specific emotional, developmental, and social needs of children under three. And education for infants must embrace and bolster those skills that don't look like reading skills.

Such an approach to prereading development for infants, Lally believes, will mean that "children will be more ready to learn than any generation before them."

For information about the CCFS's work on prereading, contact Lally at 415.289.2300 or rlally@WestEd.org.

* As children move into preschool, early childhood educators build on the strategies used with infants and toddlers by adding more structured prereading activities. One helpful source for emerging literacy development after the age of three is a document by the National Research Council, *Starting Out Right: A Guide to Promoting Children's Reading Success*. In preschool, the guide recommends focusing on a variety of areas, including: phonemic awareness, sociodramatic play, listening skills, oral language development (through engaging in interesting conversations), shared reading and exposure to books, letter-naming, and writing.
The range of research on reading includes many other perspectives in addition to those represented by Reid Lyon's work and the National Reading Panel's report that Lyon references. Readers can learn more about these other perspectives from a variety of sources, including: the International Reading Association (www.reading.org), the Center for the Improvement of Early Reading Achievement (www.ciera.org), and the National Research Center on English Learning and Achievement (cela.albany.edu). In addition, federal officials are forming new research panels to extend the work of the National Reading Panel, partly in response to critiques of its work.

On the basis of a thorough evidence-based review of the reading research literature that met rigorous scientific standards, the National Reading Panel (NRP), convened by the NICHD and the Department of Education, found that intervention programs that provided systematic and explicit instruction in phonemic awareness, phonics, guided repeated reading to improve reading fluency, and direct instruction in vocabulary and reading comprehension strategies were significantly more effective than approaches that were less explicit and less focused on the reading skills to be taught (e.g., approaches that emphasize incidental learning of basic reading skills). The NRP found that children as young as four years of age benefited from instruction in phonemic awareness and the alphabetic principle when the instruction was presented in an interesting and entertaining, albeit systematic manner.

Likewise, the National Center for Educational Statistics recently reported data from its Early Childhood Longitudinal Study involving 22,000 children showing that, after controlling for family income, youngsters who attended more academically oriented preschool programs had significantly higher scores in reading, math, and general knowledge when tested in the fall of their kindergarten year than children attending less academically oriented preschools. In addition, five NICHD longitudinal early intervention studies examining the effectiveness of different early intervention approaches provided in kindergarten and first and second grades for those children most at-risk for reading difficulties strongly suggested, if implemented appropriately, such programs could reduce the number of children who fail to learn to read well below the 38 percent rate currently observed nationally.
Closing the Gap: Meeting the Achievement Challenge in California (Show 1: Horace Mann Elementary School)

2002

This video is part of a six-part series featuring schools that are raising the achievement levels of all their students, most notably students who are African American, Latino, English learners, or living in poverty. The first show features a school where over 70 percent of the students are English learners and participate in the free and reduced-price meals program. Over the last five years, student achievement at the school has increased continuously. The school's reform effort has focused on data-driven decision making and literacy. More information about Closing the Gap is available at www.WestEd.org/closingthegap.

60-minute video / Price: $19.95 / Order #: CC-02-01

Reading for Understanding: A Guide to Improving Reading in Middle and High School Classrooms
Ruth Schoenbach, Cynthia Greenleaf, Christine Cziko, & Lori Hurwitz, Jossey-Bass, 2000

This practical guidebook provides concrete lessons for middle and high school teachers about how to support students' reading in their disciplines, as well as the theoretical underpinnings of the approach. The guide is based on work in which students in an urban ninth-grade class gained an average of two years on a standardized reading test in just seven months and learned to love to read in the process. 224 pages / Price: $19.95 / Order #: READ-99-01

For ordering information, please refer to the product order insert.

Upcoming Policy Briefs on early childhood....

Infant and Toddler Care
The explosion in scientific knowledge about early development, the greater demand for out-of-home child care, and the nationwide focus on early literacy have contributed to the urgency of ensuring that infants and toddlers receive the nurturing, stimulating care they need to succeed in school and later life. This brief defines quality day care and offers policy recommendations to help states determine the most effective ways to support and sustain an adequate supply of quality programs, especially for low-income families.

Preschool
Giving preschool-age children — especially those at risk for academic failure — the tools they need to succeed academically is a growing national theme. This brief examines what those tools are and reviews the research on how preschool programs can foster them. It offers recommendations for policies that can support effective programs and help ensure that families, especially low-income families, have access to them.
Mentoring Programs for New Teachers: Models of Induction and Support
Susan Villani, Corwin Press, 2001

The value of mentoring programs for teacher professional development and retention is widely recognized. For schools and districts about to start or revise their mentoring program, this book surveys the various models that have been developed and allows for easy comparison on characteristics that range from district size to whether teacher evaluation is part of the design. Concrete examples of the various models are described and include contact information to facilitate further investigation.

264 pages / Price: $29.95 / Order #: LI-01-01

Testing English Language Learners: A Sampler of Student Responses to Science and Mathematics Test Items

State and district officials are working to obtain valid measures of academic achievement in English language learners (ELLs) and thus ensure their inclusion in programs for the assessment of content knowledge. This sampler is a resource for these efforts. It analyzes the responses of elementary school native speakers of Spanish, Haitian-Creole, and Chinese who were given open-ended science and mathematics items in both English and their native languages. This comparison of student responses across languages is intended to enhance educators' understanding of ELLs and the interpretation of their responses to test items. The document also includes a series of exercises designed to promote the use of the sampler as a tool for professional development in the area of assessment.

192 pages / Price: $35 / Order #: CLE-01-01

Bridging Cultures between Home and School: A Guide for Teachers
Elise Trumbull, Carrie Rothstein-Fisch, Patricia Greenfield, & Blanca Quiroz, Lawrence Erlbaum & WestEd, 2001

Teaching students from a range of cultural backgrounds is made easier when teachers understand the norms of both the mainstream culture of schools and the cultures of their students. This guide provides a framework for learning about culture, along with many teacher-created strategies for making classrooms more successful for students, particularly those from immigrant Latino backgrounds.

172 pages / Price: $17.50 / Order #: LCD-01-01

Project-Based Learning with Multimedia (PBL+MM)
Science and Mathematics Program, San Mateo County Office of Education & WestEd, 2001

Awarded "Exemplary" status by the U.S. Department of Education Technology Expert Panel, Project-Based Learning with Multimedia (PBL+MM) infuses K-12 classrooms with a model of project-based learning supported by multimedia. Students learn course content and technology skills by completing curriculum-based projects that culminate in multimedia products. The production process involves reading, writing, interviewing, text-based and Internet-based research, and use of multimedia software applications. Activities are student-centered, interdisciplinary, and integrate real-world issues and practices. This model fosters workplace competencies such as teamwork, communication, planning, and problem solving.

CD-ROM / Price: $25 / Order #: IRL-01-02

For ordering information, please refer to the product order insert.
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Your letters are welcomed. Please send comments to Noel White, WestEd, 730 Harrison Street, San Francisco, CA 94102-1242; fax, 415.512.2024; or email, mwhite@WestEd.org.

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