

How We Neglect Knowledge—and Why

By Susan B. Neuman

Several years ago, in collaboration with Kathy Roskos, I was studying the effects of a literacy-related activity that made use of a pretend “office” in a Head Start center (Neuman and Roskos, 1993). Using a task developed by Lomax and McGee (1987), I asked 4-year-old Terrell to identify several objects and to describe their use. Specifically, the purpose of the assessment was to determine whether a child’s involvement with objects like a calendar, grocery list, map, or letter in a literacy-related play setting

might lead to greater understandings of functional print, defined as knowing the name of the object and knowing its purpose. Pointing to the business letter inside an envelope, I asked, “What’s this?” “A mail,” he said. Even though the protocol called for a dichotomous yes or no, it was hard to resist writing sort of.

Following the initial prompt, I asked him what the object could be used for. He did not respond. Continuing down the list to other literacy-related objects (i.e., a grocery list, a coupon), I found that they, too, were “a mail.”

At the time, I assumed an instrumen-

tation error—the instrument was obviously insensitive to a child’s language and way with words. The decontextualized objects had, perhaps, lost their meaning. But it was also true that, although Terrell had been very active in the play office setting, he had not necessarily used the contents in meaningful ways or in a dramatic play. Still, I was convinced that due to his interest and activity, Terrell would be ready for kindergarten instruction and would succeed in reading.

I am not so optimistic anymore. What I failed to recognize in constructing this

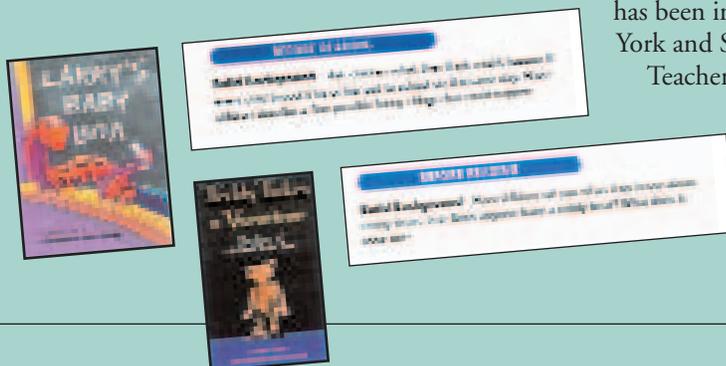
Neglected Knowledge: The Facts

Basal Publishers Misunderstand the Importance of Building Background Knowledge

According to Marilyn Jager Adams (2005), a top reading researcher, the publishers of basal readers—like so many educators across the country—were misled by the whole-language movement of the 1970s and 1980s. Describing the times, she writes, “Increasingly, teachers began to eschew published curricular materials, and in response, publishers began to displace their orderly lesson designs with a smorgasbord of ‘engaging’ activities. The proven importance of teaching children the language and background knowledge required for their lessons and texts was reversed to a concern for ensuring that their lessons and texts not exceed the language and background knowledge they already possessed” (p. 230). This is a catastrophic misunderstanding. Instead of systematically *building* children’s background knowledge and vocabulary, basals systematically *limited* the background knowledge and vocabulary covered by their texts.

In the Spring 2003 issue of *American Educator*, Kate Walsh provided clear examples of this distortion of the research on background knowledge. Sadly, her examples did not come from basals from the 1970s and 1980s; they were from basals published in 2000 and 2003—doc-

umenting that today’s basals continue to limit, instead of build, background knowledge. Two of Walsh’s examples are reproduced here.



Basal Readers Include Very Little Informational Text

Studies since the mid-1980s have consistently shown that basal readers include very little informational text. For example, Flood and Lapp (1986) looked at the first- through sixth-grade content of eight basals finding that narrative selections accounted for more than 66 percent of the pages. Smith (1991), who looked at the content of three basals for grades one, three, and five, found that 15 to 20 percent was nonfiction content. More recently, Moss and Newton (2002) examined how many selections from informational trade books were included in six popular basal readers published from 1995 to 1997. As the chart on the right shows, informational literature is relatively sparse.

Important Content Is Being Squeezed Out

According to “Quality Counts at 10: A Decade of Standards-Based Reform” (*Education Week*, 2006), only 12 states have elementary-school standards in history/social studies that are “clear, specific, and grounded in content.” Furthermore, a survey of 33 states conducted last year found that, at the elementary-school level, instructional time for social studies has been reduced in 16 states—and it has been increased in only two states, New York and South Carolina (Rothman, 2005).

Teachers and parents are worried about important content being squeezed out. In a 2002 AFT poll, 71 percent of teachers agreed (42 percent strongly agreed) that “the pressure of testing has led to a more narrow curriculum,

play setting was that Terrell needed more than theme-related objects. He needed to learn the words and some beginning understandings about what people might do in an office and why one might write a letter. He needed knowledge and vocabulary to convey his ideas. And with such instruction, I suspect that Terrell would have begun to develop the narrative routines, the concepts, and the problem-solving strategies that are, in fact, related to reading success.

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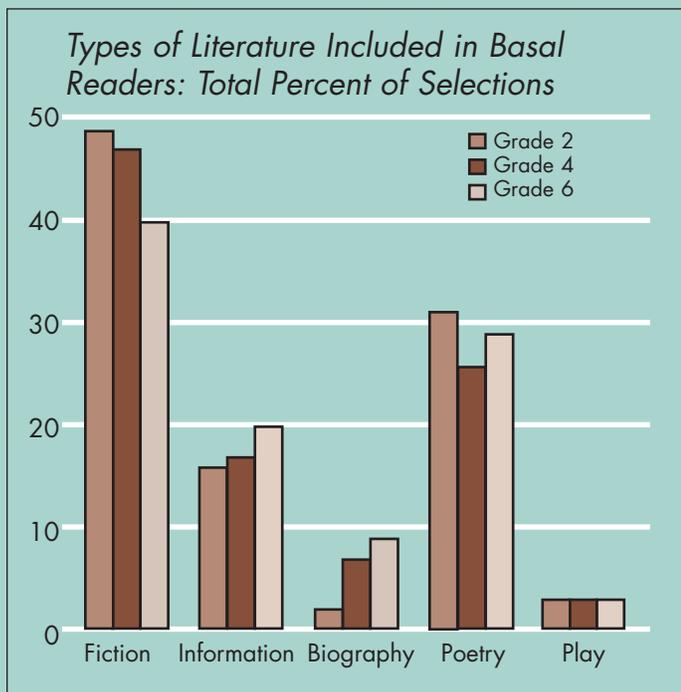
Poor children do not fare well in our society. They have more hearing problems, ear infections, dental problems, lead exposure, poor nutrition, asthma, and poor housing (Rothstein, 2004). These conditions appear to be far more

pernicious for children in the early years of development than in the later adolescent years, shaping children's ability and achievement when cognitive connections are forming (Duncan and Brooks-Gunn, 1997).

Hundreds of studies (Jencks and Phillips, 1998) have now documented the dramatic, linear, negative relationships between poverty and children's cognitive-developmental outcomes. Before kindergarten begins, differences in cognitive skills between high-status and low-status children are, on average, 60 percent (Lee and Burkam, 2002). Studies have documented large differences in children's receptive and expressive language skills; in children's ability to identify beginning sounds and letters, colors, and numbers; and in the number of

words they have been exposed to prior to entering kindergarten (Hart and Risley, 2003; Denton, West, and Waltston, 2003; Vellutino et al., 1996).

But perhaps even more serious than skill deficiencies are knowledge deficiencies that arise for children who have limited access to the informal informational lessons that can be transmitted through day-to-day interactions. Although a significant amount of research has focused on differences in early language learning (McCardle and Chhabra, 2004), in vocabulary and phonemic awareness and how they might be acquired, there has been relatively little discussion of differences among children in content knowledge and its relationship to achievement. This is a critical
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resulting in valuable material not being covered.” A 2005 poll found that 82 percent of the public—and 92 percent of those with a great deal of knowledge about No Child Left Behind—are concerned that the reliance on testing in math and English “will mean less emphasis on art, music, history, and other subjects” (Rose and Gallup, 2005).

Little Classroom Time Is Devoted to Informational Text

According to a recent literature review, there is a “scarcity of informational text in primary-grade classrooms (and, to some extent, throughout elementary school)” (Palincsar and

Duke, 2004, p. 189). Just how scarce is it? Duke (2000) studied the prevalence of informational text in 20 first-grade classrooms in and around Boston. Half the classrooms were from very high socioeconomic status (SES) districts and half were from very low SES districts. By visiting each of the classrooms four times during one school year, Duke found that, on average, only 3.6 minutes per day of instruction were typically devoted to informational text. The situation was even worse in the classrooms from low SES districts—a mere 1.4 minutes per day, on average, were devoted to informational text.

More Informational Text Aids Children's Reading Progression

What if first-graders were exposed to more informational text? To find out, Duke took 30 first-grade classes from 30 different schools in six low-income districts and broke them into three groups: 1) an experimental group in which teachers drew one-third of their texts from informational genres, one-third from narrative genres, and one-third from other genres (like poetry or procedural texts); 2) a control group in which teachers were given resources (e.g., to buy books) similar to those of the experimental group, but were not asked to change what they teach; and 3) a control group in which there were no changes. The results speak for themselves:

By the end of grade 1, [the] experimental group ... children were better writers of informational text than children in the control groups, had progressed more quickly in reading level, and had shown less decline in attitudes toward recreational reading. Experimental classes that entered school with relatively low literacy knowledge showed higher overall reading and writing ability by the end of grade 1 than comparable control classes (Palincsar and Duke, 2004, p. 189-190).

—Editors

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oversight because indications are that limited content knowledge might ultimately account for what appear to be comprehension difficulties (Vellutino et al., 1996) or higher-order thinking difficulties in older children. Therefore, if children's developing conceptual knowledge becomes subordinated to a focus on the relatively small number of necessary procedural skills early on, then the gap between socioeconomic status groups may widen with each successive grade level, building to insurmountable gaps after just a few years of schooling.

To date, much of the discussion on prevention or early intervention for children at risk has focused on whether special interventions, such as Head Start and Even Start, and remedial instruction like Reading Recovery are likely to raise and sustain children's literacy achievement. But it seems to me that the real leverage may not lie in such episodic events. Instead, it may be the continual, systematic, everyday ways we engage children in learning new knowledge and information, starting in the early years. In an analysis of programs with long-term effectiveness for low-income children, Frede (1998) reported the presence of curriculum content and learning processes that cultivate knowledge and skills, with an emphasis on language development. Children who had a broad base of experience in domain-specific knowledge were likely to move more rapidly in acquiring complex skills.

Why Have We Overlooked the Importance of Building Knowledge in Early Childhood?

I can't say for sure why reading experts, by and large, have overlooked the role that knowledge plays in reading, but I can think of three possible reasons. Sometimes, consensus in a particular field of inquiry halts progress and innovative thinking rather than promotes it

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(Kuhn, 1962). In part, the virtual consensus on the skills necessary to learn how to read may be one reason for the limited attention given to the important role of knowledge in early literacy development. Recent reports (McCardle and Chhabra, 2004), for example, contend that children's future success in becoming skilled readers is dependent on their becoming aware that spoken words are composed of smaller elements of speech, grasping the idea that letters represent these sounds, learning the many system correspondences between sounds and spellings, and acquiring a repertoire of highly familiar words that can be recognized on sight. Much of the research (National Reading Panel Report, 2000), in fact, substantiates the importance of these components in learning to read.

However, research that underlies this model has ignored the environmental factors, including material resources and the quality of the home environment, that play a central role in learning to read. These factors contribute to background knowledge and concepts, vocabulary, familiarity with syntactic and semantic sentences, and verbal reasoning abilities.

The second reason for not recognizing the importance of knowledge in early childhood could be definitional. Although the terms knowledge, skills, and dispositions are clearly familiar to most early childhood educators, rarely have we attempted to define them. As a result, there has been a lack of clarity and understanding about the scope and depth of content knowledge in these early years.

And the third reason for overlooking the importance of knowledge in early childhood might be ideological. The field of early childhood still grapples over the balance between learning processes (i.e., thinking skills), or how children learn, and content, or what they learn (Eisner and Vallance, 1974). More often than not, young children, particularly those in high poverty areas, are subjected to intellectually trivial activities, limited in content and only loosely connected between subjects. Sepanen, Godon, and Metzger (1993) found, for example, that early childhood

Title I classrooms did not provide any regular experiences in topics of math, language, and science. Minds atrophy under such conditions.

For early education to work toward helping children attain social and economic equality, we must develop pedagogy that is both sensitive to children's development and representative of conceptual knowledge that has sufficient coherence and depth. Recognizing the divide that begins to separate the "information haves" from the "information have-nots" early on, we need to develop learning experiences that work on the edge of children's competencies and understandings. Research has consistently shown the value of early education in helping to equip children with essential skills. But these skills must be used to develop coherent understandings of knowledge and concepts, the very basic foundations for later learning.

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