Literacy for All Children in the Increasingly Diverse Schools of the United States

Claude Goldenberg

Background: Education Goals and Shortcomings

In the final decade of the 20th century, the United States committed itself to eight ambitious education goals for the year 2000 (National Education Goals Panel, 1997). Three of these goals are at the heart of this chapter:

1. All children will begin school “ready to learn” (goal 1).
2. All students will leave grade 4 (and grades 8 and 12) demonstrating competency over challenging subject matter (goal 3).
3. Every school will promote parent involvement to support the social, emotional, and academic growth of children (goal 8).

These goals are highly interrelated. School readiness predicts school success, and parent involvement is deeply implicated in both. The literacy experiences, skills, and knowledge with which a child begins school will influence literacy development, and parents are an important influence at all points in this development. Parents influence how much experience children have with books and other reading materials; their familiarity with letters and sounds; the vocabulary they develop; and the reading and writing habits, opportunities, and experiences they have in and out of school. All these factors influence literacy development. None of this is to suggest that factors intrinsic to the child—for example, motivation and interest, intelligence, and phonemic sensitivity—are irrelevant. The focus of this chapter, however, is on environmental factors: the sorts of experiences schools and families can provide that will enhance literacy development for all children.

Each of the three goals—school readiness, school success, and parent involvement—shines a light on a distinct facet of children’s academic and liter-
acy development. All children must start school ready to benefit from the learning experiences they will have there; all children, once they begin school, must develop academic competencies required for later success in school and in life: and every school must engage parents as partners in an educational process that will help advance the goals of school readiness and school success.

These are tall orders, to be sure. All children and every school mean a lot of children and many schools. As the 20th century ended, there were nearly 19 million children under age 5 in the United States; nearly 40 million more were between the ages of 5 and 14 (U.S. Census Bureau, 2000a). The U.S. Census Bureaus predicts that by the end of the 21st century these numbers will nearly double to 36 million and 72 million, respectively (U.S. Census Bureau, 2000b). Moreover, in the final school year of the 20th century, over 38 million children (U.S. Department of Education, 2002) attended nearly 96,000 pre-K to grade 8 public and private schools (U.S. Department of Education, 2001a), including combined elementary and middle schools. These numbers will, of course, continue to grow as the population of children grows.

Now that we are well into the 21st century, we must look back and ask whether the United States reached its national goals by the year 2000. The short answer is no. The fact is the country has a way to go, and for some children—particularly those who are poor and members of certain cultural and linguistic groups—the country has an even longer way to go. National-level data from the closing years of the 20th century reveal the disparities between the rhetoric of goals and the reality of schools, families, and children (see Table). Some child well-being indicators that have implications for educational outcomes showed positive trends in the last years of the 20th century; for example, U.S. poverty rates decreased from 22% to 16% between 1993 and 2000 (Federal Interagency Forum on Child and Family Statistics, 2002). Nonetheless, the challenge of making national education goals a reality for all U.S. students is likely to increase as we see increases in the numbers of children and schools as well as increases in the social, economic, and linguistic diversity of the country’s populace (Federal Interagency Forum on Child and Family Statistics, 2002).

Attaining these education goals is essential if we are to make schools work for all students. How do we do this for children from low-income families who are linguistically and culturally different from the U.S. mainstream? Each year these children and their families make up a greater percentage of the U.S. population. How do we make schools work for them so that all children get off to a good start on the road to literacy? Not surprising, there are no simple answers. The answers depend on a wide range of considerations having to do with the nature of early literacy and how best to promote it; the influence of SES, language, and culture on children’s formal schooling; and what parent involvement (home–school connections or partnerships) can and should be. Each of these topics will be discussed in turn.

*Literacy for All Children* 1637
### TABLE
National Education Goals: The Rhetoric-to-Reality Gap

#### GOAL 1: All students will begin school ready to learn.

<table>
<thead>
<tr>
<th>% of 3- and 5-yr-olds (not in kindergarten) attending early childhood care and education programs&lt;sup&gt;1&lt;/sup&gt;</th>
<th>56</th>
</tr>
</thead>
<tbody>
<tr>
<td>Association With</td>
<td>70</td>
</tr>
<tr>
<td>Parent Education</td>
<td>38</td>
</tr>
<tr>
<td>Association With Ethnicity</td>
<td>59</td>
</tr>
<tr>
<td>• % white, non-Hispanic children</td>
<td></td>
</tr>
<tr>
<td>• % Hispanic children</td>
<td>40</td>
</tr>
<tr>
<td>• % black children</td>
<td>65</td>
</tr>
<tr>
<td>Association With Poverty</td>
<td>59</td>
</tr>
<tr>
<td>• % children in families at or above the poverty line</td>
<td></td>
</tr>
<tr>
<td>• % children in families in poverty</td>
<td>47</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of 3- to 5-yr-olds read to every day&lt;sup&gt;1&lt;/sup&gt;</th>
<th>58</th>
</tr>
</thead>
<tbody>
<tr>
<td>Association With</td>
<td>73</td>
</tr>
<tr>
<td>Parent Education</td>
<td>42</td>
</tr>
<tr>
<td>Association With Ethnicity</td>
<td>64</td>
</tr>
<tr>
<td>• % white, non-Hispanic children</td>
<td></td>
</tr>
<tr>
<td>• % Hispanic children</td>
<td>42</td>
</tr>
<tr>
<td>• % black children</td>
<td>48</td>
</tr>
<tr>
<td>Association With Poverty</td>
<td>61</td>
</tr>
<tr>
<td>• % children in families at or above the poverty line</td>
<td></td>
</tr>
<tr>
<td>• % children in families in poverty</td>
<td>48</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% of beginning kindergartners who...recognize letters&lt;sup&gt;2&lt;/sup&gt;</th>
<th>66</th>
</tr>
</thead>
<tbody>
<tr>
<td>Association With</td>
<td>86</td>
</tr>
<tr>
<td>Parent Education</td>
<td>38</td>
</tr>
<tr>
<td>...recognize beginning sounds&lt;sup&gt;2&lt;/sup&gt;</td>
<td>29</td>
</tr>
<tr>
<td>Association With</td>
<td>50</td>
</tr>
<tr>
<td>Parent Education</td>
<td>9</td>
</tr>
<tr>
<td>...often/very often persist at tasks (teacher report)&lt;sup&gt;2&lt;/sup&gt;</td>
<td>71</td>
</tr>
<tr>
<td>Association With</td>
<td>79</td>
</tr>
<tr>
<td>Parent Education</td>
<td>61</td>
</tr>
</tbody>
</table>

#### GOAL 3: All students will demonstrate competency over challenging subject matter.

<table>
<thead>
<tr>
<th>% of fourth graders reading at least at “basic” level&lt;sup&gt;3&lt;/sup&gt;</th>
<th>63</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of fourth graders writing at least at “basic” level&lt;sup&gt;4&lt;/sup&gt;</td>
<td>84</td>
</tr>
<tr>
<td>% of fourth graders reading at “proficient” level&lt;sup&gt;3&lt;/sup&gt;</td>
<td>32</td>
</tr>
<tr>
<td>% of fourth graders writing at “proficient” level&lt;sup&gt;4&lt;/sup&gt;</td>
<td>23</td>
</tr>
<tr>
<td>Association With Income</td>
<td>41</td>
</tr>
<tr>
<td>• % non–low-income fourth graders who are “proficient” readers</td>
<td></td>
</tr>
<tr>
<td>• % low-income fourth graders who are “proficient” readers</td>
<td>14</td>
</tr>
</tbody>
</table>

(continued)
### National Education Goals: The Rhetoric-to-Reality Gap

<table>
<thead>
<tr>
<th>Association With Parent Education</th>
<th>% fourth graders with college graduate parent who are &quot;proficient&quot; writers</th>
<th>27</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% fourth graders with non-high school graduate parent who are &quot;proficient&quot; writers</td>
<td>12</td>
</tr>
<tr>
<td>Association With Ethnicity</td>
<td>% white fourth graders who are &quot;proficient&quot; readers/writers</td>
<td>40/29</td>
</tr>
<tr>
<td></td>
<td>% Asian/Pacific Islander fourth graders who are &quot;proficient&quot; readers/writers</td>
<td>46/36</td>
</tr>
<tr>
<td></td>
<td>% Hispanic fourth graders who are &quot;proficient&quot; readers/writers</td>
<td>16/10</td>
</tr>
<tr>
<td></td>
<td>% black fourth graders who are &quot;proficient&quot; readers/writers</td>
<td>12/8</td>
</tr>
<tr>
<td></td>
<td>% American Indian fourth graders who are &quot;proficient&quot; readers/writers</td>
<td>17/11</td>
</tr>
</tbody>
</table>

**GOAL 8: All schools will promote parent involvement to support children’s social, emotional, and academic growth.**

#### % of elementary schools having these parent involvement activities:

<table>
<thead>
<tr>
<th>Activity</th>
<th>% of Schools Having Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent conferences, arts events, open houses, or back-to-school nights</td>
<td>92–97</td>
</tr>
<tr>
<td>Providing information about school test performance, student progress, or school goals/objectives</td>
<td>83–85</td>
</tr>
<tr>
<td>Providing information about how to promote learning at home (e.g., helping with homework, study skills) and to inform parents about child-rearing issues (e.g., discipline)</td>
<td>82–89</td>
</tr>
<tr>
<td>Parent advisory group or policy council</td>
<td>79</td>
</tr>
<tr>
<td>Providing information about improvements in children’s performance</td>
<td>72</td>
</tr>
<tr>
<td>Providing examples of student work meeting high standards</td>
<td>60</td>
</tr>
</tbody>
</table>

#### % elementary schools reporting most or all parents attend

<table>
<thead>
<tr>
<th>Activity</th>
<th>% of Schools Reporting Most or All Parents Attend</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open house or back-to-school night</td>
<td>49</td>
</tr>
<tr>
<td>Parent–teacher conferences</td>
<td>57</td>
</tr>
<tr>
<td>Performing arts events</td>
<td>36</td>
</tr>
<tr>
<td>Science fairs or academic events</td>
<td>19</td>
</tr>
<tr>
<td>Association With High-Poverty School Population</td>
<td>% of schools with &lt; 25% high-poverty students reporting high parent turnout</td>
</tr>
<tr>
<td>Association With Minority School Population</td>
<td>% of schools with &lt; 20% minority enrollment reporting high parent turnout</td>
</tr>
</tbody>
</table>

---

The Challenges of Promoting Early Literacy for All Children

The challenge of making schools work for all children, regardless of income level, is formidable for many reasons. One is the nature of learning to read and the many uncertainties and controversies surrounding this critical accomplishment. Another reason concerns issues of poverty and cultural and linguistic diversity.

Learning to Read: Controversies and Emerging Consensus

One of the most controversial topics in education centers on questions of what early literacy is and how children learn to read. These questions are central to the three U.S. national goals of school readiness, academic competence, and parent involvement. Questions related to what literacy is and how best to promote it color our thinking about how to accomplish the education goals the United States has set for all children. Children from low-income families are more dependent on school experiences for their academic literacy development than are middle class children (Alexander & Entwisle, 1996; Snow, Barnes, Chandler, Goodman, & Hemphill, 1991). It is not that low-income children have no literacy experiences at home; this is a harmful misconception that is flatly untrue (see, e.g., Anderson & Stokes, 1984; Clark, 1983; Goldenberg & Gallimore, 1995; Goldenberg, Reese, & Gallimore, 1992; Paratore, Melzi, & Krol-Sinclair, 1999; Taylor & Dorsey-Gaines, 1988; Teale, 1986). However, the literacy experiences and accomplishments of low-income children do tend to be limited compared to those of more affluent peers (Baker, Serpell, & Sonnenschein, 1995; Whitehurst & Lonigan, 1998), and therefore the school's responsibility is particularly great. Disagreements over how best to promote early and continued literacy growth and what parents ought to be doing to promote literacy for their children take on added significance for children who face greater risk for underachievement.

A key dimension in this controversy is the classic question of how much to emphasize letters and sounds and how they combine to form words. The historic significance of this controversy (see Chall, 1983) was acknowledged once again when Reading Research Quarterly reprinted the classic "First-Grade Studies," which demonstrated the importance of "code" emphasis in beginning reading instruction (Readence & Barone, 1997).

Over the past two decades, an analogous controversy about the preschool years has emerged and become an important component in discussions of what it means to be ready to start school. Researchers in the 1980s discovered that phonological awareness is an important precursor of learning to read (Stanovich, 1987). Phonological awareness refers to the understanding that spoken speech can be broken down into discreet units of sound at the subword level: syllables, onsets (initial consonant or consonant cluster in a syllable), rimes (what follows the consonant or consonant cluster in a syllable), and phonemes. Phonological
awareness training, particularly when coupled with training on letters and corresponding sounds, promotes early decoding and word reading, which in turn promote reading development (Snow, Burns, & Griffin, 1998; Troia, 1999).

Although there is fairly wide agreement that phonological awareness is an important aspect of being ready to learn to read (e.g., Ehri, Nunes, Willows, Schuster, Yaghoub-Zadeh, & Shanahan, 2001; Ralph, Ellis, & Medina, 1998; Snow et al., 1998; Troia, 1999; Yopp, Yopp, Harris, & Stapleton, 1998), there is less agreement about what this means practically. Should children receive direct instruction and training (e.g., Ball & Blachman, 1988, 1991)? Or should teachers promote phonological awareness by using natural language activities, such as poems, chants, and songs (Ralph et al., 1998)? How do teachers attain the right balance between authentic tasks and skill practice (Schickedanz, 1998) when helping children develop phonological awareness?

Practical recommendations differ for what should be done to help all children, particularly those at risk for poor reading achievement, begin school ready to learn, depending on what educators view as critical components of learning to read and what needs to be emphasized to promote early reading success. Proponents of strong phonics and phonological awareness training will recommend a different set of practices than those who emphasize more contextualized uses of literacy. A sociocultural, developmentalist perspective on literacy (Neuman, 1998) emphasizes the importance of meaningful and functional literacy experiences. Neuman and Roskos (1993, 1997), for example, have shown that low-income preschoolers can learn important information about print (e.g., identifying a calendar or a telephone book; pretending to take an order at a restaurant by scribbling on a pad) when classroom environments are structured so that they engage with these kinds of literacy activities and materials. In contrast, a cognitive–linguistic perspective emphasizes the critical role of phonological knowledge in learning to read. Brady, Fowler, Stone, and Winbury (1994) have shown that inner-city preschoolers can be taught important phonologically related skills, such as generating rhymes and segmenting phonemes.

These perspectives appear to be sharply contrasting. But reading educators are attempting to forge a broad consensus about what literacy is and how best to promote it that incorporates different emphases on literacy development (e.g., National Institute of Child Health and Human Development [NICHD], 2000; Pressley, 1998; Snow et al., 1998). The broad outlines of this consensus suggest that productive early literacy experiences and effective literacy instruction must address comprehensively several distinguishable, yet ultimately interrelated, aspects of literacy (see Snow et al., 1998). No one component alone is sufficient for adequate literacy development; all are needed to one degree or another, although the following components are particularly critical at particular points or stages in the process of learning to read and write:
• understanding and using print functionally (reading and writing for communication, expression, etc.)

• understanding and using the alphabetic principle (phonological awareness, letter names and sounds, efficient and automatic decoding [i.e., reading] and encoding [i.e., writing])

• motivation and interest in using print for a variety of purposes

• language, cognitive skills, and knowledge necessary for comprehension and communication

Although there is no widespread agreement about how much of each aspect should be stressed, a successful literacy program will address each of these in sufficient depth and breadth to promote literacy growth in the earliest and later years. “Optimal” will probably vary by learner and stage of literacy development, but the basic ingredients of a healthy literacy diet are probably the same for all children (and adults) learning to read an alphabetic language (Snow et al., 1998). At the prereading (emergent), early, and beginning stages of reading, phonological processes (e.g., hearing the sounds in words) and insight into the alphabetic principle (letters represent sounds in a predictable system, and words comprise patterns of letters and corresponding sounds) are especially critical for learning to read. Effective literacy practices and programs, particularly for children who do not enjoy a wide range of literacy experiences outside of school, must include adequate amounts of instruction specifically targeted at helping them acquire these understandings and skills, such as how letters and sounds map onto each other and form written and spoken words (Ehri, Nunes, Stahl, & Willows, 2001). But children also must have literacy and oral language experiences that promote vocabulary and language development, build background knowledge and familiarity with stories, and provide opportunities to see and engage in meaningful literacy activities (NICHD, 2000; Snow et al., 1998). Such experiences, both early and later, become increasingly important as children advance in their literacy development.

Effective instructional practices to promote emergent and beginning literacy for all children include the following:

• literate environments where print is used for diverse and interesting purposes, including opportunities for student choice and ample time for looking at books and reading or “pretend reading”

• direct, explicit, systematic instruction in specific skills (e.g., phonological awareness, letter names and sounds, decoding, comprehension strategies), with sufficient practice in successful use of skills in order to promote transfer and automaticity

1642 Goldenberg
• discussions and conversations about materials children read or that are read to them
• focus on word-recognition skills and strategies (direct instruction, but also use of techniques such as word walls and making words)
• strategically sequenced instruction and curriculum materials to maintain optimal challenge (instructional or independent, as appropriate)
• organizational and classroom management strategies to maximize academic engagement and appropriate use of materials
• an explicit focus on language (including vocabulary) development
• valid and frequent assessments, using multiple measures as needed and appropriate, to allow teachers to gauge developing skills and target instruction appropriately
• a home–school connection component that links the school’s efforts with children’s home experiences and enlists parents in supporting their children’s academic development

This emerging consensus might provide a foundation for U.S. national efforts to make schools work for all children. Later in this chapter I will describe programs that embody one or more of these practices and have been successful in helping improve literacy development among low-income children.

The Influence of Socioeconomic Status, Language, and Culture on Learning to Read

The complex picture of learning to read becomes further complicated when we factor in socioeconomic status (SES) and issues of language and culture. Low-income children and children from some cultural and linguistic groups have traditionally done poorly in U.S. schools (Natriello, McDill, & Pallas, 1990). As discussed previously, we are further from accomplishing our education goals with poor and minority children than we are with nonpoor, nonminority children. There is a high correlation between SES and cultural and linguistic group membership in the United States, so as a practical matter it is extremely difficult to talk about one without the other. The picture becomes highly complex, with several interrelated factors bearing on children’s literacy development.

Socioeconomic Status. Socioeconomic issues are obviously central to discussions of how schools can meet the needs of low-income students and their families. Baker et al. (1995) found that compared to children from middle-income homes, low-income children had fewer opportunities for interactions involving literacy, for example, food preparation, shopping, storybook reading, pretend play, and activities with educational toys. Middle-income parents reported significantly more play with print and more independent reading by children.
although only slightly more joint book reading, than did low-income families. Ninety percent of the middle class families in Baker’s study reported that their child visited the library at least once a month, whereas only 43% of the low-income families reported this to be so. Once children entered kindergarten, low-income parents (particularly African Americans) reported more reading skills practice and homework (e.g., flash cards, letter practice) than did middle-income parents.

Low-income children also have less exposure to literacy and opportunities to interact with literacy in their communities. Neuman and Celano (2001) report striking contrasts in the print resources available to children in low-income versus moderate-income neighborhoods. For example, the researchers report that in the two moderate-income neighborhoods, they counted 1,600 and 16,000 children’s titles, respectively, in stores, but in the two low-income neighborhoods they counted only 55 and less than 400 titles. Similar contrasts were found for signage, public spaces for reading, and other environmental and contextual indicators of literacy materials and opportunities.

Upon entrance to school, low-income children appear to be “less ready,” as Whitehurst and Lonigan (1998) point out. They have had less experience with books, writing, hearing stories, learning and reciting rhymes, and many other types of experiences that promote literacy learning. The likely impact on early literacy skills and knowledge is illustrated in Goal 1 of the Table: Children whose parents are more highly educated begin kindergarten with more understanding of important literacy concepts (Federal Interagency Forum on Child and Family Statistics, 2000). Goldenberg and Gallimore (1995) found that, on average, low-income Spanish-speaking children (tested in Spanish) had relatively few emergent literacy skills. Presented with 10 of the most frequently used letters, the average number recognized was 1 lowercase and 1.5 uppercase. Two thirds of the children could not name or recognize a single letter. More than three fifths could write no letters at all. The majority also could write no words, either correctly or attempted. Fewer than half pointed somewhere in the print when asked where the tester should read; one fourth indicated that print was read from left to right; fewer than one fourth could point to the first and last parts of text on a page.

In contrast, children from higher-income families have more text-based literacy experiences and opportunities at home. They arrive in kindergarten able to recognize more letters; they can write letters, words, and even phrases. They have more invented spelling and engage in more scribble writing. They have more concepts about print, such as where in the page the printed text is and that text is read from left to right. Some of these children are even readers in a more conventional sense, although this is less common (Adams, 1990; Chall, 1983; Clay, 1993; Mason, 1977).

There is obviously wide variability within any social group or economic level, yet in general, low-income children begin school with fewer literacy ex-
periences and less literacy knowledge. Once they begin first grade, they then tend to fall further behind more affluent peers. During school months the rate of low-income children's academic progress is equivalent to that of higher-income children, but during summers the academic gap widens (Alexander & Entwisle, 1996).

There are two important qualifications to the economic status–achievement connection, however: (1) Family socioeconomic effects on achievement, at the individual level, are in fact modest, and (2) effective school programs will help more children achieve, regardless of their economic class.

The association between SES and early reading achievement is quite weak when measured at the individual family level. However, socioeconomic influence on achievement is much stronger when measured at the school or community level. In other words, the effects of economic status on achievement are largely the result of living in communities and attending school with large numbers of children from a particular social class, not the result of a single family's socioeconomic characteristics. Average correlations between family SES and measures of academic achievement are a modest .2–.3 (Walberg & Tsai, 1985; White, 1982). In contrast, when SES is measured at the level of the school or community, the correlation with achievement is nearly .7 (White, 1982). So, for example, a low-SES child attending a low-income school and living in a low-income community is at far greater risk for reading difficulties than is the same child attending and living in a middle- or high-income school and community.

One reason for the weak link between family economic status and learning to read is that there is a great deal of variability in family practices and student achievement within any economic stratum. We must therefore avoid deterministic assumptions about the effects of economic status on literacy development. Children's preliteracy skills and knowledge (e.g., phonological awareness, letter knowledge, and concepts of print) are far better predictors of reading achievement than is family SES (Scarborough, 1998; Snow et al., 1998). What children know and can do are variable within economic class and more closely related to literacy outcomes than economic class. Among low-income families, there are those in which children experience relatively high levels of literacy, academic learning, and encouragement (Anderson & Stokes, 1984; Clark, 1983; Goldenberg & Gallimore, 1995; Goldenberg et al., 1992; Heath, 1983; Paratore et al., 1999; Taylor & Dorsey-Gaines, 1988; Teale, 1986). One of the most pernicious and persistent assumptions among many educators is that low-income families, particularly those from cultural groups that typically have done poorly in U.S. schools, barely survive in a culture of poverty and have little time, inclination, or ability to provide their children with learning opportunities to benefit academic achievement (e.g., Grossman, 1984).

Furthermore, as Baker et al. (1995) and Goldenberg et al. (1992) have shown, once children begin school, the amount of literacy in the homes of low-

*Literacy for All Children* 1645
income children increases, suggesting that families are responsive to children’s school experiences and support changes in children’s home activities to reflect a more academic focus. Indeed, perhaps in part due to families’ responsiveness, effective school and classroom practices have been shown to improve the achievement of students from diverse socioeconomic, cultural, and linguistic backgrounds. This is the second qualification we must bear in mind: Effective school and classroom programs will make a difference, no matter children’s SES. The extent to which effective programs can completely counter the influence of economic status, however, is an open question. I will return to these issues later in the chapter.

**Language.** In the United States, socioeconomic factors are often conflated with language and culture because disproportionate numbers of children from certain ethnolinguistic groups are from low-income households. August and Hakuta (1997) report that 77% of English learners qualify for free or reduced-price lunches in contrast to only 38% of the overall student population in the same schools. Latin American immigrants, who constitute by far the largest immigrant group and whose children constitute the largest group of English learners in California and the United States, come to the United States with low levels of education and few material resources (Goldenberg, 1996). Mexican and Central American immigrants tend to have relatively little formal education and are more likely than native-born U.S. residents or immigrants from other countries to be living in poverty. African American, native Hawaiian, and American Indian students are among those groups with disproportionately high numbers of low-SES families (Federal Interagency Forum on Child and Family Statistics, 2000; Tharp, 1989; Tharp & Gallimore, 1988).

Language is perhaps the most controversial of the three demographic dimensions considered in this chapter; most debate has centered on whether children for whom English is not the primary language should be taught to read first in their home language or if they should be immersed in English from the outset of their school careers. The language-of-instruction question has almost completely dominated research and discussions about the education of limited English proficient (LEP) students, now commonly referred to as English language learners (August & Hakuta, 1997). Yet cognitive, affective, instructional, curricular, and school-based factors that are important for English speakers learning to read in English, as outlined previously, are also important for English learners learning to read. Indeed, there is considerable evidence that reading and learning to read in one’s native language are in many ways like reading and learning to read in a second language (Chiappe & Siegel, 1999; Fitzgerald, 1995). Nonetheless, there are differences that teachers must take into account, such as the more limited vocabulary of English learners and the different experiential base from which English learners can draw in order to make
sense of academic instruction. All these considerations are relevant to discussions of how best to promote high levels of academic literacy attainment in early elementary school.

What is the proper role of the primary language in the academic instruction of LEP children? Primary language advocates on one extreme say that the longer, more intensively, and more effectively students learn literacy and academic skills in their home language, the better their eventual academic attainment will be in English (Thomas & Collier, 1997, 2002). The theoretical rationale is that we learn best in the language we know best, and that once basic concepts and skills are learned in the primary language, they transfer readily to a second language. In diametric opposition, advocates of English-only instruction say that early, sustained, and effective use of English in the classroom leads to superior attainment in English (Rossell & Baker, 1996). These people cite a different rationale: The more time spent learning and practicing a language, the greater the eventual attainment in that language.

Studies point policy in opposite directions. Rossell and Baker’s (1996) review of research concludes that students should be immersed in English as soon as possible and as intensively as possible. But two quantitative syntheses have concluded precisely the opposite: Use of students’ primary language produces superior achievement results in English when compared to immersion in English (Greene, 1997; Willig, 1985). One prominent demonstration of the superiority of primary language instruction in the early stages of reading was provided in a nationwide study by Ramírez, Yuen, Ramey, and Merino (1986). The researchers found that kindergarten and first-grade students who received academic instruction in Spanish had higher achievement in beginning reading in English than did comparable students who received academic instruction in English (there were no significant differences in language and mathematics). At the preschool level, some studies have shown that Spanish-language classrooms for Spanish speakers are also associated with higher levels of language and early literacy attainment in both Spanish and English (e.g., Campos & Keatinge, 1988).

A different rationale for using the primary language as an instructional vehicle has to do with the intrinsic advantages of knowing two languages. Whatever the controversy over the role of primary language (e.g., Spanish) in second-language (e.g., English) attainment, there is no controversy over the facts that (a) primary-language instruction leads to primary-language maintenance without blocking second-language acquisition, in other words a greater chance of bilingualism, and (b) bilingualism confers cognitive, cultural, and economic benefits (August & Hakuta, 1997; Crawford, 1991; Rossell & Baker, 1996). Of course a key question is whether school programs that promote primary-language maintenance and bilingual development sacrifice some degree of English acquisition. The answer would appear to be no, but this is part of the complex debate over the role of the home language in the education of
English learners. Unfortunately, knowing two languages has attracted little attention in the U.S. debate over improving schools; certainly it is not among the country’s national education goals. Consequently, the advantages of bilingualism—which are beyond dispute—have played virtually no role in informing research and policy discussions. This is indeed unfortunate and can only serve to heighten the perception of U.S. cultural and linguistic insularity (Simon, 1980).

We also must keep the language issue in perspective and understand that language of instruction per se is only one of several issues educators face in teaching English learners (August & Hakuta, 1997; National Educational Research Policy and Priorities Board, 1999). Other important issues have to do with the sorts and quality of literacy experiences and instruction children receive, as discussed previously.

Culture. Culture and cultural differences also have played a role in discussions and research on the education of historically disadvantaged groups. By definition, the most distinguishing characteristic of English learners is their lack of English proficiency. However, English learners are also members of diverse ethnocultural groups, which itself might have implications for learning to become literate (Tharp, 1989). Socioeconomic and sociopolitical issues also might be relevant, particularly for Spanish-origin English learners in the United States, who historically have been victims of discrimination and economic disadvantage.

As with language, the issue of culture is complex and difficult to disentangle from ideological or philosophical considerations that go far beyond empirical questions and matters of curriculum and instruction. Cultural diversity is increasingly a fact of life in U.S. schools, particularly in border states, such as California, Arizona, and Texas, and states that traditionally or more recently have been destinations of successive waves of immigrants, such as New York, Illinois, and Washington. Yet culture means different things to different people. Even among anthropologists there is no universal, agreed-upon definition. Is culture defined by how people dress? The food they eat? The language they speak? How they think? Behave? What motivates them? Is it all of these? Are some factors more important to cultural identity than others? Culture has many dimensions and no one dimension can be said to define any group of people. Moreover, there is considerable disagreement over whether and how the distinct cultural experiences of different people should inform school programs (Schlesinger, 1991).

Why does culture matter in the early reading development of culturally diverse students, and therefore what is its relevance to a discussion of U.S. national education goals? There are several possibilities. One is that members of different cultural groups might socialize their children differently and have different behavioral expectations for children and that some of these differences might have a negative impact on children’s schooling experiences. Valdés (1996)
provides an illustration. She shows how children of Mexican immigrants are so-
cialized not to be assertive around adults or engage in displays of information.
Yet U.S. teachers often expect a certain amount of assertiveness, even aggres-
siveness, from students. They expect students to be eager to show off what they
know. Children in the kindergarten and first-grade class Valdés studied “had to
be ready to perform and indeed outperform their peers” (1996, p. 147).
Otherwise, teachers assumed that things had not yet “clicked” (p. 146). In the
case of the Mexican-origin children who did not display expected behaviors,
teachers lowered their academic expectations for them and placed them in lower
reading groups. Valdés suggests this was the beginning of a downward spiral of
failure for these students.

Research suggests that certain types of cultural accommodations to be-
havioral or interactional styles improve students’ academic engagement and
participation. Au and Mason (1981), reporting data collected as part of the
Kamehameha Early Education Project (KEEP), found that when a teacher en-
gaged Hawaiian children in small-group discussions that were similar to the sorts
of free-flowing interactions children were used to at home, children were more
engaged and participated at a higher cognitive level. When the teacher employed
a more controlled turn-taking discussion style that was dissimilar to what stu-
dents were used to, children participated less and their contributions to the dis-
cussion were at a lower academic level. As important as this and other studies
of cultural accommodation are (see Tharp, 1989), however, there is actually
very little evidence that cultural accommodation per se produces measured gains
in achievement (Fueyo & Bechtol, 1999; Goldenberg & Gallimore, 1989). Even
when teachers and students are matched by race/ethnicity, there is no difference
in student achievement in comparison to students with teachers who are dissim-
ilar racially or ethnically (Vierra, 1984).

The most compelling argument that cultural accommodation produces
improvements in student learning and other outcomes has been provided by
Allen and Boykin (1992) in their review of laboratory and classroom studies in-
volving African American children. The authors argue that African American
children learn best from prescriptive pedagogy because of their interactional
and socialization experiences at home. The hypothesis that cultural accommo-
dation can lead to improved student outcomes is important. However, teachers
must realize that the evidence for its effects—and therefore its significance to
classroom practice—is not as strong as many might assume.

KEEP is cited widely as illustrating the power of culturally accommodat-
ed instruction to improve early literacy attainment (Tharp & Gallimore, 1988).
Hawaiian children received literacy instruction and classroom experiences that
contained elements compatible with their natal culture. For example, they
worked in small, peer-oriented collaborative groups in which children were
free to interact around academic tasks, compatible with the peer-oriented child

*Literacy for All Children* 1649
culture Hawaiian children experience, with relatively little adult supervision. KEEP teachers also used a more free-flowing discussion style during reading comprehension lessons, which paralleled the overlapping discourse patterns (dubbed "talk-story") that native Hawaiian children and adults engage in naturally. KEEP students at the original demonstration site and at remote sites when the program was exported to other schools demonstrated significant improvement in early reading achievement compared to control and comparison groups (Tharp, 1982).

The KEEP instructional program, however, also contained many elements found to be effective universally, that is, not necessarily accommodated to any particular group (Goldenberg & Gallimore, 1989). For example, KEEP employed active, direct teaching of reading comprehension; collaborative learning; well-run and organized classrooms; a good balance of word-recognition (including phonics) skills instruction and comprehension instruction; and ongoing and substantive professional development for teachers. It is impossible to disentangle the effects of culturally accommodated instruction from the effects of more general or universal principles of effective curriculum and teaching (Goldenberg & Gallimore, 1989). A plausible hypothesis is that both sets of factors—universal principles and culturally accommodated instruction—made contributions to the improvements in achievement.

There are other compelling reasons for teachers to know about cultural facets of children's learning, aside from their possible influence on measured outcomes and on accomplishing national education goals. If nothing else, different cultural groups have different norms of behaving and interacting; teachers should understand and be sensitive to these because doing so can only help students and families feel more comfortable and welcomed in what might seem a very foreign institution. Moreover, educated professionals—particularly those who work with children—must know about the varieties of human experiences, even if that knowledge does not translate neatly into educational prescriptions. But teachers also should understand that there is no consistent set of factors that has yet been discovered that takes cultural understandings and turns them into effective educational interventions.

It is also worthwhile to note, particularly in light of the following section on home-school connections, that parents are skeptical of the idea that their children's teachers must come from similar backgrounds in order to be effective. A Los Angeles Times poll asked residents in the Los Angeles Unified School District whether they thought students learned better when teachers and administrators were the same race/ethnicity as the students. An overwhelming majority of parents—85%—responded that race/ethnicity did not matter. Latino and black respondents felt just as strongly as did white respondents that race/ethnicity did not influence their children's academic achievement (Los Angeles Times Poll, 1999).
Examples of Efforts to Help Children At Risk: Prospects and Limits

At least since the 1960s educators have been exploring numerous avenues to improve outcomes, among the most important being literacy outcomes, for low-income children. By and large, U.S. schools and society as a whole have not done an exemplary job, although it is probably not for lack of trying. We can cite some successes, but the rhetoric-to-reality gap surrounding U.S. national education goals suggests how much further we must go. In this section I will discuss several types of programs and interventions undertaken to try and address the literacy achievement gap between low- and higher-income students. This will in no way be a comprehensive catalog but instead will illustrate the types of initiatives undertaken and their success and limitations. (A more comprehensive treatment of programs for students at risk can be found in Slavin, Karweit, & Madden, 1989, and Slavin, Karweit, & Wasik, 1994.)

Parent Involvement and Parent Training

Researchers have investigated scores of links between home and school, and a clear consensus has emerged: Children’s experiences at home profoundly influence their chances for school success (see, e.g., Epstein, 1992, 1996; Goldenberg, 1993; Hess & Holloway, 1984). Advocates of parent involvement argue that schools should actively seek ways to collaborate with parents for children’s academic benefit.

Yet our research base presents a dilemma: On the one hand, we have evidence of low-income and minority parents’ willingness and ability to help their children succeed academically, and there are also cases of apparently successful parent involvement or parent education programs. But on the other hand, the evidence for the effectiveness of parent involvement efforts on children’s achievement is surprisingly thin. Two meta-analyses that have appeared over the past decade challenge the notion that parent involvement programs have demonstrable effects on student outcomes (Mattingly, Prislin, McKenzie, Rodriguez, & Kayzar, 2002; White, Taylor, & Moss, 1992). Mattingly et al., for example, argue that the strongest claims for effectiveness come from studies with the weakest designs, that is, absence of suitable control groups. Many studies have found improvements in various student outcomes, but in the absence of control or comparison groups, it is impossible to rule out alternative explanations for these improvements.

The concerns raised by these two meta-analyses are important. They signal that we have failed to pay sufficient attention to documenting the outcomes of parent involvement efforts and their impact on important student outcomes. The commendable U.S. national goal notwithstanding, we do not have a firm grasp on what the likely outcome would be of widespread efforts to involve parents as
envisioned by the framers of the goal. We do have considerable evidence that parents are positively disposed toward these sorts of activities. Even among low-income, minority families—often assumed to be unable or unwilling to respond to school efforts to involve them in their children’s education—parents are willing and able, either on their own or in collaboration with schools, to help children succeed academically (Chavkin, 1989; Epstein, 1992, 1996; Goldenberg, 1993; Moles, 1996; Neuman, Hagedorn, Celano, & Daly, 1995). This is perhaps especially true in the area of early literacy, in which most parents possess the attitudes and at least sufficient early literacy skills and knowledge to help their children get on the road to literacy.

Goldenberg and Arzubiaga (1994) found that teachers’ parent involvement efforts were related both to Spanish-speaking kindergarten parents’ satisfaction with the child’s school experience and to children’s early literacy attainment: The more teachers attempted to involve parents in children’s academic learning, the more satisfied parents were. Similarly, Campbell and Ramey (1995) report that low-income African American parents were very positive about a home-school academic contact program, with more than 90% of the parents reporting completing home activities with their children. Parents gave 83% of the activities positive ratings (Campbell & Ramey, 1995).

These and other data suggest that parent training should be a viable means for enhancing parent involvement in children’s learning. But again, the empirical record is disappointing. Parent involvement programs that involve on-site parent activities necessarily deal with a select group of parents. In one well-known effort in northern California, Ada (1988) met with parents monthly to discuss children’s literature and to show them how to read with their elementary-age children. From a total district student population of 14,500, the monthly meetings drew 60–100 parents. Clearly the vast majority of parents were excluded. In another well-regarded and apparently successful parent education program aimed at low-income Latino parents (Owen, Li, Rodriguez-Brown, & Shanahan, 1993), 94% of participants at the beginning of the program—that is, before training—reported reading to their preschool children; more than 70% reported taking their child to the library. This contrasts with much lower figures reported elsewhere for the general population of Latino parents (Ramírez et al., 1986; Teale, 1986). Clearly the Owen et al. study did not draw from the general population at the school.

Given that parent training programs will necessarily include a relatively select group of parents, what happens with the other families? If parent involvement efforts are open only to those parents who can or will go to training sessions, we will invariably exclude substantial numbers of families, perhaps those with the greatest need. This is one of the major issues we must confront as we continue to explore parent involvement as a means for helping close the gap between low- and higher-income students.
Tutoring

Tutoring, in its ideal form, is the ultimate in focused, targeted instruction—one teacher, one student. Individual student needs can be addressed clearly and systematically with no interference from the needs of other students, which can be very disparate from one another. Tutoring is actually a very old form of teaching, its history dating back 2,500 years, far longer than the group-based schooling now considered the norm (Gordon & Gordon, 1990). Contemporary interest in tutoring as a means of helping bridge the gap between low- and high-achieving students probably stems from different sources. Perhaps the most important is an article written by Benjamin Bloom (1984) in which he casts effective tutoring as determining the upper limit of what teachers could accomplish with students. Tutoring, Bloom suggests, is the maximally effective instructional arrangement. He estimates that compared to regular classroom instruction involving one teacher and approximately 30 students, effective tutoring boosts student achievement by 2 standard deviations. In other words the average student, when tutored, could achieve at the 98th percentile (two standard deviations above the 50th percentile, which is considered average achievement) in relation to students instructed conventionally. Because in most circumstances widespread tutoring is impossible, Bloom’s challenge to educators was to devise instructional strategies that, in concert with each other, would produce effects on student achievement comparable to the effects of tutoring. This became what Bloom called the “2 sigma problem” (1984, p. 4).

Aside from Bloom’s article, which did not stipulate a particular tutoring program but rather key principles of effective teaching delivered in a tutoring context, numerous educators and researchers have become intrigued by the possibility of using tutoring to boost the attainment of students either doing poorly or at risk of doing poorly. Perhaps the most famous tutoring program in the literacy domain has been Reading Recovery (Clay, 1985), which has enjoyed great popularity in the English-speaking world and has been translated into various foreign languages. Other tutoring programs have since made their appearance, such as the Howard Street model (Morris, Shaw, & Perney, 1990) and Book Buddies (Invernizzi, Rosemary, Juel, & Richards, 1997). Although some of these models require a certain amount of training, other researchers have investigated minimum-training models (Fitzgerald, 2001, see #39 this volume). Many tutoring models and programs show at least some evidence of success (see Invernizzi, 2001, for a useful review).

Elbaum, Vaughn, Hughes, and Moody (2000) conducted a meta-analysis of experimental and quasi-experimental studies of tutoring. Although they found that tutoring had a positive effect on students’ reading outcomes, it was, overall, far more modest than what Bloom had predicted. In contrast to the very large “2 sigma” effect size¹ cited by Bloom (1984), the average weighted effect size (that is, adjusted for sample size differences) Elbaum et al. found was .41. (The unweighted effect size was .67—still more modest than Bloom’s.) An effect
size of .40 translates to average achievement at the 66th percentile (not the 98th percentile as Bloom predicted) in relation to a population that is achieving, on average, at the 50th percentile. In other words, the average student in the tutoring condition achieved at the 66th percentile while the average student who did not receive tutoring scored at the 50th percentile.

Despite the more modest overall effects of tutoring that Elbaum et al. (2000) found, the range was enormous. Some tutoring programs obtained incredible effect sizes greater than 4. Elbaum et al. attributed this to various measurement artifacts and either discarded the studies altogether or else truncated the effect sizes by setting an upper limit to what an acceptable effect size could be, in this case 3.45. Some programs obtained negative effect sizes, indicating that students in the tutoring condition did worse than those in the control or comparison condition. Nonetheless, the overall effect was positive even if moderate. If we include effect sizes eliminated or truncated as "outliers" by Elbaum et al., we would undoubtedly get a stronger average effect size. Yet the fact remains that only a minority of the studies could be used to support Bloom's claim that tutoring can help the average student achieve at the 98th percentile; as a general rule, effects were not of this magnitude. Yet as part of a set of educational tools to help bridge the achievement gap among sectors of our populace, tutoring might well have a place.

One further aspect of the Elbaum et al. review is worth mentioning. The authors report two studies that compared the effects of tutoring (in both cases, Reading Recovery was being used) to small-group instruction. In one of the studies, the small-group instruction was based on the Orton–Gillingham method, which emphasizes phonics; in the other study, small-group instruction was based on Reading Recovery principles, as applied to small groups. The effects of the tutoring in these two studies were zero, meaning that the small-group intervention (which served 3–4 times the number of students) was just as effective. Although additional research comparing tutoring to small-group instruction would be helpful, the two studies included in the Elbaum et al. meta-analysis suggest that small-group instruction can be as effective as one-to-one instruction—and of course far more cost effective.

**Comprehensive School-Based Efforts**

At the opposite end from tutoring are comprehensive programs that attempt to influence numerous aspects of the child's environment simultaneously. Some of these models also incorporate tutoring as one of the components. Over the past few years, a number of programs and demonstration projects have emerged that hold promise for helping attain the U.S. national education goals set forth at the beginning of this chapter. Space does not permit a full description of any, but several examples will illustrate.

A prime example of a comprehensive, schoolwide reading program that has many of the components identified in Snow et al. (1998) and described ear-
lier in this chapter is Success for All (SFA) (Slavin, Madden, Dolan, & Wasik, 1996). The original program was intended for low-income English-speaking students and has since been adapted for English learners. There is now a Spanish version (Éxito para todos) and an English version that uses instructional strategies specifically suited for English learners learning to read and write in English (Slavin & Madden, 1999). SFA is more than simply a reading program; it has comprehensive organizational, management, and home–school connection components. Indeed, it is among the most successful and effective whole-school reform models to emerge in the 1990s (Bodily, 1998). SFA uses a structured and explicit program of reading and writing skill development, beginning in kindergarten and continuing through third grade. Students are in heterogeneous classrooms but are regrouped homogeneously across classrooms for 90 minutes of daily reading instruction. The program uses well-known instructional strategies such as direct instruction, cooperative learning, writing as a process, and frequent assessment. Regular home–school contacts are a key feature, particularly for children experiencing difficulty.

Despite its admirable record of success, however, SFA is not successful with all students, as Slavin and colleagues acknowledge. Slavin, Madden, Karweit, Dolan, and Wasik (1994), for example, report that only 46% of third-grade children in SFA schools were on or above grade level in reading, in contrast to 26% of children in control schools. This is equivalent to an effect size of about .5—only slightly higher than the estimated mean effect size of tutoring alone. The effect of SFA on the lowest 25% of students was stronger: In SFA schools, the lowest 25% were, on average, close to the third-grade reading level. In the comparison schools, the lowest 25% of readers were on average a little above the second-grade level; the effect size for this lowest quarter only was a substantial .99. These are clearly meaningful effects and they demonstrate success for many more students than would otherwise be successful, even if SFA’s results are still short of success for all.

Another well-known and important effort to promote early literacy development for low-income children is the Carolina Abecedarian Project (Campbell & Ramey, 1995; Ramey & Campbell, 1984). Ramey and Campbell report short- and long-term intervention effects on cognitive (reading and math tests) and school-based (special education placement, grade retention) measures. One of the reasons this study is so important is because it used a fully randomized design to examine the combined and separate effects of two interventions on low-income African American children’s early academic performance. The preschool intervention comprised a number of curricular and instructional programs, including preliteracy and prephonics curricula emphasizing phoneme identification (Campbell & Ramey, 1995). A school-age follow-up consisted of a home–school resource teacher providing parents with activities designed to “reinforce the basic
reading and mathematics concepts being taught at school” (Campbell & Ramey. 1995, p. 751).

In third grade, the group of children that received both the preschool and school-age intervention substantially outperformed other groups (no intervention or only the preschool or only the school-age intervention). The mean third-grade standard score of this group of children on the Woodcock–Johnson reading cluster (letter–word identification, word attack, passage comprehension) was 96, still below the national mean, but substantially higher than the no-intervention controls (83). The effects of the school-age intervention alone, which consisted of the home–school resource teacher, was negligible. The preschool intervention alone had a substantial effect, although not as great as that of the combined preschool and school-age interventions.

An as-yet-unanswered question is whether even these comprehensive efforts can completely overcome the effects of low SES. Miller (1995) concludes, “there is little evidence that any existing strategy can close more than a fraction of the overall achievement gap between high- and low-SES children” (p. 334). Using SFA as a telling example—because it is the most successful of the current school reform models designed to improve reading achievement in Title I schools—Miller points out that the program can raise overall achievement levels from approximately the 30th to the 46th percentile, an effect size of approximately .4. These are noteworthy gains to be sure, as I have already pointed out. But the level of attainment is still “below middle-class and upper-middle-class performance norms” (Miller, 1995, p. 331), which are typically well above the 50th percentile on nationally normed tests.

Despite the influence of SES and the difficulty of schools’ making up for SES-based disadvantages, the important point is that effective teaching, schools, and programs influence student achievement. There is no longer any doubt about this. It matters whether a school’s overall achievement level is at the 30th or 46th percentile, and at a minimum it is well within educators’ grasp to effect this level of influence. Many argue that even this is a gross underestimate of what educators could truly accomplish. In any case, a strong, effective academic program will produce better results on student outcomes than a weak and ineffective program. This is so whether students are of low or high SES and despite their cultural and linguistic background. Low SES cannot be used as an excuse for failing to increase substantially the number of low-income and culturally and linguistically diverse students meeting U.S. national education goals.

**Implications and Future Directions**

The U.S. commitment to high levels of student achievement is on display in the form of national education goals. But at the moment, the goals remain distant visions. What must we do if they are ever to be within our reach?
Practice
First, and most obvious, we must put into practice instruction and intervention programs that we have reason to believe “work.” Despite gaps in our knowledge, there are many effective practices for which we have good research evidence but which are not finding their way into enough schools and classrooms. Tutoring and comprehensive programs, such as SFA, suggest productive areas for more widespread utilization. One obvious obstacle is cost, because both types of programs are extremely expensive. Moreover, comparisons of tutoring and small-group instruction suggest the latter might be as effective and cost a fraction as much. Nonetheless, the research base suggests that tutoring and comprehensive and structured approaches such as SFA warrant close attention. In contrast, and despite nearly universal popularity, parent involvement programs seem to lack as solid a research base as tutoring and comprehensive interventions aimed at improving achievement directly. Although it would be extreme and unjustified to say that educators should no longer explore parent involvement to improve student achievement, at the moment the research base is not very firm.

Aside from particular programs, there are effective classroom instructional practices that should be more prevalent than they are. These practices and their research bases are described in publications such as Preventing Reading Difficulties in Young Children (Snow et al., 1998), Report of the National Reading Panel (NICHD, 2000), and the many sources cited therein. At a minimum, all educators must be familiar with these reports and how to carry out instruction based on their conclusions. There is no excuse for teachers, administrators, and teacher educators—anyone who has professional responsibility for assuring that children learn to read well—not to be thoroughly versed in their implications. For example, children benefit from phonological awareness and systematic phonics instruction. The evidence is overwhelming that instruction explicitly and systematically directed at helping children learn and apply the alphabetic principle—that letters represent sounds and sounds can be represented as letters—makes a positive contribution to literacy development. However, different children probably need different amounts of instruction, so teachers must be continually monitoring progress to determine what is necessary. A child who has already begun to decode and has clearly mastered the alphabetic principle does not need phonological awareness instruction.

More generally, neither phonological awareness instruction nor phonics instruction is a panacea. As important as they are, they should not constitute the sum and substance of a reading program. The National Reading Panel (NICHD, 2000) concluded that programs spending less than 20 hours—far less than the total amount of reading instruction time available throughout a school year—on phonological awareness instruction had the strongest effects on reading acquisition. The panel withheld recommendations for how much time should be spent on phonological training, saying that it probably depended on child and situational factors. Similarly,
although the case for systematic instruction in phonics is irrefutable, its impact on reading development is moderate. The panel concluded that the overall effect size is .44, which translates roughly into an impact of about 16 or 17 percentile points, depending on students’ level of achievement. This is a substantial and meaningful effect, but other factors must come into play. Otherwise, systematic phonics instruction by itself would spell the difference between learning to read and not learning to read. Clearly this is not the case. As a further indication, the panel found that phonics instruction for low achievers in grades 2 through 6 had no significant impact on reading performance. The panel offered no definitive interpretation for these findings, concluding instead that further research is needed.

Other language and literacy experiences are also key to literacy development and must find their way into classrooms. For example, promoting reading fluency and providing comprehension instruction are extremely important; so are instruction and other noninstructional activities that build background knowledge, which is important in its own right as well as essential for reading comprehension. The National Reading Panel (NICHD, 2000) found that guided repeated oral reading had significant impact on various measures of reading outcomes, from comprehension (effect size = .35) to reading accuracy (effect size = .55). Comprehension-oriented instruction, such as teaching vocabulary and various text comprehending strategies, also helps promote reading development. The panel identified no fewer than eight comprehension strategies (or groups of strategies) for which we have firm evidence of impact on reading development: comprehension monitoring, cooperative learning, graphic and semantic organizers, instruction in story structure, question answering, question generation, summarization, and multiple-strategy instruction designed to help readers use different strategies flexibly and appropriately. Many of these strategies show strong effects.

The larger point is this: We have a firm research base that recommends the use of numerous instructional strategies to promote literacy development. One way to make progress toward U.S. national education goals is to aim for widespread dissemination and implementation of this knowledge base. This is, of course, easier said than done, as the school change literature makes painfully clear (e.g., Fullan, 1991, 1993, 1999; Goldenberg, 2004). Nonetheless, we have potential avenues for influencing the knowledge and skill base of practicing educators. Professional development for teachers and other educators is one such potential avenue (Roller, 2001). Moreover, some intervention programs, such as SFA, have well-developed technologies for effective implementation, which takes a comprehensive view of professional development and schoolwide change (Bodilly, 1998). SFA is not the norm, however.

Finally, educators must realize that the impact of socioeconomic, language, and cultural factors on children’s literacy attainment is more complex and problematic than generally recognized. For example, the impact of individual children’s or families’ SES on reading achievement is actually quite small, smaller
than the various strategies and interventions that have been described previously. However, at the aggregate level, SES has a substantial impact on achievement. In other words, when children live in low-SES communities or attend schools that are largely low SES, their achievement is likely to suffer; conversely, children living in high-SES communities and attending high-SES schools will benefit. The relationship is not perfect, of course, because there are many instances of high-achieving children (and some high-achieving schools) in low-SES contexts and low-achieving children in high-SES contexts. But in general, SES—when defined in terms of a community or an entire school, not in terms of an individual student—has a moderate to strong effect on achievement.

Similarly, the impact on reading acquisition of coming from a non-English-speaking home is likely to depend on the type of school program a child experiences. Programs that utilize children’s primary language during instruction appear to have at least a modest positive effect on achievement in English (Greene, 1997); other nonlanguage instructional factors (reviewed previously) also influence these children’s achievement. The knowledge base for promoting literacy among English learners is contradictory and confusing, to say the least, yet there is evidence that these children do better in some programs than others (August & Hakuta, 1997). Although being limited in English proficiency is a risk factor, it is more of a risk factor in some instructional contexts than others. The role of the home culture in the educational process is even more uncertain. Many studies have pointed to potential areas of incompatibility between the home cultures of minority students and the school and classrooms they attend. However, little, if any, direct evidence exists that eliminating or diminishing these discontinuities promotes higher levels of student achievement.

**Research**

Beyond implementation of practices and programs with high probabilities of success, there is just as obviously the ubiquitous need for additional research. Unquestionably we have made progress in understanding what contributes to early literacy development, what puts children at risk for reading problems, and what schools and families can do to promote literacy growth and minimize literacy difficulties. But many challenges still lie ahead. Preeminent among them is how to accelerate the literacy growth of far more low-income children than we are now succeeding in helping achieve high levels of literacy. Successful implementation of effective programs and practices would take us in this direction, but clearly this is not sufficient. Effect sizes are generally moderate, and even in successful programs such as SFA or the Abecedarian Project, there are still too many children who do not do well enough. A clear challenge for the 21st century, therefore, is to continue to refine and bolster these programs in order to find even more effective ways to help all children, regardless of socioeconomic level or linguistic and cultural background.

*Literacy for All Children* 1659
There are many instructional issues that remain unresolved, and a full catalog is beyond the scope of this chapter (see NICHD, 2000; Snow et al., 1998, for more comprehensive treatments). Clearly these issues constitute a compelling research agenda. A preeminent issue is whether there is some optimal balance of reading instruction that should be provided. There is wide consensus that children need instruction in alphabetsics (phonological awareness, decoding), fluency, and comprehension. They also need opportunities and experiences designed to motivate functional and meaningful uses of print (Snow et al., 1998). What should the mix be? How much of what should be emphasized and when? Should alphabetsics receive the lion’s share of attention in the early stages, gradually shifting to higher-level processes such as comprehension and functional uses of print, as in “learn to read then read to learn”? Or should children all proceed more or less together from the outset, perhaps emphasizing alphabetsics due to its foundational importance but never straying too far from comprehension, meaning, and functional uses for literacy?

Having identified many of the critical components for literacy development, the task is now trying to figure out how the pieces best fit together—if indeed there is a best fit, either for all students, individual students, or groups of students. For example, it might be that students who come to school with fewer literacy experiences require more direct and explicit instruction in order to help them acquire key understandings that underlie literacy development. If true, the instructional balance for these students is likely to be different from the instructional balance for students who come from homes that provide a wealth of literacy experiences.

Parent involvement is another area in great need of additional research. Many readers will be surprised to learn how inadequate the empirical base is. This thin research base does not suggest abandoning parent involvement as a potentially productive venue (although some might argue that it does); instead it argues for renewing our efforts to study parent involvement rigorously so we can determine what its effects really are. The same can be said for efforts to improve minority children’s reading attainment by accommodating to the home culture. Allen and Boykin (1992), Tharp (1989), and others have argued that instructional practices in schools must be changed to fit the home and cultural experiences of diverse students. If this hypothesis is correct, it would have very important implications for the education of large numbers of children. At the moment, however, there is insufficient evidence to form a strong basis for policy or practice. Current and future research might well change this, however (see Demmert & Towner, 2003).

**Conclusion: Rhetoric and Reality Redux**

Kameenui (1998) has identified a chasm that sooner or later we must confront: the rhetoric of all but the reality of some. U.S. national goals are a case in point: As a nation, the United States has committed itself to all children beginning
school ready to learn, all students demonstrating competency over challenging subject matter, and every school promoting parent involvement that helps children succeed. These pronouncements remain rhetoric; reality in the schools is far different. But of course the challenges educators face in achieving national education goals for all children go far beyond finding more effective ways of teaching reading and writing in school and involving parents in children's education. Far too many children attend school under circumstances likely to influence academic processes and outcomes adversely. As a group, low-income children are more likely to have to endure a wide range of disadvantages associated with poverty—single parent families, poor access to quality healthcare, poor diets, unhealthy environments, dangerous neighborhoods, behavioral and social-adaptational challenges, and numerous other challenges. Although we can find examples of children who have succeeded in the face of formidable environmental challenges, and therefore we know that poor outcomes for children at risk are not a foregone conclusion (Werner & Smith, 1982), why should children have to struggle against the odds? The issue is one of social justice, not simply of improving reading scores. Ultimately, our solutions must go beyond educational interventions, as important as they might be. Solutions also must focus on integration of programs, policies, and services, the school being but one of many agencies implicated. As Schorr (1994) has argued, "We need bold and comprehensive strategies. Incrementalism will not do it. There are chasms you cannot cross one small step at a time" (p. 237).

Efforts to improve educational outcomes for all children must be part of a broader social and political agenda aimed at providing adequate financial, material, and social supports known to influence children's academic and, more generally, developmental outcomes (Shonkoff & Phillips, 2000). Without such a broad strategy it is difficult to imagine meaningfully addressing the chasm between national rhetoric and children's reality. If we implement well those things we have reason to believe make a difference in children's literacy, and if we vigorously pursue research and political agendas aimed at further breaking down barriers to access, perhaps there is a chance that a future generation will not peer out from the first years of the next century, once again staring into this dark chasm.

Acknowledgments
This chapter was made possible by grants from the Spencer Foundation and the U.S. Department of Education, Office of Educational Research and Improvement (now the Institute for Education Sciences).

Note
1 An effect size is a measure of the impact of some procedure or program. It is the amount of increase or decrease in achievement that can be attributed to the procedure or program. Effect sizes are expressed as portions of a standard deviation, so that an effect size of .5 means an effect of one half of a standard deviation. Generally speaking, an effect size around .2 is considered small, .5 is moderate, and .8 is large (NICHD, 2000).
References


the National Reading Panel’s meta-analysis. 

Reading Research Quarterly, 36, 250–287.


Reading Research Quarterly, 36, 28–47.


Goldenberg, C., & Gallimore, R. (1989). Teaching California’s diverse student population: The common ground between educational and cultural research. 
California Public Schools Forum, 3, 41–56.


Bilingual Research Journal, 21, 103–122.


literacy project. Newark, DE: International Reading Association; Chicago: National Reading Conference.


