CHAPTER 4

LITERACY: INSTRUCTIONAL ISSUES[1]

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Literacy instruction is undoubtedly one of the critical focal points in the education of all children – native English speakers as well as English language learners (ELLs). Literacy is both an end in itself and a means to other ends since, without formal education, most children would not learn to read and write and, without reading and writing skills, children would not be able to learn and function effectively in school and beyond. Clearly, there are challenges in teaching ELLs to read and write that exceed those that educators face when teaching native English speakers. The focus of this chapter is on research that has examined the instructional, family and community, and assessment issues related to reading and writing by ELLs. For purposes of this review, *reading and writing include the production or comprehension of written language and behaviors related to the production and comprehension of written language – for example, strategies for comprehending unknown written words or engagement in reading and writing activities.* This encompasses a broad range of outcome measures, as will become evident in the following review. The corpus of studies that was retained for full analysis following our initial review, as described in Chapter 1, were categorized into four broad topics, each of which is addressed in the following sections:

(a) Instructional Approaches

(b) Language of Instruction

(c) Family and Community Issues

[1] In D. August & D. Shanahan (Eds) (2006). *Developing Literacy in Second-Language Learners*, (pp. 109-175). Mahwah, NJ: Erlbaum and Washington, D.C.: Center for Applied Linguistics.

(d) Assessment Issues

INSTRUCTIONAL APPROACHES

Research reviewed in this section has examined a wide variety of different methods, techniques and strategies aimed at promoting the reading and writing skills of English language learners. Notwithstanding this variety, it is possible to classify most studies into three major approaches: (1) direct instruction, (2) interactive, and (3) process-based. A similar taxonomy has been proposed by Hillocks (1984) on the basis of meta-analyses of writing. More specifically, Hillocks distinguishes between (1) presentational, (2) environmental, and (3) natural process modes of instruction that resemble in some important respects what we identify as direct, interactive, and process-based approaches, respectively. He also identified what he called an "individualized" *mode* of instruction. Each of the three approaches used in the present review, in turn, reflects a particular pedagogical frame of mind and it is this framework that unifies the methods within each category. We describe the framework for each approach in the sections that follow. Studies were identified with each approach on the basis of the authors' complete descriptions of and rationale for the interventions they were examining so as to ensure as appropriate classification as possible. However, it is important to acknowledge that these approaches to, or modes of, instruction are not mutually exclusive in that a given classroom intervention can entail features of more than one approach. For example, virtually all instruction is concerned with the teaching of specific skills to some extent and with the social context in which teaching and learning take place; and, clearly, virtually all instruction entails some kind of interaction, with the teacher at the very least. In fact, these approaches may be best conceptualized as forming a continuum from direct instruction to interactive to process-based approaches, and particular studies in this review are best viewed as falling relatively close to or distant from these prototype anchor points. It was possible to discern that each of the

instructional strategies depicted in these reports was comprised of a relatively distinct constellation of features, which we describe shortly, and each appeared to have a central focus that permitted us to situate it relative to this crude tri-partite classification. A central issue for future research is to investigate if there are specific features that distinguish each approach and to evaluate the relative effectiveness of hybrid approaches. Some interventions were explicitly and deliberately composed of different approaches, and these studies are discussed in conjunction with each appropriate approach. There was a handful of studies that did not fit into any of these categories comfortably; for example, a study on suggestopedia does not fit comfortably with the tenets of any of the major approaches we have identified (Ramirez, 1986). Such studies were excluded from our review on the grounds that single studies of unique techniques lack sufficient generalizability to be useful, at this time.

In the sections that follow, we identify the constellation of features and the central focus of instruction that distinguish each approach, and we review the evidence emerging from research pertinent to each approach. Before embarking on our review, it is interesting to note that the vast majority of studies examined reading vs. writing and students in elementary level grades vs. middle or high school grades. In sum, the majority of this research focused on various aspects of the reading development of ELLs in elementary school. In the descriptions that follow, we use the student-related descriptors used by their report authors – thus, ELLs of Hispanic background are variously referred to as Latino/a, Mexican American, or Spanish-speaking.

Direct Approaches

The studies in this category highlight direct instruction of specific reading or writing skills that are thought to be essential for all students learning to read and write or for particular

learners who have special literacy needs. Collectively, they focus on a variety of different skills, such as the use of context to interpret unknown words in text (Kucer, 1992), the acquisition of new vocabulary (Avila & Sadoski, 1996), and the ability to discriminate the sounds of words and to link them to their spelling (Kramer et al., 1983). Some authors focus on strategies in contrast to skills, such as cognitive reading strategies (Padron, 1992) or strategies for dealing with writing and reading "blocks" (Kucer, 1995), although the distinction between "strategies" and "skills" is not explicated clearly. For purposes of simplicity, we refer to the focus of all direct instruction as "skills" but recognize that some researchers are looking at strategies. Direct approaches to instruction are based on the twin assumptions that reading and writing are comprised of interrelated but discrete sub-skills and that these skills are best taught through direct instruction. In contrast, interactive approaches and process approaches (to be discussed later) examine mediated learning—learning mediated by social interaction (interactive approaches) or by engagement in authentic reading and writing for communicative purposes (process approaches). Moreover, direct instruction is also distinguished by its orientation to evaluation -- the effectiveness of direct instruction is assessed directly – by examining students' acquisition or use of specific targeted skills/strategies. Interactive and process approaches include a much broader range of outcomes, as we shall see later. Direct instruction is thought to be particularly appropriate and desirable for minority language students on the grounds that they are at-risk for reading and writing development and, thus, they require explicit and focused instruction in the requisite skills that comprise reading and writing. A summary of the studies that were retained for this review is presented in Table 1.

Insert Table 1 about here

It is evident from Table 1 that the extant research with respect to specific techniques and instructional objectives examined by studies that have looked at direct instructional approaches is limited, with most studies focusing on reading and little attention paid to writing skills – except see Bermudez & Prater (1990) and Kucer (1995). Within the domain of reading, a variety of specific reading-related sub-skills or strategies have been the target of instruction: interpreting unknown words (Kucer, 1992), vocabulary (Avila & Sadoski, 1996; Ulanoff & Pucci, 1999), sound discrimination (Kramer et al., 1983), and strategies for overcoming blocks during reading and writing (Kucer, 1995). The corpus is further limited with respect to grade level coverage -- with the exception of Kramer et al. (1983), extant research has focused on learners in grades 3 to 7 /8, with the consequence that there is little empirical evidence concerning direct instruction in reading or writing for early primary school or high school ELLs.

Despite the diversity of outcome measures, a number of studies in the corpus examined reading comprehension, a critical aspect of proficient reading (Padron, 1992; Klinger & Vaughn, 1996; Hernandez, 1991; Jimenez, 1997; and Kucer, 1995). While the specific aspects of comprehension investigated in these studies varied, they fall within four general strategies, identified by Padron (1992) as: (1) question generating, (2) summarizing, (3) predicting, and (4) clarifying. All studies that examined direct instruction of reading comprehension strategies have reported that ELLs benefit from such instruction in a number of ways. More specifically, Padron (1992) examined grade 3 to 5 Hispanic students' use of specific comprehension strategies following random assignment to experimental and control groups. The experimental groups were

give training twice a week for 30 minutes over a one month period. Students in the control groups engaged in regular reading activities. Experimental students at all grade levels showed a significant increase from pre- to post-test in their use of the targeted strategies, with students in the higher grades increasing their use of more sophisticated strategies (e.g., asking questions about parts of the story that were not understood) more than students in the lower grades. Hernandez (1991) found that non-English-speaking Hispanic students who were about to enter grade 7 benefited from direct instruction in the use of reading comprehension strategies during the summer months – interestingly, the participating students demonstrated increased use of the strategies in Spanish and English even though training was provided in Spanish only. Hernandez also reports that the participating students' reading comprehension improved following instruction, but he does not present statistical evidence in support of this claim. Kucer (1995) reports that grade 3 Mexican American students increased their use of strategies for dealing with reading and writing blocks, but does not report objective evidence of actual improvements in reading comprehension.

Evaluations of two comprehensive programs of instruction that can be classified as direct approaches were identified: "Success for All" and "DISTAR". Detailed descriptions of SFA can be found in Slavin and Madden (2001) and of DISTAR in Stebbins et al. (1977). Both programs provide highly structured instruction in reading with scripted curriculum. While the focal approach within each program is decidedly direct instruction, each in fact encompasses a somewhat eclectic variety of activities, and future research would be useful to identify how significant different components of each is for its success. Evaluations of SFA implementations in Philadelphia, California, Houston, and Arizona are reported in Slavin & Madden (1999), and an evaluation of SFA in Texas is reported in Hurley, Slavin & Madden (2000). Taken together,

the findings of these evaluations, which include comparison groups and district norms, indicate that SFA students generally score significantly higher than comparison students on standardized tests of word identification, word attack, and passage comprehension at all grade levels. In bilingual versions of SFA, differences in favor of SFA students dissipate in higher grades, possibly as a result of ELLs with high levels of English reading being transitioned into all-English programs. Evaluations of DISTAR similarly show advantages on a variety of reading skills tests (including decoding, spelling, word knowledge, and language) for students in DISTAR programs at the elementary school level in comparison to control groups or district norms (Becker & Gersten, 1982; Gersten, 1985).

Direct skills instruction has also been shown to be effective for students with language or learning impairments. Klinger & Vaughn (1996) found that grade 7 and 8 students with learning disabilities benefited from instruction in the use of reading comprehension strategies to enhance understanding. Rousseau, Tam & Ramnarain (1993) have similarly reported that direct skills instruction focusing on reading comprehension is effective for grade 6 and 7 students with low levels of literacy and with speech/language impairment, although their study comprised only 5 students and thus requires replication with larger samples. Finally, Jimenez (1997) reports that grade 7 Latino students with low levels of literacy enhanced their use of cognitive reading strategies following direct instruction in the use of such strategies, but he does not report whether their actual reading comprehension increased as well. The question arises in studies of strategy use whether increased use of specific strategies that are the object of direct instruction actually improves reading comprehension – a number of studies in this corpus reported evidence of strategy use without reporting evidence of increased comprehension, as already noted.

Also of note in this corpus are studies by Avila & Sidoski (1996) and Hernandez (1991), noted above, that examined the effectiveness of cross-language skills training – that is, direct training in specific skills was provided in the students' native language and the effectiveness of training was assessed by examining use of the targeted skills in English (Avila & Sidoski, 1996; and Hernandez, 1991). This is an interesting and important approach to providing literacy instruction to ELLs because it draws on the native language skills and competencies that ELLs bring to school while promoting acquisition of skills that are relevant to the target second language, English. To be more specific, Avila & Sadoski (1996) examined the use of the keyword method to promote the acquisition of English vocabulary on the assumption that vocabulary development is essential to reading acquisition. Spanish keywords were used to promote the acquisition of targeted English words. They report that the grade 5 Hispanic students who participated in their experimental training demonstrated significantly superior word knowledge skills in comparison to comparable students who were in the control group; the advantage of the experimental group was evident immediately following intervention as well as after some delay. In Hernandez's study, grade 7 ELLs were taught a number of strategies for comprehending written text in Spanish while the effectiveness of this intervention on the students' comprehension skills was assessed in English. Hernandez found that the students increased their use of the target strategies when reading English texts (as well as Spanish texts) and that their reading comprehension increased, although no statistical evidence of the reliability of the latter finding is reported.

Despite the current popularity of arguments in favor of direct instruction (e.g., Snow, Burns, & Griffin, 1998), there is surprisingly little empirical work that systematically examines the effectiveness of particular variations of this approach. Of particular note, we identified very

few studies that examined instruction in phonological awareness and its effects on reading – these are reviewed in the chapter on Crosslinguistic and Crossmodal Issues. This gap may be accounted for in part by the inclusion of only studies that included measures of actual reading. Thus, studies that looked at phonological awareness instruction without examining directly whether this resulted in improvements in reading would have been excluded from our corpus, as noted earlier. In any case, this lacuna in the research is surprising given the controversial and heated discussions that have occurred recently concerning the effectiveness of "phonics instruction". It is also surprising given the extensive evidence for the effectiveness of such approaches in the case of monolingual English-speaking students (see, for example, Snow et al. 1998). Most of the empirical studies we identified examined students who were in grades 3 to 7, while students in the early primary and high school grades have been largely ignored. Clearly additional research is called for that examines students in middle and especially high school as well as on writing and phonics instruction. Research on direct skills training deserves particular attention in an era when educators are being held to a myriad of standards and standardized testing requirements since the skills that are the focus of such instruction are also often the stuff of accountability.

Interactive Approaches

A recurrent issue in literacy education concerns the nature of the broader social context in which students learn to read and write. In particular, a number of theoreticians emphasize the importance of interactive learning environments to promote reading and writing proficiency (e.g., Cummins, 1984; Slavin, 1995; Tharp & Gallimore, 1988). Interactive learning environments are environments in which learners engage in literacy activities with one or more other learners or with more mature readers and writers – like teachers, parents, or older students.

In this way, students learn from others, initially by observation and subsequently by internalizing more mature literate behaviors exhibited by others. In contrast to learning in direct instruction, learning in interactive instructional environments is indirect or mediated by social interaction. Indeed, interactive approaches are favored by some on the grounds that teachers and parents who are more competent than the learner can provide learners with individualized guided instruction that corresponds to their zone of proximal development – in line with Vygotsky's theory of development and learning. While interactive approaches as a whole cannot be attributed exclusively to Vygotsky, his theory of learning has certainly played a pivotal role among those who promote this approach to teaching reading and writing instruction (Vygotsky, 1962), and the notions that comprise his now-classic theory of learning can be found in many of these interactive approaches. Chief among the arguments for such an approach are the following principles or beliefs, culled from studies that are reviewed in this section:

- Interactive teaching/learning environments give children opportunities, and indeed encourage children, to be active participants in the learning process, not simply passive recipients (e.g., Fayden, 1997)
- Interactive learning environments serve to motivate the learner, to focus their attention on relevant literacy-related behaviors and dispositions, and to provide opportunities for self-initiated and socially-rewarding literacy activities – in other words, to take control of their own reading and writing (Carger, 1993).
- Interactive learning activities familiarize learners with particular language genres or activities through modeling and guided instruction (Klinger & Vaughn, 1996); this can be especially useful when complex reading and writing behaviors are implicated.

- A key competency of highly literate individuals is not simply the ability to read and write well but the ability to think and talk about reading and writing (Martinez-Roldan & Lopez-Robertson, 1999). On this assumption, it is argued that interactive learning environments impart opportunities to acquire critical meta-literacy skills – the ability to reflect on and communicate about literature or other literacy-related objects and events.

It has been argued that interactive learning environments are especially relevant to ELLs because of their diverse socio-cultural backgrounds. More specifically, interactive approaches support individualized teaching and learning in line with the considerable heterogeneous learning needs and styles of ELLs. Moreover, interactive learning environments are thought to reinforce participant structures that some ELLs are used to in their homes but differ from mainstream American culture. The participant structures in many minority culture homes are thought to differ from those in mainstream anglo-American culture in emphasizing group vs. individualized participation, collaborative vs. competitive demonstrations of competence, and learning by observing vs. learning by talking. Interactive learning environments entail multiple participants engaged in collaborative work and, consequently, extended opportunities to learn through observation. Learning from models is also thought to be advantageous for students from minority language backgrounds who have not had extensive extra-curricular experiences with the adult models of literacy; the same could be said of majority language students from low literacy backgrounds. A further argument in favor of interactive approaches comes from the notion that reading and writing are more than mere cognitive activities. Rather reading and writing are linked to a culture of literacy (Hudelson, 1994). Interactive strategies recognize and, indeed, promote the acquisition of this culture in addition to the specific language-cognitive skills that

comprise reading and writing as cognitive activities. Descriptions of the learning environments of a number of the studies reviewed in this section are presented in Table 2.

Insert Table 2 about here

In keeping with the broad range of goals of interactive approaches to literacy instruction, a wide variety of specific interactive teaching/learning environments have been implemented and examined in the literature – see Table 3. The diversity of interactive techniques to literacy instruction exhibited in this body of research is, in turn, reflected in a diversity of reading, writing, and literacy-related outcome measures -- Table 3 provides a partial listing of the outcomes that were examined in this body of research. Briefly, a number of the studies used norm-referenced measures of general reading; while others used discrete-point tests of specific reading skills related to vocabulary, letter identification, and the lexical and propositional content of written text, to give but a few examples. Yet others examined students' use of reading strategies and reading-related behaviors, such as helping, engagement in reading, perceptions of control of reading, and interests and attitudes. The latter are termed "reading-related" in this review since they do not tap directly into reading itself. Some teachers and literacy specialists argue that such reading-related behaviors, while ancillary to reading per se, are very important components of a developmentally appropriate program of reading instruction. It has been argued further that these ancillary skills are particularly important in instruction for ELLs who have no or limited exposure to literacy outside of schooling and, thus, require instruction that attends to the broader context of reading; the same could be said of native English speakers with limited literacy experiences before coming to school.

Insert Table 3 about here

Aggregating across studies, a number of general trends are evident in this body of research, although qualifications need to be made in accordance with methodological issues. First, it appears that interactive instructional strategies can be effective with ELLs, as argued by its advocates. Virtually every study in this corpus reported that ELLs in interactive learning environments demonstrated improvements in reading and writing or behaviors related to reading and writing. The exceptions were Syvanen (1997) who found no significant improvement in student/tutors' reading levels but did note significant gains in their control over the reading material, and Cohen & Rodriquez (1980), a study we return to shortly. In support of this overall trend, a number of studies included statistical comparisons of differences between treatment and control groups or pre- to post-test results (Calderon, et al.,1998; Doherty, Hilberg, Pinal, & Tharp, 2003; Echevarria, 1996; Fayden, 1997; Padron, 1992; and Klinger & Vaughn, 1996); but others provided only narrative descriptions of the benefits of interactive instruction (Blum et al., 1995; Carger, 1993; Klinger & Vaughn, 2000; Li & Nes, 2001; and Martinez-Roldan & Lopez-Robertson,1999). An additional feature of some concern in some of these students is sample sizes of 5 or less (Blum et al., Li & Nes, and Carger who did not specify the number of students). Small sample sizes can be justified in ethnographic studies that entail in-depth descriptions of student involvement in reading can be justified and in studies of special populations that are difficult to identify – e.g., ELLs with learning/language disabilities (see Echevarria, 1996, for an example). At the same time, follow-up studies with larger samples are called for to confirm trends noted in such studies – none of the above studies reported such

follow-up research. In their favor, and generally speaking, these studies are noteworthy for the detail and care that was taken to provide descriptions of the actual implementation, and Echevarria, in particular, even assessed the fidelity of implementation of the Instructional Conversations approach that was the focus of her investigation.

A second trend to emerge from this group of studies is that interactive approaches appear to be effective with ELLs from a variety of backgrounds; more specifically, with ELLS from low SES families (Fayden, 1997; Padron, 1992), emergent ELL readers and ELLs with limited prior literacy experiences (Blum et al., 1995; Carger, 1993), and ELLs from diverse ethnolinguistic backgrounds: native American (Fayden, 1997), Chinese American (Li & Nes, 2001), as well as Hispanic American students (e.g., Calderon et al., 1998; Echevarria, 1996; Klinger & Vaughn, 1996). In light of the apparent language socialization differences among families from different cultural backgrounds (Ochs & Schieffelin, 1984), more research is clearly needed that explores the effectiveness of interactive instructional approaches in greater depth with learners who are not of Hispanic background -- Hispanic/Latino students were the students in most of these studies. It is also noteworthy that interactive instruction, and in particular Instructional Conversation, was effective for a group of ELLs with learning disabilities in the middle school grades – 7, 8, and 9 (Echevarria, 1996; Klinger & Vaughn, 1996).

Third, interactive approaches also appear to be effective with ELLs in middle school (Echevarria, 1996; Klinger & Vaughn, 1996) as well as ELLs in elementary school -- see Table 3. However, there is an apparent lack of studies on ELLs in high school. This gap is of particularly concern given the critical role that reading and writing play in the mastery of academic subjects, such as mathematics and science, in the higher grades.

Finally, interactive approaches appear to be effective in promoting reading-related behaviors; that is, those behaviors that support engagement in reading and writing and an understanding and appreciation of literacy in its broadest sense. The extant research also supports the general claim that interactive approaches support reading comprehension as well, although the relevant results are mixed – Echevarria and Syvanen both failed to find an advantage for ELLs in interactive classrooms in comparison to controls, as did Cohen & Rodriquez (1980). The latter study warrants some discussion since it compared reading achievement of students exposed to two contrasting modes of instruction – high intensity (direct) skills instruction and group-oriented, interactive instruction. This is a powerful design since it serves to evaluate the impact of different approaches rather than simply show that a specific approach is better than default instruction. Cohen & Rodriquez (1980) found that the ELLs in the direct instruction classrooms demonstrated higher reading comprehension scores on a standardized reading test than did students in the interactive classrooms. On the one hand, it could be argued that these results are an artifact of the testing situation – discrete-point testing favors direct skills-based instruction. On the other hand, and assuming the validity of these results for present purposes, these results, along with the results from the other research in this corpus, argue for flexibility in choosing instructional approaches in accordance with one's instructional objectives – direct skills-based techniques may be best deployed when the focus of instruction is on the acquisition of specific reading/writing skills; whereas interactive strategies may be most appropriate and effective when instruction aims to promote an understanding of literacy, involvement in and/or control over reading and writing, or other reading-related behaviors. Such a differentiated and multi-pronged instructional strategy should not be surprising given the multi-faceted nature of reading and writing. Future research would benefit the education community if it were to systematically

examine the differential and comparative effectiveness of specific instructional approaches with respect to the achievement of different types of instructional objectives. We return to this point in the Conclusions section.

Process Approaches

Process approaches emphasize student engagement in authentic literacy activities with significant communicative goals. Typically, students are given extended opportunities to engage in free reading or writing and in reading and writing activities in which communication is emphasized – such as dialogue journals, literature logs, or literature circles. Engagement in reading and writing activities may be individual or interactive – dialogue journals or free writing, for example, are usually individual activities, whereas literature circles are group activities. Children's literature is a common vehicle for implementing process approaches since literature exposes learners to authentic written text, is engaging, and allows learners to relate to written language via their own experiences, if materials are well chosen. As Roser et al. (1990) indicate, literature-based literacy programs provide a number of advantages to ELLs: they (1) offer exposure to a variety of children's books, (2) contribute to a rich literary environment, (3) motivate responsive reading, (4) encourage voluntary reading, (5) expand the learners' reading interests, (6) help learners grow in language, reading, writing, and thinking, and (7) help learners discover their own connections with literature".

Process approaches are distinguished by the view that language is holistic – reading writing, speaking, and listening (as well as their component sub-skills) co-occur under authentic conditions and they, therefore, should be taught and learned together. See Table 4 for some sample descriptors of process-based instruction in studies reviewed in this section. Proponents of the process approach view the distinctions between the sub-components of reading and writing

that are emphasized in direct skills-based approaches or even some interactive approaches as artificial. Moreover, they argue that focusing instruction on sub-skills is less likely to succeed because it focuses students' attention unduly on the component elements of literacy while distracting them from the ultimate goal – reading and writing for authentic communication and self-expression. This is not to say that process approaches are indifferent to the mastery of spelling, grammar, etc; rather, they view the acquisition of these sub-skills as a natural by-product of engagement in communicatively-oriented reading and writing. In fact, evaluations of some process-based approaches include assessment of discrete-point reading and writing skills (see, for example, Kucer & Silva, 1999; and Roser et al., 1990). The question is how effective are they at promoting specific reading and writing skills.

Whole language can be viewed as a special case of the process approach since it shares the above tenets of other process approaches. Indeed, a defining characteristic of whole language is its emphasis on the integrity of reading, writing, speaking, and listening (and their respective sub-skills). Whole language philosophy asserts that the acquisition of literacy skills occurs naturally, like the acquisition of oral and aural language, through involvement in authentic, meaningful uses of written language. There is wide variation among whole language programs with respect to the instruction of the component skills of reading and writing.

Insert Table 4 about here

As was the case for the other approaches discussed in this chapter, there are a number of different ways in which process approaches are conceptualized, operationalized, and evaluated (de la Luz Reyes, 1991) Table 5 summarizes the variety of instructional techniques and foci that

were investigated and the outcome measures used to evaluate them in the studies included in this review. The description of the outcome measures in Table 5 is not intended to be complete, rather, it is intended to illustrate the wide range of outcome measures that have been used in this research, in keeping with each program's conceptualization of the approach. In particular, a number of socio-affective variables (e.g., attitudes toward reading and self-concept as a reader/writer) figure in a number of these studies. Proponents of process approaches regard it as the preferred method of instruction for ELLs on the assumption that they are particularly responsive to the special language learning needs of ELLs.

Despite arguments in favor of process approaches for ELLS, overall, evidence of the effectiveness of these approaches is mixed. To be more specific, some studies provide evidence of the advantages of process-based literacy activities (Kuball & Peck, 1997; Kucer & Silva, 1999; and Roser et al., 1990), but these results are not compelling – Kuball & Peck provide no statistical analysis to support their claims; Kucer & Silva found advantages in reading but not writing; and Roser et al. use questionable norms to interpret the results of the experimental students. Others report no advantages for ELLs who experienced process-based literacy activities (Schon, Hopkins & Davis, 1982; and Schon, Hopkins & Vojir, 1984); while yet others report negative outcomes for students in process-based literacy classrooms (de la Luz Reyes, 1991; Gomez et al., 1996). Of particular note, Gomez et al. (1996) reported that students who received "structure-based lessons" outperformed students who received extended opportunities for free writing – an activity that is often associated with process instruction. Evidence for the effectiveness of process approaches to literacy instruction is even more tentative when careful consideration is given to methodological factors. While the studies varied with respect to the detail and thoroughness of the descriptions they provided of the instructional approaches under

investigation, overall, many studies of process approaches suffer from inadequate descriptions of the actual literacy activities. This is especially true of those that examined whole language classrooms, but it is not only these studies that suffer such problems – for example, Schon et al. (1984) note that "Teachers in the experimental group were instructed to provide at least sixty minutes a week of free reading time and <u>to do everything they could to help their students develop positive attitudes towards reading</u>." (Underlining added by G&R; p. 14).

A number of researchers, even those who argue for a process approach to literacy instruction, called for a balanced approach that incorporates some direct instruction of specific skills, as needed, embedded in process-based activities. For example, Kucer & Silva (1999), noted above, comment that "*…it is overly simplistic to assert that students will improve their literacy abilities by being immersed in a garden of print; that is, students will improve in their reading and writing due to the maturation process, regardless of instruction. …" (p. 365.).* A similar conclusion is drawn by de la Luz Reyes (1991) following a study of the writing abilities of grade 6 Hispanic ELLs in classrooms where dialogue journals and literature logs were used to promote development -- de la Luz Reyes notes that: "*Overall, mere exposure to standardized writing conventions did not improve the students' use of them."* (p. 291). In response to this situation, Kucer and Silva recommend that *"…when it is determined that a child is encountering repeated difficulty with a particular dimension of written language, focused instructional events would be developed that explicitly teach over time the matter in which the child is experiencing difficulty. In these lessons, not only is the child shown what to do, but also how it is to be accomplished." (p. 366).* Clearly, considerably more research is necessary to come to firm conclusions about process approaches – in particular, more research is called for that identifies the specific conditions for successful implementation of such approaches along

with objective criteria for establishing effectiveness. In the meantime, the extant evidence suggests that process approaches alone are not particularly effective at promoting the acquisition of reading- and writing-specific skills unless provision is made for such a focus.

Insert Table 5 about here

Methodological Considerations

Methodological concerns that are particularly relevant to specific approaches have been discussed in the preceding sections. Here we address methodological issues that emerge from a consideration of all three bodies of research. There is clearly variation in the methodological strength of individual studies; nevertheless, generally speaking, future research on the effectiveness of alternative instructional approaches would benefit from the following improvements – consistent use of appropriate statistical analyses to support interpretation of data, long term as well as short term assessment of the impact of instruction, larger sample sizes, and the inclusion of ELLs from a variety of minority ethnolinguistic groups – in the majority of studies, students from Hispanic/Latino backgrounds were examined leaving open to question the generalizability of findings to other groups. Also, and as previously noted, there is a severe dearth of research on students in high school when the demands on competency in literacy are particularly serious. A number of studies have examined the effectiveness of specific instructional approaches for students with special challenges. In most cases, these students were identified as learning disabled or impaired on the basis of their standing relative to district norms. It is possible that students identified in this way comprise a heterogeneous group of challenges, including language impairment, dyslexia, and learning disability. While these impairments

converge the longer students are educated, there are good theoretical and practical reasons to believe that they are initially different forms of impairment that, arguably, call for different interventions. For example, specific language impairment is not the same as a general learning disability (see Leonard, 2000, for a review) and appropriate intervention for the former is different from appropriate intervention for the latter. Future researchers are encouraged to differentiate special learning needs of ELLs and to identify learners with different needs using appropriate selection criteria. Without more differentiated work on students with impairment, our understanding of how to meet their special needs will remain sketchy and general.

The issue of generalizability, alluded to above, should be of paramount concern if research on instructional issues is to contribute to our understanding of the effectiveness of alternative instructional approaches and, in turn, to policy development and teacher development. When examined as a whole, this body of research suffers from the "one-off" syndrome – that is, single studies by a researcher or team of researchers on a specific pedagogical issue or approach in a specific school and district. It is likely that this way of doing research has arisen in response to the needs and realities of specific classrooms and schools. Nevertheless, future research that entails long term, sustained efforts and multiple samples in different communities could contribute significantly to our understanding of how and when these approaches work. Also relevant to the issue of generalizability is the diversity of ways in which variations of an approach, such as process-based approaches, are operationalized. On the one hand, flexibility in the way an approach is or can be operationalized is realistic and desirable so that the particular needs and resources within particular classrooms can be addressed. On the other hand, the lack of uniformity or coherence in the way approaches are implemented compromises generalizability substantially. It is incumbent on researchers to provide not only sufficient detail about

implementation of the approach they are investigating to ensure that they are studying what they say they are studying, but also to provide information about the reliability of their descriptions, which, as noted earlier, is lacking in some cases. The lack of relevant information about implementation makes it difficult to discern if positive effects, when they occur, are truly due to the specific instructional features of the learning environments that are of interest to the researcher or to some other aspect of classroom life. If research is to influence policy development, researchers must be concerned with the precise nature of the instruction under investigation, the adequacy of their description of the implementation, and the generalizability of alternative variations of the same approach across sites, student populations, and grade levels.

LANGUAGE OF INSTRUCTION

An ongoing issue among theoreticians, researchers, and professional educators has been the benefits, or disadvantages, of providing instruction through the medium of the native language of ELLs. A number of arguments for this (see Cummins, 2000, and Thomas & Collier, 1997, for complete discussions) and against it (Porter, 1990; Rossell & Baker, 1996, for example) have been made; these will not be reviewed in detail here because of space limitations. However, in short, proponents of native language support argue that L2 reading acquisition is facilitated if instruction is provided in a language that child already knows and skills acquired in the native language transfer to the acquisition of reading and writing in a second language. Opponents of native language support argue that it detracts from acquisition of the second language because it gives the learner less instructional time relevant to the second language – the time-on-task argument.

There has been a lot of research attention devoted to assessing the impact of instruction through the native language versus instruction through English alone. The primary way in which

this issue has been addressed is by comparing the performance of ELLs who have received instruction in the primary grades through the medium of only English to that of ELLs who have received instruction in their native language along with English instruction. Sometimes this comparison is effected by making direct comparisons between these two groups within the same school district; and sometimes it is made by comparing the performance of ELLs in bilingual programs to standardized norms appropriate for the level of schooling of the bilingual ELL group. Collectively, studies using these methods comprise the majority of studies that were uncovered. Meta-analyses of this work have been carried out by Greene (1998) and Willig (1985). There is another form of comparison that addresses this question, but indirectly -- namely, by comparing the performance of ELLs who were born, raised and received instruction in English during the primary grades in the U.S. to that of foreign-born students who immigrated to the US., following some initial instruction in the native language in the country of origin. The logic of this comparison is that foreign-educated students have had the benefits of native language support in the development of language skills for academic purposes before coming to the U.S. and this would be equivalent to ELLs who were educated in the native language along with English from the outset in the U.S.. There is only one such study in our corpus (Ferris & Politzer, 1981), but it bears some attention because of the unique contribution it makes to this issue. Yet another way in which this issue has been addressed is by examining the relationship between ELLs' level of bilingualism and their level of literacy (or academic achievement) in English. The logic here is that students with high levels of proficiency in English and the native language are like students who receive support for native and English language development in the primary grades of school. By comparing the literacy and academic development of more proficient with less proficient bilinguals, we are able to examine the influence of native language

support on educational attainment – the fundamental issue in evaluations of bilingual instructional programs. This issue has been addressed in the Academic Achievement and Crosslinguistic-Crossmodal chapters. The corpus of studies reviewed here is summarized in Table 6.

Before proceeding with a discussion of the results of this research, it is useful to provide a methodological overview of them. Of course, the focus of this work has been on elementary level students since the case for bilingual instruction or initial instruction through the students' native language applies especially to students who are receiving initial reading and academic instruction. The choice of language of instruction to optimize educational outcomes is also an issue for ELLs at the middle or high school levels; but, we did not identify any research that did this. A number of studies have examined the short-term impact of bilingual instruction on students in grades 1, 2 and 3 (Calderon et al., 1998; Carlisle & Beeman, 2000; Fulton-Scott & Calvin, 1983; Lindholm & Aclan, 1991; Saldate et al., 1985); other studies examined the mid-term impact of bilingual instruction on students in the senior elementary grades 4, 5, and 6 (Burnham-Massey & Piña, 1990; Friedenberg, 1990; Fulton-Scott & Calvin, 1983; Gersten & Woodward, 1995; Lindholm & Aclan, 1991; Mortensen, 1984), and some examined the long term impact – on students in grades 7 and 8 (Burnham-Massey & Piña, 1990; Gersten & Woodward, 1995) or in one case grade 11 (Burnham-Massey & Piña, 1990;). Examination of both the short and long term impact of bilingual forms of education is important since it permits an assessment of bilingual instruction after different periods of participation.

Insert Table 6 about here

The vast majority of studies have employed standardized tests, including the CTBS, Stanford Achievement Test, Iowa Test of Basic Skills, Woodcock-Johnson, Metropolitan Achievement Test, SRA, and Texas Assessment of Academic Skills. This is an important feature of this body of research since it serves to evaluate this form of instruction in the same way as English-only education is evaluated. Moreover, the population of students who contribute to the norming of standardized tests are carefully selected to represent target levels of achievement in school and, thus, use of such assessment instruments ensures objectivity and generalizability that could be compromised if only local assessments were used. Other outcome measures have also been employed in single studies: GPAs (Fulton-Scott & Calvin, 1983), self-concept as reader/writer (Kuball & Peck, 1997), and locally-devised rubrics for scoring writing or oral language skills (Ferris & Politzer, 1981).

Notwithstanding such methodological variation, overall, the studies within this corpus that have compared the performance of ELLs in programs that provided L1 support with that of ELLs in programs without such support report that ELLs who had received some reading instruction in the primary grades in the native language, with or without ancillary ESL instruction, demonstrated the same or better performance in reading as ELLs of similar linguistic and cultural background who had received initial literacy and academic instruction in English only (Bacon, Kidd & Seaberg, 1982; Burnham-Massey & Piña, 1990; Calderon, Hertz-Lazarowitz, & Slavin, 1998; Carlisle & Beeman, 2000; Friedenberg, 1990; Fulton-Scott & Calvin, 1983; Gersten & Woodward, 1995; Kuball & Peck, 1997; Lindholm & Aclan, 1991; Mortensen, 1984). Neither Burnham-Massey and Piña or Kuball and Peck provide statistical confirmation of their conclusions. This was found even when assessments continued until the

middle school grades (7-8) or the senior high school grades (11) (see Burnham-Massey & Piña, 1990), attesting to the robustness of these effects.

ELLs who received instruction through the native language do not always demonstrate parity with national norms or comparison groups in the initial grades during which native language literacy instruction is provided. More specifically, a number of studies found that it took several years before parity was achieved -- Gersten & Woodward (1995) reported advantages for ELLs in an English immersion program in grades 4-6 but no differences in grade 7. In some cases, ELLS who received bilingual instruction actually demonstrated superior reading performance relative to comparison groups (Calderon, et al., 1998; Mortensen, 1984), but again usually after participating in the program for some years – Ramirez (1992), also cited in the Academic Achievement chapter, found superior reading performance among ELLs who had received bilingual instruction, but only among students who continued to receive instruction in the native language into the high school years; Saldate et al. (1985) also reported superior performance among bilingually-instructed students after three years, but not earlier; and, finally, Fulton-Scott & Calvin (1983) report that there were few differences between students in bilingual-multicultural programs and ESL programs in the primary grades, but that the performance of bilingually-instructed students was superior to that of the comparison group by grade 6.

In a longitudinal study of the performance of Hispanic ELLs and English L1 students in two-way immersion programs in grades 3 to 5, Howard, Christian and Genesee (in press) found that both ELL and English L1 students showed significant improvements in writing and reading performance from grade 3 to grade 5, but that the ELLs performed significantly lower than the English L1 students on both measures at all grade levels. The difference between the ELL and

English L1 groups could be due to a number of factors. First, the ELL students were significantly more likely to come from lower socio-economic backgrounds than were the English L1 students, as measured by parental occupation or free/reduced lunch. Second, the ELL students may not have been in the two-way immersion program to reach parity with their English-speaking peers. In support of this possibility, Collier (1987) has reported that it can take from 5 to 7 years for ELLs in alternative forms of educational programs to achieve grade-appropriate scores on standardized reading and language tests in English (see also Cummins, 2000). ELLs have the triple challenge of acquiring the societal language for both social and academic purposes, acquiring new academic skills and knowledge, and adapting culturally to their new environments, all at the same time. This calls for developmentally coherent curricula that span several grades and for adaptations to assessment programs that take into account ELLs' long term developmental trajectories. Longitudinal studies are critical if we are to ascertain and understand the long term results of particular instructional strategies or approaches, a point we return to in the final chapter.

Evidence of equal or superior reading achievement in English among ELLs who received reading instruction in the native language has also been reported for students with learning disabilities (Maldonado, 1994) and for Cherokee students (Bacon, Kidd, & Seaberg, 1982), two groups of learners who are at double risk of failure in school – risk due to their minority language status and risk due to their learning handicap in the case of Maldonado's learners and their indigenous cultural background in the case of students in the Bacon et al. study. Before leaving this discussion, we wish to draw attention to the study by Maldonado (1994) on the development of ELLs with learning disabilities who were receiving bilingual instruction. This study is particularly noteworthy because it entailed random assignment of disabled students to

bilingual and English-only classrooms – we return to the issue of random assignment shortly. More specifically, 20 students with learning disabilities from one school were randomly assigned to either an experimental group that received integrated bilingual special education or a control group that received traditional special education in English. The two groups were taught for three years in otherwise similar classrooms by similar teachers. The experimental group received instruction in Spanish for all but 45 minutes during the first year and received dual language instruction (50% English; 50% Spanish) the second year. English was the only language of instruction during the final year. The instruction for the control group was conducted only in English. Student performance was assessed using the CTBS both at pre- and posttest. Students in the bilingual special education class were superior to students in the English-only group at post-test. Interestingly, the students in the bilingual special education program actually scored lower than the control group at pre-test indicating that they had made even greater gains than the control group than their post-test results alone would indicate. Replication of the Maldonado study is called for in order to address methodological weaknesses – in particular, it is not clear whether the only or primary instructional difference between the learning disabled group who received native language instruction and those who did not was the language of instruction.

Returning to the issue of random assignment -- previous critiques of evaluations of bilingual instruction have discounted extant evidence on the grounds that most studies do not include random assignment (Rossell & Baker, 1996). One of the primary arguments for the use of random assignment is linked to the issue of generalizability – that is, random assignment of subjects to an experimental condition permits the researcher to rule out other potential confounding factors that might account for significant or non-significant effects. However,

random assignment is not realistic in this case since it is difficult to imagine, for ethical and political reasons, any school district or ethics review board that would enforce random assignment, without parental permission, to such radically different educational programs. Moreover, there is no realistic or legal way to ensure that participants in bilingual programs would remain in the program following initial assignment so that the long term participants in such programs could no longer be said to be randomly assigned. In addition, since choice is the hallmark of education in the U.S. and in current implementations of bilingual education, a randomly assigned group of students would not be a valid reflection of the kinds of students and families who typically select such programs under ordinary circumstances. Convergence of findings from studies that have employed different assessment instruments and analytic techniques, as well as different groups of students in different regions of the country, is a more desirable and realistic way of providing evidence for the generalizability of findings concerning the effectiveness of bilingual or any other form of instruction for ELLs. In fact, extant research provides this kind of generalizability.

In summary, research on the reading and writing outcomes of ELLs in instructional programs that provide some instruction through the medium of the native language indicate that (a) participation in such programs does not retard the students' English language reading and writing development, and to the contrary, (b) participation in such programs is often associated with equal or superior performance when compared to that of similar ELLs in programs without such support; at the same time, (c) ELLs in programs with native language support do not necessarily achieve parity with native English speakers on reading and writing measures, and (d) when they do, it can take 3 to 5 years, or more.

FAMILY AND COMMUNITY ISSUES

The studies reviewed in this section examined literacy development in relation to home-based factors --such as number of books at home, parents' values, and aspirations, as well as home-related factors – such as the impact of school-initiated interventions in the home, e.g., the impact of using audio-books at home on students' reading performance (see , Blum et al., 1995). Factors related to oral language development in the home and its impact on phonological awareness, or other reading-related skills, are discussed in Chapter 3: Crosslinguistic-Crossmodal Issues. In principle, one might also expect community-related factors to play a role in the development of reading and writing skills in ELLs – e.g., the extent to which written forms of language are evident and useful in the community, for example. In fact, we uncovered no studies of this nature. Notwithstanding certain gaps, this is an important line of research since it is often argued that ELLs are at-risk for reading failure or difficulty because of their lack of exposure to or engagement in literacy outside school – this itself is subject to empirical verification. A thorough understanding of the language experiences of ELLs in the home and community would be useful for developing school-based literacy activities that build on these students' total language experiences, especially those language experiences that support literacy development. Moreover, evidence that home- and community-based literacy activities can enhance ELLs' literacy development would be welcomed news because it could provide additional resources for promoting literacy development by drawing on the assistance of parents and communities.

Insert Table 7 about here

Two predominant themes in this research are (a) socio-economic status, and (b) home-based literacy practices and resources. These two variables are highly inter-related. Socio-economic status was assessed in terms of eligibility for free lunch. Eligibility for free lunch is linked to parental income which may, in turn, be linked to parental occupation and education and, ultimately, to a variety of home-based literacy practices and resources: literacy skills of parents, their engagement in reading and writing on their own behalf and with their children, and availability and use of books. At the same time, it is important to recognize that there may be a discrepancy between a family's current SES and parental education because immigrant parents may be relegated to low level jobs in their new communities, despite high levels of education from their communities of origin. We review the findings from these two sets of studies separately, but recognize that they are likely concerned with the same proximal family influences.

With the exception of findings from Ima and Rumbaut (1989), the evidence indicates that there is a positive correlation between socio-economic status and literacy development (Buriel & Cardoza, 1988; Kennedy & Park, 1994; Tompkins, Abramson, & Pritchard, 1999; and Reese, Garnier, Gallimore, & Goldenberg, 2000) – students from higher socio-economic backgrounds exhibited higher levels or more rapid development of reading skills in English than ELLs from relatively low socio-economic backgrounds. Ima and Rumbaut failed to find a significant difference in SES between LEP and FEP students of Southeast Asian background in regression analyses that examined the influence of a variety of other factors. In line with the Ima and Rumbaut, Thomas and Collier (2002) have also reported that SES accounts for a relatively small proportion of variance in the reading scores of ELLs in a variety of different program options. The discrepancy in these findings may be somewhat artifactual. Socio-economic status is itself

not a causal variable, but represents a number of other proximal variables that are causal in nature – e.g., reading practices at home and the availability of reading material at home. Thus, studies that include a constellation of such proximal variables may eliminate the statistical influence of SES, thereby giving the impression that SES is unrelated to literacy development. In fact, from developmental and pedagogical perspectives, it is the family variables associated with SES that are of more significance because they carry with them practical implications of some import. This is evident as we turn to the next set of studies – those that looked at family-based literacy practices and their relationship to literacy.

Taken together, findings from studies that have examined family-based factors indicate that early literacy experiences in the home support subsequent literacy development in school (Reese, et al., 2000). For example, Blum et al. (1995) found that the reading performance of ELLs benefited from home-based literacy activities that were initiated by the school – the use of audio-tapes to support reading at home. The results of this study must be interpreted with caution, however, owing to a small and highly select sample. It warrants replication with methodological enhancements because of its potential educational importance. Yet other studies in this corpus examined patterns of language use and literacy resources outside school in relationship to literacy development in school – see Hansen (1989), Hughes, Schumm & Vaughn (1999), Pucci & Ulanoff (1998), Jackson & Wen-Hui (1992), and Kennedy & Park (1994). Pucci and Ulanoff (1998) and Jackson and Wen-Hui (1992), for example, found that precocious or proficient readers from minority language backgrounds had more books at home, were read to at home more often, and had someone who took an interest in their reading and assisted them with reading more than did non-proficient or average L2 readers. The sample sizes in the Pucci and Jackson studies were quite small (n=12 in both cases), and they examined

parental literacy activities with children who were already proficient readers. It would be useful to examine the effectiveness of a training program for parents of non-proficient readers with a view to seeing how practical and effective such parental intervention could be. We cannot tell from the Pucci and Jackson study what the causal factor is – was it parental intervention that promoted the development of their children's reading or was it these children's precocity in reading that prompted parental involvement, or both? Nevertheless, we reiterate that these results, like those from studies examining home-based interventions that are initiated by teachers, are very useful since they have clear implications for how to extend opportunities for literacy development.

Using multi-variate techniques, Buriel and Cardoza (1988), Duran and Weffer (1992), Kennedy and Park (1994), Reese et al. (2000), and Ima and Rumbaut (1989) examined literacy development in relation to a host of family-related factors, including parental levels of education and socioeconomic status; educational aspirations, expectations, and values; homework patterns; immigration and medical background; and others. The Buriel & Cardoza, Reese et al., and Kennedy and Park studies are noteworthy since they examined the impact of native language use at home on literacy development – in other words, whether use of a non-English language significantly retarded acquisition of reading and writing skills in English in school. None of these studies reported a significant relationship between L1 use and L2 reading achievement. More specifically, the reading performance of ELLs who were raised in homes where the native language was used extensively did not differ from that of ELLs raised in homes where English predominated, arguing that use of the native language at home does not impede minority language students' English literacy development; Reese et al. also point out that use of L1 does not, therefore, necessarily enhance L2 reading development. The same lack of relationship

between home language use and literacy development in English is reported in Chapter 3 on Crosslinguistic-Crossmodal Issues and the section on Language of Instruction in this chapter. When other predictors factors examined in these multi-variate studies are examined, the picture that emerges is complex, suggesting that it is unlikely that there is a simple uni-variate relationship between family variables and children's literacy development. Rather, there are likely to be complex interactions between literacy development, on the one hand, and SES, ethnic group membership, level of schooling, and other mediating factors, on the other hand.

Notwithstanding these trends, current research on family-based factors, while interesting, is conceptually fragmented and often limited owing to small sample sizes and restricted age and ethnic group sampling. More research is needed that examines the influence of non-school factors in different ethnic groups since there is no reason to believe that the same set of variables will impact on literacy development in the same way in different ethnic communities (see Steinberg, Dornbusch, & Brown, 1992, for an example of such research in the case of English speaking students). As well, more theory-driven research that is designed to test specific hypotheses about the relationship between home and school variables and their interactive effects on literacy development is called for if we are to develop causal models that can serve as bases for curriculum and instructional development. To date, research on non-school factors has been largely exploratory and, thus, is subject to alternative interpretations.

ASSESSMENT ISSUES

Assessment is undoubtedly one of the most critical aspects of education for English language learners. It is implicated in virtually every aspect of their education – from screening or admission, to identification of special and individual needs that will figure in instructional planning, to promotion or retention. While there exists an extensive body of research on

assessment for native English speakers, this research is of dubious generalizability to ELLs for a variety of reasons. Most obviously, standardized or norm-referenced tests are only valid for students on whom the test has been normed, and use of such tests with other types of students can lead to egregiously faulty results and decisions. For example, a standardized test of mathematics or science administered in English to ELLs, arguably, is just as much about the student's language proficiency as it is about his/her knowledge of mathematics or science. Standardized tests that have been developed for mainstream English-speaking students may contain cultural biases that can result in underestimations of the competence of students from different cultural and/or linguistic backgrounds (Cabello, 1984). To be effective, education must be based on an accurate assessment of students' knowledge and skills; otherwise, students will be provided instruction that is too advanced or not advanced enough, redundant, or simply irrelevant. Despite its singular importance, research on assessment of ELLs is dramatically lacking. Of the entire body of research reviewed for this volume, only 10 empirical studies related to assessment issues were uncovered and retained. While these studies address issues of some importance, their significance is weakened by conceptual fragmentation; that is, each study looks at a different assessment issue. Thus the findings reported by these studies lack generalizability and utility because we cannot ascertain their reliability and generalizability.

The diversity of this research can best be illustrated by providing a brief overview. McEvoy and Johnson (1989) examined the utility of using a test of general intelligence (WPPSI) as a predictor of early reading scores among Mexican American students – they found that indeed the WPPSI predicted a significant amount of variance in reading scores when predicting from age 5 to grades 1 to 4. Jansky et al. (1989) failed to find good predictive validity for a 5-test screening battery for children of Hispanic background when initial screening occurred at K or

grade 1 with follow-up for 5 to 6 years. Accordingly, they argue for careful selection of screening tests that are fine-tuned to specific needs and characteristics of students being tested. In contrast, Frontera & Horowiz (1995) report that teachers' can be a valuable and valid source of information concerning students who are at risk for reading failure; teachers were questioned using a questionnaire. Miramontes (1987) examined the miscues of good and disabled readers whose first language was Spanish versus those whose first language was English. She found that students whose first language was Spanish (whether they were good or disabled readers) more closely adhered to the text than did students whose first language of reading was English. She emphasises the importance of assessing ELL's reading abilities in both languages and also of examining reading processes not just levels. In another study, Miramontes (1990) makes the same claims as a result of research on the miscues of Hispanic students with mixed language dominance/proficiency. Umbel et al. (1992) also argue for assessment of ELL's skills in both languages in order to arrive at valid assessments of vocabulary skills. Cabello (1984) documents alternative forms of cultural bias in tests used to assess ELLs – bias linked to lexico-syntactic, content and concepts, social, and cognitive aspects of assessment. She recommends the use of test items that are relatively free of bias when assessing students with different linguistic and cultural backgrounds. Similarly, Garcia (1991) found that the performance of Hispanic students on an English language reading test was seriously underestimated because of their limited prior knowledge of certain test topics and concludes that simply diversifying the topics in a test was inadequate to overcome this bias. In a large survey of 5,472 students of Southeast Asian background, Ima & Rumbaut (1989) argue that educators must consider the diversity of learners within this group of ELLs if their educational efforts, including assessment activities, are to be appropriate and effective.

Collectively, these studies address a number of important general issues; however, it is difficult to provide recommendations from this corpus because the research is so fragmented:

1. the importance of assessing ELLs in both languages in order to arrive at a complete and valid assessment of their abilities and difficulties (Miramontes, 1987; Umbel et al., 1992)
2. the importance of using multiple sources of information when assessing the learning needs of ELLs ((Frontera & Horowitz, 1995; McEvoy & Johnson, 1989)
3. the importance of taking into account different kinds of information about ELLs and of using tests that are dynamic and tailored to the specific needs and characteristics of the students being tested – free of cultural bias, sensitive to students' relative proficiency in each language, sensitive to developmental patterns and to first language reading (Miramontes, 1987; Yansky, Hoffman, Sugar, & Davies, 1989).
4. the importance of identifying distinctive patterns of reading and language development among ELL subgroups that can serve as valid points of reference for diagnosis – in other words, one should not assume that there are singular or simple profiles that validly characterize the reading difficulties of all ELLs who are below grade level (Goldstein, Harris & Klein, 1993; Ima & Rumbaut, 1989; Merino, 1983; Miramontes, 1990)

There is clearly a need for much more research in this field if we are to address these issues with empirical evidence. At present extant research is too fragmented to be conclusive. Additional key issues that deserve attention include:

1. How to identify strengths and weaknesses of reading skills in L2 (and L1) of ELLs – in particular, those who are below grade level in reading performance; and, in a related vein, Do ELLs from different L1 backgrounds demonstrate the same patterns of difficult and strength?

2. Can reading skills of ELLs in L2 be calibrated in some way that would permit appropriate placement of students in English reading programs?
3. How can we distinguish ELLs who are suspected of impaired reading from those who simple have incomplete mastery of L2
4. Can standardized English and content-area tests that are mandated by state regulations be adapted for use with ELLs to make valid inferences about their reading and academic progress relative to mainstream students?
5. Is it possible to develop tests of English reading and language that are not biased against ELLs in inappropriate ways?

SUMMARY

Studies of alternative instructional approaches to teaching reading and writing to ELLs provide evidence that direct and interactive approaches appear to be relatively effective in promoting the acquisition of specific reading and writing skills and, in the case of interactive approaches, reading- and writing-related behaviors. In contrast, evidence concerning the effectiveness of process approaches is mixed at best, with a minority of studies reporting positive effects for students who experience process-oriented classrooms but a majority reporting no or negative effects. Arguably, the equivocal results for process approaches can be attributed to the heterogeneous set of instructional strategies that have been included in this category. Indeed, an area of future research with respect to all three instructional approaches is the identification of the critical features of each approach. The effectiveness of direct and interactive instructional approaches was evidenced in the case of students with typical as well as those with impaired capacities for learning – although the evidence is skimpy, and definitions of impairment in this

domain are often overly general and lacking in precision. While direct and interactive approaches appear to be relatively effective, evidence with respect to the specific language skill domains over which each approach can be said to be effective is very limited – that is to say, there is limited evidence concerning the effectiveness of these approaches for the complete range of skills and sub-skills that is thought to comprise reading and writing : phonological awareness, word decoding, vocabulary, sentence processing, comprehension, and so on. We return to this issue in the Conclusions chapter.

Research with respect to Language of Instruction has focused on whether use of ELLs' L1 in the home or for initial schooling (and especially literacy instruction) enhances, impedes, or has no effect on the development of reading and writing skills in English. Collectively, this body of research indicates that use and/or development of the L1 in or outside school has no significant effect or, in some cases, a facilitating effect on the development of reading and writing skills in English in school. Unfortunately, there is insufficient research concerning additional instructional factors within L1 or English-only programs/classrooms to draw conclusions regarding the joint effectiveness of language of instruction and instructional approach. Moreover, the precise impact of use of L1 for initial literacy instruction is not entirely clear since the sole independent variable in most of this research is language of instruction with little control in most cases for other possible mitigating factors.

Findings from research on family and community issues revealed two general trends. First, and generally speaking, there is a positive correlation between socio-economic status and literacy development, although some exceptions to this pattern were noted. There is clearly a need for future research that identifies the proximal causal factors that underlie this relationship and that examines the effectiveness of alternative instructional approaches that mitigate the

disadvantaging influences of low SES. Second, findings from studies that have examined family-based literacy factors indicate that early literacy experiences in the home support subsequent literacy development in school, regardless of the language of use in the home. While these findings hint at promising future instructional directions, much more research is needed that examines the types of family-based interventions that work and under what conditions – with what types of ELLs and parents. In other respects, studies on family and community factors have been largely exploratory and are conceptually fragmented. Future research that systematically examines possible causal links between home and community factors on the one hand and learner outcomes on the other would provide a more solid base for planning appropriate interventions that take advantage of resources in the homes of ELLs.

Finally, with respect to Assessment Issues, it is difficult to draw precise or broad-based conclusions because there is extremely little empirical research on assessment issues related to ELLs and the extant research is conceptually fragmented.

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TABLE 1

SUMMARY OF RESEARCH ON DIRECT APPROACHES

Authors	Instructional Strategies	Sample Characteristics	Grade	Comparison Groups	Outcome Measures (partial listing)	Results
Avila & Sadoski (1996)	Key word method in Spanish to enhance acquisition of new English vocabulary	Hispanic, low achieving	5	-random assignment to TR & CT groups (n=63) -stats	-cued recall of new vocabulary -sentence completion using new vocabulary -immediate & delayed recall of new vocabulary	-TR >CT immediate and delayed recall of Eng words
Becker & Gersten (1982)	DISTAR: comprehensive direct instruction	Hispanic, low SES Note: article published in 1982, but studies done in 1975-1976	5, 6	-TR & CT local; -sample sizes for 1975/ 1976 studies: n=203/ 177 -stats	-WRAT: reading levels I & II -MAT: word knowledge, reading, total reading	-TR>CT: WRAT reading decoding, & MAT spelling, -variable effects in favor of TR on MAT word knowledge & language subtests; - no differences favored CT
Bermudez & Prater (1990)	Brainstorming & clustering to develop fluency and elaboration of ideas	Hispanic, urban, low income	3, 4	-TR & CT groups (n=16 each) -stats	-comprehension of stories -retention of story information -fluency, elaboration, & organization of written text	-TR>CT elaboration; -no other sign differences
Gersten (1985)	DISTAR in structured English immersion + ESL	Asian ELLs with a variety of L1s	1, 2, 3-6	-grades 1-2: compared DISTAR students with district students (n=unstated) -grades 3-6: compared TR scores with scores of students from previous year (TR n=20; CT n=15) -stats	-CTBS: reading -CTBS: language	-gr. 1-2: DISTAR>District on reading; DIST=district on language test -gr. 3-6 students showed sign gains in comparison to previous year's students

Hernandez (1991)	-use of modeling, check lists, and direct instruction to promote reading comp. strategies	Hispanic, LEP	Summer pre-grade 7	-Pre-post test comparison (n=7) -no stats; descriptive only	-reading comprehension and strategy use	-students demonstrated pre- to post-test improvement in reading and strategy use

Hurley, Slavin & Madden (2000)	Success for All– comprehensive, scripted curriculum with a variety of instructional approaches, but a focus on direct instruction in reading	-Hispanic, low SES, urban and some rural areas of Texas	3, 4, 5	-comparisons between SFA schools and district results after 1-4 years of implementation -95 schools -stats	-Texas Assessment of Academic Skills: Reading	-SFA schools made greater gains after 1, 2 and 4 years of SFA than did other, non-SFA schools
Jimenez (1997)	-direct instruction to increase students' use of cognitive strategies during reading	Hispanic, low literacy	7	-pre-post comparisons (n=5)	-classroom observation of reading -think-aloud protocol during reading -teacher interviews about strategy use	-all students made greater use of targeted strategies & exhibited heightened motivation to read - no objective evidence about changes in reading ability
Klingner & Vaughn (1996)	Cross-age tutoring & cooperative learning to promote reading comprehension	- Hispanic, urban, middle class, with learning disabilities	7, 8	-random assignment to Tutorial & Cooperative learning groups (n=13 in each) -stats	-Woodcock Johnson: letter-word identification, passage comprehension -Woodcock Language Proficiency Battery (Sp) -LAS (Eng & Sp) -Gates-MacGinitie Reading Comprehension -Interview: reading strat.	-Pre-post test improvement for both gps; - no btwn gp differences
Kramer, Schell, & Rubison (1983)	Auditory discrimination training of 4 contrasting sounds in English	Hispanic, urban Kansas	1, 2, 3	-random assign to TR & CT -pre-post test comparisons (n=15); stats	-auditory discrimination of target and non-target sounds	TR>CT: pre to post test gains

Kucer (1992)	- use of cloze texts to teach strategies for comprehending unknown words in text	Hispanic, bilingual, working class, metropolitan school	3	-single subject design, observations following intervention (n=6) -descriptive only	-video-tapes and field notes of lessons: reading strategies -cloze tests: reading strat. -interviews with students & teachers: reading strat.	-students used targeted strategies as taught, but did not always explicitly understand purpose of instruction
Kucer (1995)	-use of direct instruction & wall charts to promote use of strategies for dealing with blocks during reading & writing.	Hispanic, bilingual, literate in Spanish	3	-single subject design, observations following intervention (n=unstated) -observational only	-observations of students' use of strategies during reading and writing	-observed that students increased their use of all strategies but no objective or statistical measures
McLaughlin et al. 2000	-semi-scripted instruction aimed at improving vocabulary and reading comprehension (12 week intervention)	Hispanic ELL and English L1; in schools in Mass., California & Virginia	4, 5	TR & CT groups; pre-post testing (n=150 in grade 4; n=150 in grade 5) -stats	-test of knowledge of target words; PPVT; test of polysemy production; test of morphology; test of breadth of knowledge of vocabulary; cloze test	-TR>CT on vocabulary & reading comprehension; for both ELL & English L1 gps -ELL<English L1 on all outcome measures in yr 1 -gap between ELL & English L1 reduced by 50% following treatment
Padron (1992)	-use of reciprocal teaching & direct instruction in use of cognitive reading strategies	Hispanic, bilingual, low income, suburban SW	3, 4, 5	-random assignment to TR and CT groups; pre-post test -(n=89); -stats	-Reading Strategy Questionnaire	-TR>CT: use of all strategies; younger students used less sophisticated strategies than older students
Rousseau, Tam & Ramnarain (1993)	-use of key words & listening previewing to enhance reading performance –decoding and comprehension	Hispanic, with speech & language deficits, inner city metropolitan school	11-12 year olds	-single subject design with alternating treatments; (n=5) -descriptive only	-words read correctly -correct answers to comprehension question	-key word was more effective than previewing; -combined approach was more effective than single approach

Slavin & Madden (1999)	Success for All – 5 implementations: a comprehensive, scripted curriculum with a variety of instructional approaches, a focus on direct instruction in reading	Study #: 1) Gr. 3, Hispanic, low SES, inner city; urban 2) Gr. 1, 2, 3, Hispanic 3) Gr. 4, 5, Asian, Af. Am. & White, low SES 4) Gr. K-3, Asian, low-income, urban 5) Gr. 1, Hispanic, low SES	1, 2, 3, 4, 5	-TR:CT -(n=unstated) -statistical comparisons	-Woodcock Language Proficiency Battery: English Letter-Word Identification, Word Attack, Passage Comprehension	Study #: 1) SFA>CT on all measures 2) SFA>CT on all measures at all grades 3) SFA>CT on all measures at all grades l 4) SFA>CT in gr. 1; less difference in gr. 2 and very little diff. In gr. 3 5) SFA>CT on all measures
Ulanoff & Pucci (1999)	-use of concurrent translation and preview-review techniques to promote vocabulary	Hispanic, transitional bilingual program	3	-Random assignment to one of 3 gps: 2 TR & 1 CT; pre-post test. -CT gp. (n=16) -Conc. Translation gp. (n=21) -Preview-Review gp. (n=23) -stats	-test of vocabulary -immediate and delayed test	-Pre-Review showed largest numeric gains (but not stat sign); concurrent worst performance

TABLE 2

EXAMPLE INTERACTIVE LEARNING ENVIRONMENTS

- **e.g. 1**: **from Calderon et al**. (p. 157) "teachers assign students to four-member, heterogeneous learning teams of students, who work together to help each other learn…" "… the interaction and practice with peers helped students develop fluency and comfort with English."

- **e.g. 2**: **from Fayden** (p. 25): "The teacher was the model for reading. As she and the children reread the book many times over a period of several days, the teacher, gradually withdrew herself as the children assumed more and more responsibility for reaching the book."

- **e.g. 3: from Klinger & Vaughn** (p. 276): "At first, the teacher models use of these strategies by "thinking aloud" as she reads through a text. The teacher then leads students in a text-related discussion, assisting them in strategy use and gradually withdrawing support as it is not longer necessary. As students become more proficient …, they take turns being the "teacher" and leading discussions about text content."

- **e.g. 4: from Klinger & Vaughn** (p. 70): ".. it is based on the theory that cognitive development occurs when concepts first learned through social interaction become internalized and made one's own."

TABLE 3

SUMMARY OF RESEARCH ON INTERACTIVE APPROACHES

Authors	Instructional Techniques	Sample Characteristics	Grade	Comparison Groups	Outcome Measures (partial listing)	Results
Blum, Koskinen, Tennant, et al. (1995)	-Home-based repeated reading with audio-model	-ELLs with different L1s -suburban school in Washington metropolitan area -no L1 reading ability	1	-single subject design with replications (n=5) -observational only	-weekly oral readings: oral reading fluency, self-monitoring behavior & motivation -observation surveys: letter identification, word recognition, other oral reading behaviors	- all students showed improved reading fluency & accuracy over time; -enhanced frequency of & involvement with reading at home
Calderón, Hertz-Lazarowitz & Slavin (1998)	Bilingual cooperative, integrated reading & composition (BCIRC)	Hispanic – Spanish-dominant ELLs	2, 3	-TR = (BCIRC) vs CT (total n=222) -stats	-Texas Assessment of Academic Skills (Sp): reading & writing -English Norm-referenced Assessment Program for Texas: reading & writing	-TR>CT English reading -TR=CT on English language -2yrs of TR > 1 yr of TR > CT -TR>CT on grade 3 exit criteria to all-English program
Carger (1993)	Book sharing and pretend reading in groups	Hispanic; emergent readers	K	-single subject design (n=3) -descriptive only	-audiotaped pretend reading sessions: engagement in reading, word & idea counts	-Children grew in ability to convey meaning with emotion and confidence -comfort level with reading also increased
Cohen & Rodriquez (1980)	Group-oriented (interactive) vs. direct, high intensity (HIL) reading instruction	Hispanic, low SES, urban	1	3 classes of HIL & 3 classes of interactive instruction; (total n=150) -stats	-CTBS: reading comprehension subtest	-HIL > interactive instruction

Doherty, Hilberg, Pinal, & Tharp (2003)	-a comprehensive program of instruction using the Five Standards for Effective Pedagogy; emphasis on interactive pedagogy	-Largely Hispanic, low income ELL -low performing rural school in Central California	3, 4, 5	-regression analyses to compare performance of students in classes with relatively high or low conformity to model (n=266); stats	-SAT-9: comprehension, language, reading, spelling, vocabulary, overall NCE	-teachers' use of Five Standards made significant contribution to students' year-end achievement scores: comp, reading, spelling, & vocab; no effect on language -teachers's use of Standards + multiple, diversified activity settings had significant effect on achievement
Echevarria (1996)	Instructional Conversations (IC)	-Hispanic, LD -metropolitan Los Angeles	7, 8, 9	-alternating treatment design -assessed fidelity of implementation -(n=5); (n=3) for some analyses -stats	- IC activities: students' responses and utterances -story retellings: narrative ability, propositions, content	-TR>CT on academic discourse & participation -TR>TR on comprehension -TR=CT on literal comprehension & post-lesson narratives
Fayden (1997)	Shared reading	-Native American & Hispanic, rural -low SES -limited exposure to books	K	-within subject design (n=24) -pre-post testing -stats	-Clay's Reading Strategies -Sand Test: elementary knowledge of printed material	-significant improvement on both tests from pre to post test
Klingner & Vaughn (1996)	Reciprocal teaching with cooperative grouping or with cross-age tutoring	Hispanic, LD, urban	7, 8	-within subject design, random assignment to groups (n=13 each grp) -pre-post testing -stats	-Woodcock Johnson: letter identification, passage comprehension -LAS -Gates-MacGinitie Reading Comprehension -strategy interview	-Coop TR=Tutor TR -Post>Pre test for both gps
Klingner & Vaughn (2000)	Collaborative strategic reading technique & its effects on vocabulary comprehension & strategy use	Hispanic, metropolitan school, Southeast U.S.	5	-within subject design (n=37) -pre-post vocabulary testing -stats used for vocab. tests only	-vocabulary tests -audiotaped cooperative learning group sessions: use of reading strategies, helping behavior	-Post>Pre vocabulary -description of student engagement in use of targeted strategies

Li & Nes (2001)	Paired reading and its effects on fluency and accuracy	-Chinese L1 with ESL instruction -low English reading levels -West Texas, urban	1, 2, 3	-single subject design (n=4) -pre-post observation -no stats	-Audiotaped paired reading sessions: oral reading rate & fluency	-fluency and accuracy increased over 8 mths of TR
Martinez-Roldan & Lopez-Robertson (1999)	Literature circles	-Latino, Spanish dominant & English dominant -Tucson, Arizona	2	-Observation of student behavior -(total n=22); Sp. dominant (n=14); Eng. dominant (n=8) -no stats, narrative only	-observation of student literature circles: examined young children's ability to engage in and benefit from literature circle discussions	-young bilingual children can engage in rich discussion of children's literature
Padron (1992)	-use of (a) reciprocal teaching and (b) direct instruction in use of cognitive reading strategies	-Hispanic, bilingual, low income -suburban, SW	3, 4, 5	-random assignment to TR (2 gps) and CT (2 gps) - pre-post test -(total n=89) -stats	-Reading Strategy Questionnaire	-TR>CT: use of all strategies -younger students used less sophisticated strategies than older students
Syvanen (1997)	Effects of cross-age tutoring on tutors; 19 week intervention	Hispanic, Spanish dominant, ESL students	4, 5	-within-subject design (n=16) -pre-post test -stats	-MMCPC scale: perception of control of cognitive/ social domains by tutors -district reading achievement test -survey of attitudes toward school	- pre to post test gains in control over tutoring process - no increase in interest in school & reading achievement

TABLE 4

SAMPLE DESCRIPTIONS OF PROCESS APPROACHES

- **E.g. 1: from Gomez et al.** (p. 218): Students in the Free Writing group … selected their own topics, and could write for as long as they wanted. Students' writing was not subjected to error corrections… teachers responded to each students' writing through written comments. Students were then invited to respond …, thus creating a written dialogue.
  In the Structured Writing group… topics were assigned by the teacher, and the students wrote intensively, in nine minutes of concentrated writing time. Students were instructed to work alone and quietly… Writing samples were subjected to error correction by the teacher…. Students were direct to focus on avoiding those errors on their next writing sample."
- **E.g., from Kuball & Peck (**p. 217): The classroom was print-rich environment in which skills were learned in context as part of a whole. For instance, the teachers modeled reading & writing on a daily basis. Recipes, songs, stories, and daily news were charted in front of the students. Child-dictated stories were transcribed by the morning teacher …thus, skills were presented in context. Fragmented instruction, in which skills are taught in isolation, was not offered."

TABLE 5

SUMMARY OF RESEARCH ON PROCESS APPROACHES

Authors	Instructional Techniques	Sample Characteristics	Grade	Comparison Groups	Outcome measures (partial list)	Results
de la Luz Reyes (1991)	-use of dialogue journals & literature logs to promote writing of ELLs	Hispanic, Sp L1, bilingual students -low-to middle SES	6	-single subject design (n=10) -no statistical analyses	Analysis of literature logs: -topics & themes, sensitivity to audience -self-concept & attitudes -language use (Sp vs Eng) -length & quality of writing -spelling & grammar -descriptive	-ELLs attempted to write in Eng before they had complete control over language -development of complex ideas & construction of meaning suffered
Gomez, Parker, & Lara-Alecio (1996)	Free writing vs. structured writing groups	-Hispanic; low achieving ELLs -southeast Texas	Summer, pre-6	Structured gp. (3 classes) vs free writing (5 classes) -random assignment to group (n=48); stats	Analysis of student papers to measure writing skills: -micro-level indicators -analytic ratings -holistic ratings	Structured gp > Free writing gp. on analytic & holistic scores, but few stat differences
Kucer & Silva (1999)	Transitional whole language bilingual and its effects on reading & writing	-Hispanic, bilingual -working class -metropolitan area	3	-within subject design (n=26) -pre-post test -stats	-oral reading & story retelling -story writing & spelling -field notes & interviews	-significant gains in reading – based on miscue analysis -no gains in writing
Kuball & Peck (1997)	Whole language & its effects on writing development	-Hispanic ELLs & Eng L1s -low-income -Los Angeles, urban	K	-within subject design: Hispanic (n=8) & English L1 (n=8) -pre-post analysis -stats, descriptive only	Writing Samples, Measurement Scales: -stages of writing -grapho-phonemic skills -composition skills: stages of writing -Student questionnaire: self-concept as writers	Writing of ELLs as well as those of Eng L1 students improved over 1 year
Roser, Hoffman, & Farest (1990)	-shared literature	-Hispanic; low SES -Brownsville, Texas	K, 1, 2	-TR vs district results -26 schools, 78 teachers, 2,500 children (6 comparison	-student/teacher reactions to program -California Test of Basic Skills: standardized reading test for 2nd grade	-TR had greater gains than district -but, no controls

				schools) used for CTBS) -stats		
Schon, Hopkins, & Davis (1982)	-free reading time with variety of L1 (Sp.) books	-Hispanic, low SES -Tempe Arizona	2, 3, 4	-TR: free reading with variety of books vs. CT (n=114) -stats	-Inter-America Reading Test -Researcher-developed survey: self-concept & attitudes toward reading	-TR=CT on English reading comprehension -TR>CT on Sp reading
Schon, Hopkins & Vojir (1984)	-free reading time with high interest books in Sp. L1	Study 1: -Hispanic, low SES -affluent area of Tempe, Arizona Study 2: -Hispanic, low SES -school in middle-income area	9-12	Study 1: -TR (n=64) vs. CT (n=47) for Eng. measure; TR (n=44) vs. CT (n=44) for affective measure -stats Study 2: -TR (n=18) vs. CT (n=21) for Eng. measure; TR (n=33) vs. CT (28) for affective measure -stats	Study 1: -Metropolitan Reading Test -measure of attitudes toward reading & self Study 2: -Nelson Reading Test -measure of attitudes toward reading & self	Study 1: TR=CT on Eng reading comprehension Study 2: TR=CT on Eng reading comprehension

TABLE 6

SUMMARY OF STUDIES ON LANUAGE OF INSTRUCTION

Authors	Sample Characteristics	Grade	Comparison Groups	Outcome measures (partial list)	Results
Bacon, Kidd & Seaberg (1982)	Cherokee	8	TR: bilingual program in grades 1-5 (n=35) vs. CT: English only (n=18) -stats	SRA Achievement Tests: reading	TR>CT
Burnham-Massey & Piña (1990)	Hispanic, former LEP students & English L1 students	5, 7-11 (longitu-dinal study)	TR: Former LEP who had had reading instruction in Sp (n=117) vs. CT: Eng L1 students (n=492) -no stats, percentile scores only	-CTBS reading & language	-grade 5: TR scored at 50%ile -grade 7/8: TR=CT -grades 9-12: TR= or > CT
Calderon, Hertz-Lazarowitz & Slavin (1998)	-Hispanic, Sp. Dominant, low SES -El Paso, Texas	2, 3	TR: Bilingual cooperative, integrated reading & composition vs. -CT: cooperative learning without bilingual integrated approach (total n=222); -stats	-Texas Assessment of Academic Skills (Spanish) -English Norm-referenced Assessment Program for Texas	TR>CT English reading TR=CT on English language 2yr TR > 1 yr TR > CT TR>CT on gr 3 exit criteria to all-English program
Carlisle & Beeman (2000)	-Hispanic: Sp at home (60%), Eng at home (28%), both Eng & Sp at home (12%) -small town, California -	1	-TR (n=19): Spanish instruction vs. -CT (n=17): English instruction -stats	-Woodcock-Johnson (Sp, Eng.): reading, listening, writing	-TR=CT on Eng reading -TR>CT on Sp reading -instruction in Sp enhanced Sp reading; -no effect of instruction in Eng. on Eng. reading
Ferris & Politzer (1981)	-Hispanic, born in Mexico or in US -TR<CT on SES -TR>CT on Spanish	7, 8	-TR(n=30): born & educated in Mexico vs. -CT (n=30): born & educated in U.S. ; -stats	-multiple measures of writing skills: holistic, T-units, error analyses	-CT>TR on verb inflection, verb tense, & pro agreement -TR=CT on all other measures

Friedenberg (1990)	-Hispanic -Former ESOL students -Southern Florida	3, 4	TR(n=249): reading instruction in Eng & Sp. vs. -CT(n=53): reading instruction in English only -stats	Stanford Achievement Test: reading	TR>CT
Fulton-Scott & Calvin (1983)	-Hispanic -3 Southern California urban schools with different programs: 1) bilingual-multicultural, 2) integrated ESL, & 3) non-integrated ESL	1, 6	-TR: bilingual-multicultural -CT1: integrated ESL -CT2: non-integrated ESL (n=approx. 10 students per grade level at each school); (total n=59) -stats	-GPA in reading and language -CTBS	-TR> CT1 & CT2: gpa, CTBS

Gersten & Woodward (1995)	-Hispanic, TR & CT equivalent on SES, low level of English on entry -10 schools in El Paso, Texas	4, 5, 6, 7 (longitudinal study)	-TR: bilingual immersion (n=111, 5 schools) vs. -CT: transitional bilingual (n=117, 5 schools) -stats	ITBS: language, reading, & vocabulary	TR>CT in grades 4, 5 & 6 -TR=CT in grade 7 -both TR & CT scored low
Howard, Christian & Genesee (in press)	-Hispanic, primarily low SES -English L1, primarily middle class -11 two-way immersion sites across U.S.	3,4,5	-within-group longitudinal design -between gp: Sp (n=153-162) vs Eng (n=148-167) – n varies by analysis -stats	-Cloze reading test in Sp & Eng -narrative writing sample collected at 9 times over 3 years	-Sp and Eng students showed improvement in Sp & Eng reading & writing from grade 3 to 5—exhibited similar growth curves -Eng>Sp on Eng reading & writing measures at all grade levels (sign.)
Kuball & Peck (1997)	-Hispanic, Sp L1 students -English L1 students -urban Los Angeles school in low income area	K	-Within subject design -TR: Whole language instruction in Sp for Eng. L1 students (n=8) vs. -CT: whole language instruction in Eng. & Sp. for Sp. L1 students (n=8) -pre-post analysis -stats + descriptive	Writing Samples, Measurement Scales: -stages of writing -grapho-phonemic skills -composition skills: stages of writing -Student questionnaire: self-concept as writers	-TR=CT in writing development over kindergarten year;
Lindholm & Aclan (1991)	-Spanish L1 & English L1 students -2 schools in Northern California	1-4	-two-way Spanish immersion compared to test norms (total n=249) -stats	CTBS: reading subtest	-Spanish students approached grade level in English reading by grade 4 -High proficient bilinguals > medium/low proficient bilinguals
Maldonado (1994)	-Hispanic, learning disabled -inner city, middle and low SES -Houston, Texas	2, 3	-TR: integrated bilingual special education (n=10) vs. -CT: English-only special education -(n=10) -pre-post analysis; -stats	CTBS: reading & language	-CT>TR at pre-test -TR>CT at post-test
Mortensen (1984)	Hispanic	4, 5, 6	-TR: bilingual instruction (n=65) -CT: Eng. Only (n=55) -stats	Wisconsin Design Tests for Reading Skills Development	-TR=CT word attack skills -TR>CT comprehension skills

Saldate, Shitala, & Marcello (1985)	-Hispanic, low SES -Arizona	1-3	-TR: Bilingual Program (n=30) vs. -CT: Eng. Only program (n=31) -stats	-MAT: Eng. or Sp – gr. 2 -WRAT: reading, Eng or Sp. – gr. 3	-TR=CT in grade 2 -TR>CT in grade 3

TABLE 7

SUMMARY OF STUDIES OF FAMILY INFLUENCES

Authors	Sample Characteristics	Grade	Comparisons	Outcome Measures (partial)	Results
Blum et al. (1995)	-ELLs with diverse L1s -no L1 reading ability -suburban school in Washington metropolitan area	1	-single-subject, reversal design ABA, with multiple baselines (n=5) -observational	Weekly oral reading: -oral reading fluency, self-monitoring behavior & motivation Marie Clay observation survey: -letter identification, word recognition, hearing & recording sounds in words, & oral reading behavior	-use of audio-recordings at home during reading enhanced reading performance -students expressed preference for audio-tape method
Buriel & Cardoza (1988)	-1st, 2nd, & 3rd generation Mexican American students -Southwest	9+	-Within-subject analyses using regression analyses -Between subject analyses using ANOVA (n=103-137 depending on analysis)	-standardized test of reading & vocabulary	-L1 home use was unrelated to reading in 1st generation; modest relationship in 2nd generation; moderate & mixed relationship with 3rd generation -SES unrelated to reading in 1st & 2nd generation and only moderately in 3rd generation
Duran & Weffer (1992)	-top 25% of high school grads (talented); -Mexican American -large, midwestern city	10	-Within-subject design -regression analyses (n=157) -stats	-American College Testing: reading subtest -GPA	-yrs in US had significant effect on pre-high school reading -family values did not affect reading ach. directly but did affect ach. thru classroom-related behaviors
Hansen (1989)	-Mexican American -Greater San Francisco area: inner city, residential urban, & suburban settings	2, 5	-within-subject design (n=117) -stats	-Stanford Diagnostic Reading Test: comprehension & auditory vocabulary	-auditory vocabulary grew during summer, but text comprehension did not -peer language use during summer was related to auditory vocabulary gains

Hughes, Schumm & Vaughn (1999)	Hispanic parents of learning disabled and average to high average readers	3-5	-compared responses of parents of LD (n=40) children with those of parents (n=40) with average or above average reading skills	-types of reading & writing activities at home -desirability & feasibility of activities -facilitators & barriers to helping children read at home	-few differences between parent groups -most common activity was reading to children or having child read to parents -parents valued home reading but parents of LD children found it difficult to help children -most common barrier—lack of communication with school
Ima & Rumbaut (1989)	-Southeast Asian LEP & FEP students -San Diego school district	7-12	-Between-group -point of comparison varied by question – see Results (n=239) -descriptive stats only	-CTBS: reading, language -GPA	-SES did not distinguish between LEP and FEP SE Asian students -Students whose parents had more education pre-migration scored higher on reading than students whose parents had less education at pre-migration
Jackson & Wen-Hui (1992)	-precocious ELL readers & precocious Eng L1 readers -mixed L1 backgrounds; -urban & suburban settings in the Pacific Northwest	K, 1	-precocious ELL readers (n=12) vs -precocious English L1 readers (n=12) -stats	-9 measures of reading: spelling, pseudoword reading, word reading, oral reading (speed, accuracy); poem reading, silent reading, PIAT reading comprehension (& others)	-the precocious ELL readers were similar to monolingual precocious readers: all frequently had someone read to them, discussing the pictures in the book, pointing out letters and words, and explaining the meanings of words; - -all also had someone identify numbers for them, and most had been helped to identify letter names, spell words, and understand word meanings -all had attended some kind of pre-school all of their parents reported that the children read at home at least 2 or 3 times a week.
Kennedy & Park (1994)	-Asian & Mexican American	8	Asian (n=1131) vs Mexican American (n=1952) -stats	-self-reported English course grades -standardized reading test	-Mex Am: home language use was not related to reading, but SES was; self control & educational expectations were also significantly related to reading -Asian Am: home language use & SES were related to reading; social psychological variables were also sign.

Pucci & Ulanoff (1998)	-Hispanic, proficient and less proficient ELL readers from 4 classes -Los Angeles area	4	-proficient (n=12) vs less proficient (n=11) ELL readers -stats for cloze test	-Self-report measures of behavior related to reading -cloze reading test	-proficient readers had more books in home, enjoyed reading more, & felt they were proficient readers than less proficient readers
Reese, Garnier, Gallimore & Goldenberg (2000)	-Latino;,low SES -Los Angeles area	K-7	Within-subject design, longitudinal (n=121) -stats	-standardized reading test in grade 7 (CTBS) -parent interview/survey data concerning family characteristics, demographics, aspirations & expectations, role of parents in education of child, and other factors -grade of transition to English-only instruction	-parental SES was significant predictor of English reading -family literacy practices & grandparents' level of education also predicted students' reading -ELL's success in learning to read Eng did not depend exclusively on primary language input -K. ELLs with greater emergent Spanish literacy and Eng oral proficiency were faster to transition to Eng reading & attained higher levels of English reading proficiency in middle school
Tompkins, Abramson & Pritchard (1999)	-ELLs with Multiple L1s -English L1 students -low vs high income schools -Central California	3, 4	-ELL (multiple L1s) vs English L1 students; -low vs high SES schools (total n=60) -stats and qualitative analysis	-Journal entries: spelling	-students in more affluent school used more conventional spelling patterns than students in lower SES school