

**ESTABLISHING A CORE SET OF CRITICAL READING STRATEGIES  
FOR IMPROVING THE CONTENT AREA READING SKILLS OF  
SECONDARY ENGLISH LANGUAGE LEARNERS**

**THESIS**

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## **DEDICATION**

**Dedico este tesis a mis padres, Manuel Enrique y María Eva  
García. Como mis primeros maestros, su dirección y consejos me han  
guiado y sostenido durante todos mis esfuerzos.**

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## CHAPTER I

### INTRODUCTION TO THE STUDY

This research addresses the low academic achievement of secondary English language learners (ELL) vis-à-vis secondary ELL students' literacy skills in content area reading. The research question addressed here is "What are the principle critical reading strategies that ELL students must master in order to improve their academic performance in content-area classrooms?" The main objective of the research is to review the relevant literature in order to establish a core group of critical reading strategies that address the specific aspects of content area reading needs for second language learners (SLL). The rationale behind the central research question is presented as a function of the current state of instruction for ELL students and their academic performance. Research supporting the need for what the author refers to as critical reading strategy instruction (CRSI) includes information regarding current setbacks and innovations in ELL instruction, language of instruction, teacher training, and gaps in ELL students' skills as a result of the aforementioned factors. This information is followed by a discussion of current ELL literacy instruction and the need for incorporating CRSI. Key sub questions addressed as part of the literature review are "What are the key content-area literacy needs of ELL students," "What are the particular characteristics of content area reading," "What are the characteristics of content area reading that pose problems for ELL learners," and "What are the specific strategies that address these areas of need" as found in the literature.

The impetus for this research came from the author's experiences as high school ESL teacher. In 1999, the author began teaching ESL and Spanish at the Freshman Center of a Central Texas school district. Inexperienced and still in the process of

Certifying as an ESL teacher, he found the challenges of second language instruction overshadowed only by the challenges faced by his students as they attempted to learn to speak, read, and write in English. These experiences, many of which are included in this analysis, prompted the author to question the nature of the instruction that limited English proficient (LEP) students were receiving. Especially important to the author became the dilemma of the lack of academic success experienced by his students in content area classes such as science, history, and mathematics. This analysis represents the author's initial efforts at understanding and addressing the literacy challenges faced by second language learners at the secondary level.

## CHAPTER II

### THE IMPORTANCE OF ADDRESSING THE ACADEMIC PERFORMANCE OF SECONDARY ELL STUDENTS

#### The Current Status of ELL Education

Gersten (1999) describes the quality of English Language Development (ELD) as erratic based on the lack of attention given to curriculum development, training and professional development for teachers, and applied research. However, while it is important to acknowledge this reality, it is also important to understand that there are other underlying reasons for the erratic if not poor quality of instruction for ELL students. In the author's opinion, the current status of instruction for ELL students is due to the constant flux in support for bilingual and ESL instruction. On one hand, recent legislative developments in key states such California have put the future of bilingual education in jeopardy. The 1998 passage of Proposition 227 in California dealt a blow to bilingual education that many fear will set precedent for other states to follow. Passed by a margin of 61 to 39 percent, Proposition 227 had as its central goal the elimination of bilingual education (Cummins, 1999). Despite the margin of victory, there were some very vocal opponents to the measure. Specifically, the opponents of the proposition argued that it a) made it illegal to use languages other than English for instruction in California public schools, b) dismantled programs that were successful in teaching English and kept students from falling behind in other subjects, c) imposed sheltered English immersion, d) restricted waivers to the English-only rule and failed to guarantee the availability of native-language instruction both of which denied parental choice (Crawford 1998, 2). Furthermore, Proposition 227 was criticized for seeking to teach ELL students basic



survival skills with the intent of immediately transitioning them into mainstream English classrooms after spending only one year in a sheltered English-immersion classroom. This limited time was mandated based on the California legislature's belief that English proficiency could be achieved in that period of time (Quezada et. al. 2000).

As such, Proposition 227 exemplifies the continued fight against bilingual education that had begun to gain momentum ten years prior to its passage. In the 1980s, a number of states, including California and Colorado, repealed their bilingual statutes while states like Texas and Illinois revised their bilingual statutes (Escamilla, 1989). Other efforts such as the *English Only* movement have also gained strength and popularity. Attinasi (1998) writes that, in the late 1990s, the initiatives aimed at removing community languages from schools had bolstered *English-Only* movements and represented a pendulum swing away from the reforms ushered in by the passage of the Bilingual Education Act of 1974. For example, states such as Colorado and Massachusetts have limited the special language services that ELL students can receive.

Paradoxically, in addition to these limitations on language development classes, states have also established guidelines for testing that place even greater pressure on ELL students. For example, in Oklahoma, while students can remain in bilingual education programs for up to three years, they must also turn around and take the state-mandated assessments in English immediately after leaving the program. Similarly, although ELL students in Ohio receive a two-year exemption from taking the state-mandated assessments, they must pass these exams in English when they get to high school (García, 2000).

Despite these apparent setbacks, innovation in ELL instruction has continued.

One such development is the creation of dual language-immersion programs. Dual language-immersion, also known as Two-Way Bilingual Immersion, is a model in which monolingual Spanish-speakers, monolingual English speakers, and bilingual students receive instruction together and in both languages. Rojas and Apodaca (1997) note that Two-Way Bilingual Immersion involves providing academic instruction to all students in the class regardless of whether or not they are monolingual speakers of one language, fully bilingual speakers of two languages, or fall somewhere in between. Furthermore, they note that, over time, the Two-Way bilingual model has been shown to be the most effective second-language learning model currently in use because programs using this model have had high academic performance by participants (Rojas & Apodaca, 1997). This conclusion was based on a comparison of student achievement on standardized tests compared across six program models (Two-Way Bilingual, Late Exit Bilingual, Early Exit/Content ESL, Early Exit/Traditional ESL, ESL Through Content, and ESL Traditional Pullout). Ironically, one of the most successful examples of the Two-Way Bilingual model is found in the state of California at the San Francisco Unified School District (SFUD) Language Academy.

In the face of such staunch opposition, it seems remarkable that innovation in ELL education has continued. However, when one takes immigration into consideration, the reason for continued innovation is clear. The continued influx of non-English speaking immigrants from Mexico, Central and South America, as well as from other countries, ensures that innovative efforts to meet the educational needs of this growing population continue. From 1991 to 1996, a total of 6,146, 200 people legally immigrated to the US, and in 1998 alone 660, 500 persons legally immigrated to the US (US Census,

2000b). It is important to underscore the fact that these figures only represent the numbers of *legal* immigrants into the US. If the numbers of uncounted, undocumented immigrants into the US were calculated and included, the numbers of immigrants would be much higher.

Currently, there are 28,379,000 foreign-born people living in the United States. Of this total, the majority of immigrants, 27.6 percent, come from Mexico. The Philippines (4.3 percent), China/Hong Kong (3.8 percent), Cuba (3.4), and the Dominican Republic (2.4) round out the top five countries from which immigrants to the US originate (US Census Bureau, 2001b). According to the US Census Bureau (2001b) there are 8.8 million children ages 5 to 17 that speak languages other than English at home. Of these 8.8 million, 70.9 percent are of Hispanic origin. Moreover, there was a 6.9 percent increase in the number of students classified as limited English proficient (LEP) from 1996 to 1997, and this increase promises to continue given that 8 percent of all kindergartners in the United States speak a language other than English (Klingner & Vaughn, 2000).

On a personal level, in three years as an ESL teacher, the author has seen evidence supporting the above prediction. During the 1999-2000 school year, the author received only two new recent-immigrant students in his ESL class. However, the following academic year (2000-2001), seven recent-immigrant students enrolled in his classes, and six more recent immigrant students enrolled during the current (2001-2002) academic year. Such changes lead the author to conclude that the number of ELL students at the school will continue to increase with time.

## Academic Performance of ELL Students

The other side of the ELL coin is that this growing immigrant (predominantly Latino) population is also counted amongst the least likely to achieve academic success. For example, according to Romo (1993), the education of Mexican immigrant children has been characterized by high dropout rates, low achievement test scores, students who are overage for their grade level, poor attendance, and low rates of postsecondary participation. On a national scale, in 1996, 35 percent of all Latinos did not finish high school (Jimenez & Gámez, 1996). Meanwhile, in 2001, of the 3,966 students that dropped out, 23.7 percent were of Hispanic origin compared to 9.3 percent for whites, and 10.8 percent for blacks. While in 1999 only 54.7 percent of Hispanic students graduated from high school, 82.1 percent of the general population graduated. The following year, statistics show that there was little improvement with 57 percent of Hispanics graduating in 2000 compared to 84.9 percent for whites, 78.5 percent for blacks, and 86.7 percent for Asians.

Achievement in higher education for Latinos and Latinas is equally low. In 1999, 23 percent of the general population received degrees from four-year universities or colleges, but only 10.3 percent of Latinos achieved the same goal. Meanwhile, in the year 2000, only 10.6 percent of Hispanics obtained a bachelor's degree or higher compared to 26.1 percent for whites, 16.5 for blacks, and 43.9 for Asians. Equally striking is the fact that, in 1999, only 2 percent of Hispanic students received graduate degrees. This percentage rose to 3.3 percent in 2001 but is still lower than whites, blacks, and Asians with percentages of 8.8, 5.1, and 15.3 respectively. (Tabassum, 1999; US Census Bureau, 2001b).

Academically, Latino/a students have not fared any better in Texas based on the disproportionate total population statistics. From 1998 to 1999, Hispanic students accounted for 52.2 percent of all dropouts with African American students a distant second with 25.4 percent. Yet, Hispanics made up only 36.6 percent of the overall student population in grades 7-12, just behind white students who comprised 46.6 percent of the population. That same year, the graduating class of 1999 was 31 percent Hispanic while 53 percent was white (TEA, 2000).

Furthermore, even though a high percentage of Hispanic students passed the Reading (80.7), Writing (82.3), and Mathematics (82.9) portions of the Texas Assessment of Academic Skills Test (TAAS) during the Spring of 2000, the percentage of Hispanic students that passed the End of Course Exams (EOC) for Algebra (32.7), Biology (69.4), English II (71.1), and US History (58.3) was dismal (TEA, 2000). These EOC scores are even more dramatic when one considers that the EOC exams represent subjects students must pass in order to graduate from high school. The outlook for next year does not look promising either. In speaking with administrators and teachers, the author has found that the coming Texas Assessment of Knowledge and Skills Test (TAKS) is expected to result in even greater failing scores for ELL students given the test's emphasis on reading and writing in all of the subject areas (TEA, 2000).

Locally, of the 7,457 students in the district where the author teaches, 57 percent are Hispanic. At the end of the last academic year (2000-2001), the TAAS results for the school where the author teaches were presented to the faculty. Key results from the test included low scores on the part of Latino/a students in the reading, writing, and math portions of the test compared to those of Anglo students. Of the scores for the Latino/a

students, moreover, the lowest were among those students classified as limited English proficient (ESL) and monitored students--a monitored student is a student who has been exited from the ESL program but is still in the required 2-year academic performance monitoring period; students who do well during this period are completely exited from the ESL program while low-performing students are often recommending for re-entry into the program.

In response to the low overall scores during the 2000-2001 school year, the school's principal initiated a mentoring/tutorial program that targeted students who had not scored well on the TAAS test. This year (2001-2002), the overall scores for the school improved. However, while the test scores of Latinos, Blacks, and low SES students also improved, ELL students still made up a large percentage of the students who failed one or more of the sections (usually the reading and/or writing sections) of the test, bringing to the fore the need for specific strategies to address the low academic performance of second language learners at our school.

Reasons for this lack of academic performance have recently been the subject of much research. One important finding about the academic performance of ELL students is that teachers often *expect* bilingual, Spanish-dominant students to perform at lower levels of thinking and are given work using basic information that requires simple recall and recitation (Swicegood-Muñiz, 1994). Another possible factor impacting ELL students' academic performance is presented by Romo (1993) who notes that one of the educational challenges facing Mexican immigrants is that many begin to work before they even graduate from high school. Meanwhile, Jimenez (1997) states that many of the literacy problems that Latinos/as face are a result of inadequately funded and segregated

schools.

The author has also been a witness to these conditions in working with ELL students. Many times, content-area teachers have notified the author of their intention to give an ELL student a passing grade simply for attempting the coursework because they couldn't see themselves flunking these students because of the issue of language proficiency. On the surface this seems like the "nice" thing to do. However, in doing so, these teachers fail to realize that passing a student often means sending that student to the next level in math or science without having mastered the necessary skills needed to be successful. Moreover, these teachers were basically washing their hands of the responsibility to teach the necessary skills to the ELL students in their classes. At the same time, other teachers have offered to water down assignments in order to get ELL students to pass. As with giving students a passing grade, however, watering down the curriculum simply places ELL students in no-win situations where they have not been taught the necessary skills and knowledge to be successful in class.

Adding to the problem is the fact that many teachers are not trained in second-language acquisition or multicultural education. Swicegood-Muñiz (1994) provides an excellent example of how this lack of training keeps second language learners from developing necessary skills, noting that the majority of the talking occurring in ESL and bilingual education courses is being done by the teacher and not the students. Not providing ELL students with the opportunity to react to and interact with the concepts and information hinders students' ability to develop original and higher-order thinking cognitive processes. Furthermore, the problem of untrained teachers is exacerbated by the fact that many teachers at the middle school level do not consider literacy to be a

significant part of their instructional plan (Jimenez, 1997).

Having taught English and history at the secondary level, the author has come to believe that many high school teachers share this sentiment. On numerous occasions, fellow teachers complained that their students were failing because they couldn't read. Many of these teachers went on to say they themselves should not have to teach students to read because that was the job of the elementary, middle, and junior high school teachers. The unfortunate irony, however, is that these same teachers were responsible for teaching recent immigrant and other ELL students who were in need of learning how to speak, read, and write English.

Finally, teachers' lack of training and education in bilingual and ESL instruction is demonstrated in their misperceptions of the language learning process. In this regard, Jimenez (1994) acknowledges that there are many myths about the second language acquisition process that people accept as fact. A key misconception about second language learning is presented by Cummins (1994). He notes that the ability that ELL students have to converse fluently in English is erroneously seen as an indication that they have achieved academic fluency in the target language. This misconception that teachers have about ELL students stems from their inability to distinguish between conversational and academic language. This distinction, conversational vs. academic, forms the foundation for Cummins' (1994) concepts of basic interpersonal communicative skills (BICS) and cognitive academic language proficiency (CALP). BICS is the language that we use in our everyday lives to communicate. Students learning a language generally develop this level of language proficiency within 2 years. On the other hand, CALP represents the more complex levels of language used in the



academic realm. In contrast to BICS, CALP requires 5-7 years to develop. It is the demonstration of conversational ability that often misleads teachers to assume that ELL students have developed the academic language ability to be successful in content area classes.

In addition to this confusion, Cummins (1998) notes that educators sometimes believe that verbally fluent ELL students have learning disabilities because they are having academic difficulties. The consequence of this misconception is that many ELL students have been mislabeled as being learning disabled. García and Ortiz (1988) identify three categories of reasons why students experience academic failure: 1) students are placed in an environment that does not accommodate their particular needs, 2) students experience failure but are served in a regular classroom because a handicapping condition has not been found to be the cause of their problems, and 3) students actually have a major disorder or condition. However, the researchers also argue that in many cases the failure to distinguish between the first two reasons and the third on the part of schools and teachers results in the overrepresentation of language minority students in special education. Furthermore, they state that there is a lack of understanding of limited English proficiency, second language acquisition, and cultural differences on the part of those who are responsible for referring students for special education. Similarly, Jimenez (1997) states that ELL students often have gaps in their education because of inappropriate placement as special needs students.

At the same time, however, Jimenez (1997) points out the fact that many recent immigrants enter US schools lacking the benefit of a continual sequence of instruction as well as literacy instruction in their native language. Similarly, many immigrant students

often come to school with gaps in their education. Romo (1993) notes that the while many Mexican immigrant children whose families migrate as seasonal workers may have attended the equivalents of 7<sup>th</sup> and 8<sup>th</sup> grades in *Secundaria* in Mexico but may have only attended a few years of the 1<sup>st</sup>-6<sup>th</sup> grade equivalent grades in *Primaria*. Many of these same students often come from rural areas and have long records of absences and transfer stemming from their family's need to migrate in order to find work. Still others come to US schools never having been enrolled in Mexican schools. Other factors that often cause students to have gaps in their learning include inappropriate placement as a special needs students as well as being placed with well-meaning teachers who had little to no experience in working with second language learners (Jimenez, 1997).

In his first year as an ESL teacher, these kinds of situations were one of the most common occurrences that the author faced in working with content-area teachers who were not trained in second language learning and instruction. The level of frustration that these teachers expressed was a clear indication of the need for intervention on behalf of the ELL students with whom the teachers were working. Some of these teachers had reached the point where they just wanted to have some of the ELL students in their classes tested for special education because they were sure that there was kind of cognitive learning problem involved. Others went as far as to say that some of their Ell students were just not bright enough to do well in their class. In order to assist teachers in working with ELL students, the author found that it is necessary to inform fellow teachers about basic second-language learning concepts, especially BICS and CALP.

The impact of the dearth of teacher training in bilingual and ESL instruction transcends what students are taught. It also impacts the manner in which ELL students

are viewed and treated by their teachers. Romo (1993) argues that the lack of English proficiency on the part of Mexican immigrant children is often perceived and treated as a lack of intellectual ability. Reyhner and García (1989) state that many teachers consider minority students culturally deprived because they come from homes in which oral literature is predominant in contrast to middle class homes in which books, magazines, and parents who read are the norm.

However, what many teachers of students that come from poor backgrounds fail to realize that oral literature is characteristic of homes in which the parents are poor, and in doing so, they fail to recognize assets that students bring into the classroom.

Unfortunately, many ELL students, especially Latinas/os, come from poor families. The US Census Bureau (2001a) found that the poverty rate for foreign-born families was 15.7 percent, compared to 8.3 percent for native-born families. Even more striking is the finding that while the poverty rate for foreign-born families from Europe was 16.8 percent, the poverty rate for those coming from Latin America was 21.9 percent. In 1999, of the 14.4 million people who came from Latin America and lived in poverty, 25.8 percent were from Mexico. This is especially striking in light of the fact that Mexican-born immigrants make up the majority of the over 28 million foreign born people living in the United States (US Census Bureau, 2001b). Moreover, it provides a possible explanation for the fact that, as was noted above, many immigrant children begin to work before graduating from high school.

Finally, continuously experiencing failure greatly impacts the academic performance of ELL students over time. Tinajero & Dunlap (1985) state that ELL students must also contend with the cycle of limited academic success. They argue that

ELL students who experience failure upon their arrival in their new environment, often continue to be unsuccessful because of the lack of proper instruction and proper language support. ELL students also experience negative affects on their cognitive abilities and their intellectual functioning stemming from linguistic, environmental, and/or instructional problems.

The author saw this kind of cyclical failure even before he became an ESL teacher. Working with ELL students who had not passed the Texas Assessment of Academic Skills (TAAS) test, the author met Edgar, a recent immigrant who had been taking the TAAS test since the first year he arrived at the school. Over the next couple of years, Edgar took the test and failed, despite going to TAAS remediation classes. In the end, Edgar refused to go to any more remediation classes and eventually left school altogether because, in his opinion, he would never graduate because he could not pass the TAAS test.

#### Literacy and literacy instruction of ELL students

A common thread running through these statistics and observations is the issue of literacy and literacy instruction for ELL students. A basic contention here is that achieving literacy proficiency in a second language is difficult, especially when a student is expected and required to achieve native-like proficiency (Jimenez, 1996). Tinajero and Dunlap (1985, 219) explain this difficulty noting that "...the sole medium of instruction for a large number of these children is English--a language they can barely understand, let alone speak or read." García (2000) also argues that developing the necessary literacy and language arts skills often takes a considerable amount of time and attention on the part of all those involved in the learning process.

This demand is especially crucial given the demand on ESL teachers and students. Many times, the author's ELL students have approached him regarding the amount of time it takes them to finish their homework. Because of the heavy reading load, many ELL students often spend hours on one particular assignment, and find themselves unable to finish all of their work because they have not had enough time to develop the necessary reading skills and language proficiency to do their work. The situation is no better for many ESL teachers. In addition to his ESL class load, the author has had to teach up to two sections of Spanish all the while keeping up with the testing, monitoring, and related paper work that comes with teaching ESL. The end result is that many students and teachers often do not have the necessary time to invest in the language learning and literacy development process.

The literacy challenges that ELL students face become more critical in content-area classrooms. Letsoalo (1996) writes that the language found in textbooks either assists or hinders students' understanding and academic success. For example, many times, the language used in biology textbooks is beyond the everyday experience of the very students (e.g. English proficient secondary level students) for whom they were designed. As a result, these textbooks represent an even greater challenge for students who are just learning to speak, read, and write English and must also learn biology at the same time. Furthermore, Letsoalo (1996), in a study conducted at Ratmatau Senior High School in Lebowa South Africa, found that the biology text used at the school contained the following characteristics that impeded comprehension: a) complex sentence structure, b) the presence of misleading or confusing technical terms, c) the text's excessive use of non-technical terms, d) the text's use of unfamiliar/difficult grammatical

items, e) complex wording of sentences, and f) inconsistent factual content presentation. These text conventions present second language learners with numerous hurdles that impede and disrupt understanding.

At the same time, the content-area classroom itself acts as an obstacle for ELL readers. Ruddell (2001) recommends providing content-area instruction for ELL students in sheltered instruction (SI) format. Sheltered instruction provides for instruction that is solid, well designed, and suitable for all students. In SI classrooms, students receive the necessary language support while focusing on learning content area knowledge. Moreover, SI classrooms also provide the verbal communication and cultural identification that is crucial to the success of ELL students.

Unfortunately, many ELL students do not have the benefit of learning content in this kind of environment. The fact of the matter is that most schools lack the mechanisms (e.g. sheltered instruction content classes) that provide the necessary language and content learning support. At the school where he teaches, the author has seen second language learners at all levels of English language proficiency placed in overcrowded content area classrooms in which the kind of support they need is not available. In these classes, the textbook and the teachers' lecture notes were the sole sources of information. As a result, the support Ruddell (2001) calls for was not available. Moreover, while some of these students did have the benefit of knowing one or two students in the class who knew Spanish and would provide some assistance with their work, most found themselves in classes where neither the teacher nor other students spoke Spanish and where there was a lack of Spanish-language content area materials.

The need for improved literacy instruction for second language learners is

apparent even in mathematics. For example, Basurto (1999) notes that math is a subject with which second language learners have trouble because of their inability to analyze and answer word problems. This assertion is based on ELL students' scores on math subtests of the Iowa Test of Basic Skills (ITBSP) and the Comprehensive Test of Basic Skills (CTBS). Tinajero and Dunlap (1985) echo this finding stating that mathematics is an area of great difficulty for language minority children, especially with regard to solving word problems. This difficulty is a consequence of problems in ELL students' use and synthesis of information written in English. Since word problems in math emphasize linguistic processing skills, the language in which they are written often inhibits the reading, thinking, and computing processes of ELL students because many of them have not developed the English language proficiency needed to synthesize the information in story problems. Consequently, ELL students have difficulty in developing the abstract thought processes and cognitive skills that are crucial for successfully mastering word problems in math.

Ironically, mathematics is often one of the courses in which most second language learners are expected to not have language related problems. For example, puzzled math teachers who believe that ELL students should not have problems in math classes because they consider math to be a "universal language" often approach the author for help. These teachers often want an explanation for the lack of success on the part of the ELL students in their classes. The evidence presented here, however, suggests that math stops being a universal language once students are required to make the shift from arithmetic to the analysis of data in story problems, one of the most common forms of mathematical problems in secondary level math classes. Furthermore, Tinajero and

Dunlap (1985) note that the difficulties that ELL students face in mathematics ultimately limit the level of mathematics at which these students can achieve. Nonetheless, teachers of ELL students expect them to achieve very high levels of mathematics proficiency with no regard for the language and literacy issues involved in mathematics.

Mathematics also presented problems for the author's students. Although many of his students understood the content (i.e. they understood the basic concepts of algebra and were able to manipulate equations), problems arose when students had to apply this knowledge to word problems that they had trouble deciphering in order to set up their equations. In addition, they were unable to read the textbook in order to get help in figuring out how to do their work because they cannot understand it.

Not surprisingly, over the last three years during which the author spent more time evaluating his ESL students, he has continued to see just how much of a problem reading in the content-area presents for his students. The majority of the ELL students in his classes continue to come to him for assistance in science, math, and social studies. In the case of science and social studies, the author has noticed that his students' inability to understand new and complex concepts, teacher's notes, and assignments for these classes create a barrier between his students and the content they needed to learn. Even the students who grasped the majority of the content (i.e. the facts) had trouble demonstrating their knowledge because they couldn't understand the questions on their worksheets and on their tests. In math, the author's students continue to experience frustration when working with word problems despite having mastered the mathematical concepts and processes.



### Support for literacy and literacy instruction research

As a result of the literacy challenges that ELL students face, a number of researchers have expressed their support for and offered evidence in favor of conducting research in order to develop effective literacy instruction techniques for second-language learners. According to Jimenez (1996), new models for proficient reading, as well as improvements in instruction, could be developed through further investigation of the reading knowledge and strategies of ELL students. He also calls for research that focuses on enabling the "...attributes of culturally distinct populations" (Jimenez 1996, 90). Furthermore, Jimenez (1994) notes that studies have found that very little attention has been paid to producing effective practices for ELL literacy instruction. Swicegood-Muñiz (1994) bolsters Jimenez's claim stating that, while numerous studies have focused on teaching monolingual English-speaking students to read using metacognitive strategies, few studies have had as their focus the metacognitive reading strategies and training in these strategies of bilingual, Spanish-dominant students. Moreover, there is concern that the literacy instruction that ELL students *are* receiving is inadequate. Often, rather than focusing on high level content, language, and comprehension skills, the teachers of second language learners provide mostly basic skills instruction using repetitive drills which fails to motivate students (García, 2000).

### The need for resources

Faced with the challenge of addressing students' problems with content-area reading, the author sought resources that could guide him in meeting this need and that his students could use in their classes. The author met with teachers on his campus and administrators from the district's Office of Special Populations. Unfortunately, the

teachers with whom he met knew of few Spanish language resources that were aligned with the textbooks that they were using in their biology, geography, algebra, and geometry classes. A few of the algebra and geometry teachers had brief Spanish language booklets that they copied and gave to their ELL students. However, these booklets were overly brief in their explanations of the material and did not have sufficient examples and explanations of the examples to really help students learn. At times, the lack of explanatory detail even caused the author trouble when using the copied handouts to assist his students with their work.

Content area textbooks for history and science did contain Spanish language glossaries of the key vocabulary. However, the use of the glossaries was limited by the fact that the vocabulary was not presented in context in Spanish. The definitions were given in isolation and were not presented in relation to each other or the main ideas of the content. Consequently, few teachers were able to go beyond simply telling students to look up the vocabulary in Spanish.

On the other hand, the Office of Special Population had a wealth of resources for literacy and literacy instruction for ELL students, as well as for content area instruction. Unfortunately, the majority of the materials focused on students at the elementary level, and even though some of the texts were somewhat relevant to the secondary classroom, the depth of knowledge and skill that secondary ELL students need in order to be successful was lacking.

#### Reading and the nature of content-area reading

As has been demonstrated in the previous sections, the lack of literacy success of bilingual ELL students is a multifaceted problem because there are many home and

school factors that have an impact on the reading success of ELL students. However, in order to fully understand the problems that secondary ELL students face in the content area class, it is important to establish what reading is. For the purpose of this analysis, the author is using the transactional model of reading. Weaver (1988) states that the transactional model views reading as a thinking process in which the reader interacts with the text in order to construct meaning using his/her prior knowledge. As such, the reader is not a passive receiver of meaning but rather an active creator of meaning (Webb, 1980).

In observing his students, the author found that they were passive in their reading almost to the point of helplessness. Seldom did they question what they read or ask question about what they read. Reading was about finding the answers to questions not learning or interpreting. And when they problems with comprehension, they simply stopped reading.

Thus, in the author's opinion, the central goal of critical reading strategy instruction (CRSI) is to assist ELL students in developing the knowledge and skills to effectively overcome the problems posed by content area reading in order to learn from content area textbooks. It is the author's hope that in doing so, his students will become active readers who transact with the text and bring their prior knowledge and experience to bear on the meaning making process. Based on this goal, the transactional model is deemed appropriate for CRSI because it is student centered and serves as a catalyst for problem solving by presenting a clear vision of what the goal of the reading process is.

Having established a general concept of what reading is, it is also important to understand the nature of content area reading. There is little doubt that content area

reading poses a problem for the general student population. Cousin (1989) states that upper elementary, junior high, and high school teachers agree that reading textbooks is one of the primary problem areas for students who are experiencing learning problems in classes such as social studies and science. This is because children at these stages of education are attempting to make the move from learning to read to reading to learn (Spor, 1999). Moreover, Feather (1993) states that many students are not experienced at reading content area texts and that the strategies they have learned in reading narrative texts are not applicable to reading expository texts. Similarly, Chapman (1993) argues in favor reading strategy instruction based on the fact that middle school and high school students are faced with reading that is more complicated yet less familiar.

Thus, it is the author's contention that the lack of content-area reading success on the part of ELL students at the secondary level is due in large part to the nature of content-area reading. According to Feather (1993), reading content area texts (infotexts) requires that students possess knowledge of vocabulary, monitoring techniques, and metacognitive awareness. Similarly, Bryant, Ugel, and Thompson (1999) note that content area reading constitutes interacting with text in order to interpret and construct meaning. More specifically, they note that the need for students to be able to comprehend explanatory/factual text is implied when engaged in content area reading in science, history, and social studies. These are the very behaviors and skills that the author did not observe in working with his ELL students.

With regard to vocabulary, content area readers must learn the specialized language of each content area. The technical vocabulary words are often content-specific, meaning that the words have meanings specifically oriented to a particular

discipline that ELL students must already know or learn in order to be successful in the class. As a result, content-area vocabulary presents special challenges for ELL students (Feather, 1993). Because of their limited English proficiency, ELL students are often limited in their knowledge of technical terms, especially terms that may have multiple meanings in different content areas. For example, words such as brush and ruler are two common words whose different meanings an ELL student will have to distinguish and understand depending on whether he's in an art, geography, social studies, or math class (Bryant, Ugel, & Thompson, 1999).

A crucial aspect of content area reading that distinguishes it from reading narrative text is that the purpose of content area reading is learning. Spor (1999) calls this ability to learn subject matter from reading "content literacy." Collins (1994) identifies five components of content literacy including a) establishing a purpose for reading (i.e. locating specific details, and writing a critical analysis), b) deriving meaning from the text in order to learn, c) predicting one's own performance on a given reading task, d) remedying comprehension failures, d) recognizing inadequacies in the text (e.g. ambiguous words within the text), and e) being aware of one's own strengths and weaknesses (e.g. background knowledge, interest in topic, and individual reading skills). These unique characteristics that distinguish content area reading from narrative reading require readers to learn a new set of reading strategies (Spor, 1999), posing great challenges for ELL students, many of whom lack the expository text experience and extensive vocabulary knowledge needed to effectively negotiate content area texts.

In addition to the problems presented by vocabulary and lack of experience, ELL students reading content area texts are also thwarted by the manner in which these books

are written. Among the problems generally found in content area books are odd organizational sequences, abrupt shifts in topic, and unrelated headings and subheadings. (Feather, 1993). Chapman (1993) points out that the characteristics that complicate middle school and high school high school level reading are: 1) differently structured expository and information texts are less familiar than narrative texts, 2) the need for greater evaluation when reading more polemical texts, and 3) information in texts that is novel, complex, densely packed, and difficult. Crawley and Mountain (1995) also point out a number of factors that make content area texts difficult including: 1) the style in which they are written is encyclopedic, 2) the information is presented very quickly in chapters with a high density of concepts and facts, 3) the rapid presentation of the material often makes the material appear difficult and dull, and 4) the presentation of the material makes students feel like they are unable to learn from it.

Letsoalo (1996) is a good example of the problems found in content area textbooks. As noted earlier, the study, focused specifically on second language learners, revealed problems similar to those noted above in the biology textbook used in the senior secondary school in Lebowa in South Africa. The key question for the Lebowa study was whether or not the biology textbook presentation was suitable for second language learners. The researcher found that problems with the biology texts included: 1) complex sentences and structure, 2) misleading or confusing technical terms, 3) excessive use of technical terms, 4) use of unfamiliar/difficult connectives, 5) complex wording of sentences, and 6) inconsistent presentation of factual content. In order to address these shortcomings, twelve recommendations were made regarding the sentence structure, vocabulary, word structure, grammatical structure, and consistency of the text.

Other characteristics of content area textbooks present problems for ELL students because of the nature of second language acquisition and literacy development. The literature and content-area texts that ELL students work with at the secondary level are extremely cognitively demanding because they are highly decontextualized and contain a lot of technical vocabulary. According to Cummins (1994), text complexity falls along a continuum ranging from highly context-embedded/cognitively undemanding to highly context-reduced/cognitively demanding. Text that is highly context embedded and cognitively undemanding contains many cues such as pictures, graphs, or other illustrations that assist the reader in creating meaning. Many of these texts also have the benefit of being written in simple syntax. These kinds of texts do not require the reader to expend large amounts of cognitive energy and skill in order to comprehend what is being read.

In contrast, context-reduced/cognitively demanding texts do not have as many supportive cues and the complexity of the syntax is often much greater. Consequently, much cognitive energy, effort, and skill are required for comprehension to take place. Unfortunately for many ELL students, content area textbooks at the secondary level fall into the category of highly context-reduced/highly cognitive demanding. Without the textual cues and faced with a limited English proficiency and experience with expository texts, ELL students often find themselves unable to read and learn from content area textbooks. Moreover, even texts that provide context in the form of visual aides such as charts, graphs, and pictures are difficult because the vocabulary used with the visual aides is still beyond the English proficiency of many ELL students. As noted above, the academic language proficiency needed to effectively work with textbooks takes 5 to 7

years to develop as opposed to the 2 years it takes to develop conversational proficiency (Cummins, 1994).

Moreover, there are a number of additional reader characteristics that make content area reading difficult. Crawley and Mountain (1995) identified six reader characteristics that play an important role in the problems that content area reading poses for readers in general. These reader characteristics include 1) varied levels of reading ability, 2) varied background experiences, 3) varied levels of vocabulary knowledge, 4) variations in ability to retain information found in texts, 5) the failure of students to make use of the reading and study skills they already have, and 6) students' perception that reading skills do not transcend subject areas. As such, it is not surprising that content area problems are not limited to ELL students because even native English speakers have problems transacting with text. Unfortunately, it is often the case that the problems facing mainstream monolingual students are often magnified for ELL students because of language proficiency and educational background. Consequently, content area reading presents an especially formidable challenge to ELL students that must be addressed if the academic performance of these students is to improve.

The bottom line here is that numerous factors point to the significance of the challenge that content area reading presents for secondary ELL learners. Given the current status of ELL education as a result of political setbacks and opposition (Escamilla, 1989; Attinasi, 1998; Cummins, 1994; Crawford, 1998; Gersten, 1999; Garcia, 2000; & Quezada, Wiley, & Ramirez, 2000) and despite recent innovations brought about by the increasing number of foreign-born students (Rojas & Apodaca, 1997; Klingner & Vaughn, 2000; & US Census Bureau, 2001), the lack of academic



success experienced by ELL students must be addressed. The lack of academic success on the part of secondary ELL students in the content area classes (Romo, 1993; Cummins, 1994; Jimenez & Gàmez, 1996; Tabassum, 1999; TEA, 2000; & US Census Bureau, 2001) is caused in part by inappropriate teacher expectations (Romo, 1993; Swicegood-Muñiz, 1994; Jimenez, 1997;), the lack of teachers trained in ESL and bilingual instruction (García & Ortiz, 1988; Cummins, 1994; Jimenez, 1994), and gaps in ELL students' skills caused by inadequate instruction, students' academic history, and errors in placement (Tinajero & Dunlop, 1985; Romo, 1993; & Jimenez, 1996, 1997). Specifically, the challenges faced by ELL students in content area classroom (Tinajero & Dunlap, 1988; Jimenez, 1994, 1996; Letsoalo, 1996; Basurto, 1999; & Garcia, 2000) as a consequence of a lack of appropriate content area resources and the nature of content area reading and content area text books (Webb, 1980; Weaver, 1988; Cousin, 1989; Chapman, 1993; Feather, 1993; Collins, 1994; Cummins, 1994; Crawley & Mountain, 1995; Letsoalo, 1996; Bryant, Ugel, & Thompson, 1999; Spor, 1999), were identified as key causes of academic failure for ELL students.

Having assessed the current status of secondary ELL students' academic performance vis-à-vis factors impacting their content area reading ability, the author found that there was enough evidence to provide a compelling case for a research-based initiative aimed at resolving this problem. Moreover, the author concluded that the research for this master's thesis represents the best opportunity for beginning this endeavor. After consulting with professors with whom he has worked in the past, the author chose to begin at a very basic level of research. In order to address the issue of improving literacy education for ELL students at the high school level, I propose to

conduct a review of the literature regarding ELL students and reading in the content area. Specifically, the literature review focuses on the problem of establishing a core of effective content-area reading strategies for ELL students at the secondary level that can then be incorporated into a critical reading strategy instruction curriculum.

#### Definition of terms

Bilingual: generally seen as being a fluent reader, speaker, and writer of two languages. However, in this analysis, the term bilingual is not used to denote high proficiency in two languages. Instead, the definition is much broader, simply denoting that the individual speaks, writes, and/or reads two languages with at least a high beginner's proficiency.

Monolingual: term used to denote an individual who is able speak, read, and write only one language

Critical reading strategies: strategies that enable readers to read actively through the use of metacognition and a variety of text- and student-initiated techniques. For the purpose of this analysis, critical reading strategies does not refer to specific methods or strategy *vehicles* such as KWL, SQR3, and Think Pair Share. Instead, the term refers to the processes and tools that students use as they interact with the text in order to construct meaning as they read. These strategies include use of context clues, self-questioning, making inferences, and drawing conclusions as well as using their prior knowledge

English as a Second Language (ESL): immersion English classes of students with varying use of primary languages for students demonstrating varying levels of English oral proficiency and literacy

English Language Learner (ELL): term referring to ESL students that is becoming the term of choice for referring to second language learners

Second Language Learner (SLL): student who is acquiring a second language.

Primary Language (L1): the first language that a person learns; also referred to as a person's primary language, native language, home language, or mother tongue.

Secondary Language (L2): the second language that a person learns; also referred to as the target language

Five Model Hypothesis: second language acquisition model developed by Stephen Krashen that states that L2 acquisition depends on comprehensible input, monitor theory, the acquisition hypothesis, the affective filter hypothesis, and the natural order hypothesis

The Affective Filter Hypothesis: theory developed by Stephen Krashen which states that the level of anxiety that an SLL student feels has a direct impact on the success that the student has in acquiring the target language; Krashen argues that the higher the anxiety level, the less likely the student is to be successful, while the student is more likely to be successful if less anxiety is felt

The Acquisition Hypothesis: states that SLL learners are more successful in becoming proficient in the target language when the language is acquired in a natural setting instead of learning the language in a traditional classroom setting through a grammar-based curriculum

The Natural Order Hypothesis: states that L2 acquisition follows a certain order that mirrors the order in which the L1 is acquired

The Monitor Theory: states that the monitor is a theoretical device that governs

language output based on the knowledge of the language that requires sufficient time to work properly

Comprehensible Input: language that the reader hears or reads and is able to understand

Basic Interpersonal Communication Skills (BICS): level of oral language proficiency, which includes the language that an ELL student needs to successfully communicate in everyday interactions

Cognitive Academic Language Proficiency Skills (CALPS): level of language proficiency (including reading, writing, and speaking) necessary for an ELL student to be successful in school

Metacognition: student-initiated processing that enables the reader to recognize when comprehension has broken down during the reading event; also referred to as going beyond knowing

Zone of Proximal Development ZPD): Vygotskian concept which establishes the relationship between what we can do or what we know independently and what we are able to do or what we understand with assistance; the distance between the two is what Vygotsky called the Zone of Proximal Development

Sheltered Instruction: approach in which ELL students are placed in content-area ESL transition classes made up of ELL students who are still developing their English language fluency and literacy

Culturally relevant texts: texts that contain information that is related to the life experience of the reader

Culturally recognizable texts: text containing information and events that is

within the readers' realm of experience

Cognates: words that have similar spelling, pronunciations, and meanings in two or more languages (e.g. *revolution* and *revolución*)

Translating: paraphrasing parts of a text via the bilingual's other language for the purpose of clarification.

Transferring: accessing skills or knowledge cross-linguistically; also referred to as the transfer of skills between languages.

Code-switching: the act switching from one language to another during the discussion of text.

### CHAPTER III

#### REVIEW OF THE LITERATURE

##### Finding areas of areas of need

In order to establish a core set of critical reading strategies for ELL students, it is necessary to first determine the areas of need that the strategies are to address. Critical reading strategies are the processes and tools that students use in the meaning-making act of reading. It is important to note that some of the areas of need that were found to represent actual strategies that participants in the studies were failing to use or were using incorrectly or inefficiently. In these cases, identifying the area of need resulted directly in identifying one of the core reading strategies for which the author was searching. Other areas of need, however, represent either language learning factors or text related factors, as well as types of knowledge about reading and the reading process, that the readers did not know about, had a limited understanding of, were not being used or were not being used effectively.

##### Using case studies

The researcher discovered that, in addition to the general research on ELL student literacy and literacy instruction, case studies were useful for this analysis for a number of reasons. First, the majority of the research that the author found on this topic had been conducted as case studies. Thus, the use of case studies for this review came about, in part, as a result of necessity.

The author also found substantial support for the use of case studies. Harste, Woodward and Burke (1984) argue in favor of using case studies because of the nature of written language learning research and because of the nature of case studies themselves.

They found that using open-ended, real language situations rather than statistical-experimental approaches was better suited for gaining knowledge about written language learning because it places the language user in the role of curricular informant. This occurs by allowing the researcher to examine contemporary, real-life events using direct observation and systematic interviewing to obtain the holistic and meaningful characteristics of the event (Yin, 1984). Thus, the case study approach is appropriate for the purpose of assessing the reading behaviors of ELL students because it enables the researcher to view the authentic language instances that occur, thereby providing a sounder basis for generating theory.

However, the goal of this analysis is not to develop theory in the traditional sense. Yin (1994, 4) notes that the concept of theory transcends the idea of causation (the *why* or *how* of a phenomenon) to include "...the design of research steps according to some relationship to the literature, policy issues, or other substantive source." The purpose of this analysis, then, is not to explain *why* certain second language learners are successful content area readers and why others are not, although such answers may present themselves throughout the analysis. Instead, the goal is to establish a starting point (i.e. the core list of strategic reading strategies) for further research into the manner in which the issue of secondary ELL students' low academic performance vis-à-vis content area literacy problems can begin to be addressed.

The manner in which the researcher is able to view the language instances noted by Harste, Woodward and Burke (1984) is exemplified by the use of the "think aloud" or other form of verbal reporting used in many of the case studies (Padrón, Knight, & Waxman, 1986; Langer, Bartolomé, Vásquez, & Lucas, 1990; García, 1991; Padrón,

1992; Calero-Breckheimer & Goetz, 1993; Jimenez, García, & Pearson, 1994a; Jimenez, García, & Pearson, 1994b; Pérez, 1994; Swicegood-Muñiz, 1994; Verhoeven, 1994; Jimenez, García, & Pearson, 1995; Jimenez & Gamez, 1996; Jimenez, García, & Pearson, 1996; Jimenez, 1997; Tang, 1997; Droop & Verhoeven, 1998; Vaughn & Klingner, 1999; and Klingner & Vaughn, 2000) included in this review. Wade (1990) defines the think aloud as a type of verbal report that can be used to assess comprehension strategies in which the subject is given a task and asked to verbalize what comes to mind as they perform the given task. Afflerbach and Johnston (1984) state that verbal reporting provides valuable and unique information regarding the cognitive processes that take place during reading. Similarly, Wade (1990) supports the use of think alouds for reading research noting that verbal reports provide a direct method of obtaining information about the cognitive processes that occur during reading. In verbalizing what comes to mind, the subject provides rich and elaborate data that can be analyzed. Moreover, the fit between using case studies in combination with the think aloud is supported by the fact that, case studies generally involve small populations. Afflerbach and Johnston (1984) note that the need to use small populations with think alouds is obvious given the amount of time necessary for transcribing and analyzing the extensive reports elicited by the subjects.

At the same time, Spiro et al. (1987) argue that in dealing in ill-structured domains of knowledge—areas of knowledge containing complex, interconnected subject matter such as cognition, metacognition, reading, and reading instruction—the most effective approach to learning and using what one learns about these domains is to employ a method of case-based representations. This argument is based on the idea that



case based representations facilitate the application of the knowledge gained from ill-structured domains to a wider range of future applications. Similarly, Yin (1994) states that the case study method is valuable in studying complex interactions—in this case the meaning making process of reading—which are difficult to distinguish from their context. The author contends that the case-based approach is applicable to reading research given the complex and interconnected nature of reading itself based on the transactive view of reading noted above. In addition, it is the author's contention that, in using case studies, the strategies identified in this analysis will then have a greater potential for applicability across content area curricula.

In deciding on the format for presenting the data obtained from the case studies, the author found that organizing the data according to the areas of need identified in the case studies (see following section) was the most appropriate format given the overall aim of this study. Therefore, the data are not presented in the study-by-study format generally utilized in research reviews. Rather, the case studies are presented as within each of the areas of need they represent. Consequently, the author also found it necessary to provide the reader with the necessary background information (i.e. grade level, sample size, focus of the study) for each study prior to presenting the areas of need and the corresponding data from each case study.

Due to the dearth of case studies focusing primarily on secondary bilingual students, the author found it necessary to cast a wider net and include case studies conducted with students at the elementary (1<sup>st</sup>-4<sup>th</sup> grades), middle school (5<sup>th</sup>-6<sup>th</sup> grades), junior high school (7<sup>th</sup>-8<sup>th</sup> grades), secondary (9<sup>th</sup>-12<sup>th</sup> grades), and post-secondary (undergraduate) levels. Because of the lack of case studies targeting secondary bilingual

students and because the goal of this analysis is not to verify but rather *identify* a core set of critical reading strategies for bilingual secondary students, the author found the inclusion of a wider range of studies both appropriate and necessary.

The elementary level case studies made up the majority of the sources of data with a total of 7 case studies. There were 8 middle school studies, followed by the junior high/secondary and post secondary with 3 and 1 respectively. In situations where the population of students in a particular case study overlaps categories (e.g. 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> grades or 8<sup>th</sup>, 9<sup>th</sup>, and 10<sup>th</sup> grades) the case study is placed in the category from which the majority of the students in the case study come.

The focus of some of the elementary level case studies was the general use of metacognitive reading strategies. Padrón, Knight, and Waxman (1986) sought to find if there were differences in the cognitive strategies utilized by bilingual and monolingual readers. Thirty-eight 3<sup>rd</sup> and 5<sup>th</sup> grade students participated in the study. The students read passages from the Ekwall Reading Inventory that were at their tested reading level. Swicegood-Muñiz (1994) examined the impact of metacognitive reading strategy training on 3<sup>rd</sup> grade bilingual students. Ninety-five Spanish dominant students were included in the study. A comparison of the students' use of metacognitive reading strategies was conducted after 48 of the students received instruction in strategy use while the remaining 47 were taught using grade level Spanish basal readers.

Other case studies conducted with elementary level students focused on specific facets of reading and reading-related skills. Droop and Verhoeven (1998) conducted their study examining the role played by background knowledge in L1 and L2 reading comprehension using 70 students in the 3<sup>rd</sup> grade. The students were from three different

cultural backgrounds (Dutch, Turkish, & Moroccan). Expository texts varying in cultural reference of the topic and in linguistic complexity were chosen from Dutch curricula. The researchers examined the extent to which the cultural background of schoolbooks impacted the recall and comprehension of second language learners. Students' recall and comprehension using expository texts from Dutch curricula that differed in cultural reference--topics were related to Dutch, Turkish, or Moroccan culture--and linguistic complexity were compared and contrasted. Also included in the study were texts that were deemed to be culturally neutral.

Thirty-two biliterate 3<sup>rd</sup> and 4<sup>th</sup> graders were used by Calero-Breckheimer and Goetz (1993) to examine the students' strategy use when reading narrative texts in Spanish and English. Padrón (1992) investigated the impact of cognitive reading instruction, specifically the impact of instruction in the use of Question-Answer Relationships (QAR) and Reciprocal Teaching on the use of cognitive reading strategies by Hispanic bilingual students. Eighty-nine students (23 3<sup>rd</sup> graders, 35 4<sup>th</sup> graders, and 31 5<sup>th</sup> graders) read expository texts at varying grade levels.

Verhoeven (1994) conducted a study with elementary students focused specifically on the transfer of literacy skills between languages. This study was conducted with 98 Turkish students, all of whom had been living in the Netherlands for at least 2 years. The average age of the students was 6.7 years. The goal of the study was to find empirical evidence for interdependence between the students' L1 (Turkish) and their L2 (Dutch).

Pérez (1994) studied the L1 Spanish literacy development of 20 bilingual students ranging from kindergarten to 4<sup>th</sup> grade. Students' oral reading, writing, and discussions

were utilized to ascertain the extent to which the students used reading and writing strategies as well as the nature of the students' processes of meaning construction.

A number of the middle school case studies targeted specific reading concepts or skills. One common focus of a number of the studies conducted with middle school students was the role of prior knowledge and vocabulary knowledge. García (1991) included 51 Hispanic children and 53 Anglo children from the same 5<sup>th</sup> and 6<sup>th</sup> grade classrooms. The students' use of prior knowledge and vocabulary knowledge was examined using expository test passages and questions. In contrast, Nagy, García, Durgunoglu, and Hancin-Bhatt (1993) conducted their study focusing on the use of cognates by Spanish-English bilingual students using 74 students. The students, who came from the 4<sup>th</sup> and 5<sup>th</sup> and 6<sup>th</sup> grades (29, 33, and 12 respectively), read expository texts that contained true and false Spanish-English cognates.

Klingner and Vaughn (2000) specifically targeted the use of Collaborative Strategic Reading (CSR) by bilingual students in content area classes. Thirty-seven 5<sup>th</sup> grade students participated in the study in which they read from their science textbooks. The students ranged from high- to low-achieving in academic performance as well and from low- to high-English language proficiency.

Some of the middle school case studies had the broader focus of examining students' overall reading behaviors. Langer, Bartolomé, Vásquez, and Lucas (1990) investigated the meaning construction processes of 12 students in the 5<sup>th</sup> grade. These students read stories and information pieces in English and Spanish.

Four of the case studies used in this analysis (Jimenez, García, & Pearson, 1994a; 1994b; 1995; and 1996) were based on research conducted with the same students. The

author chose to include all four, however, given that each document provided different vignettes of the students. Jimenez, García, and Pearson (1994b) presented eleven bilingual Latino/a students and 3 monolingual Anglo students from the 6<sup>th</sup> and 7<sup>th</sup> grades. Of the eleven Latino/a students, 8 were considered proficient readers and three were considered struggling readers, while all three of the monolingual Anglo students were considered proficient readers. Jimenez, García, and Pearson (1996) included only the 8 proficient bilingual Latino/a students and the three proficient monolingual Anglo students. Finally, Jimenez, García, and Pearson (1994a and 1995) both focused on three students: 1 proficient bilingual Latino/a student, 1 struggling bilingual Latino/a student, and 1 proficient monolingual Anglo student. In all of these studies, the researchers focused on the extent to which each of the successful and struggling readers utilized critical reading strategies in general and how successful they were in implementing the strategies. Moreover, in all four studies, the proficient monolingual Anglo students served as comparisons to the proficient bilingual Latino/a students.

A number of the studies conducted with junior high/secondary school level students targeted the use of critical reading strategies and the impact of culturally relevant material on comprehension. Jimenez (1996) investigated the knowledge and use of literature-based cognitive strategies of 3 Latino/a special education students in the 7<sup>th</sup> grade. The study also sought to examine the impact of culturally relevant text on the reading comprehension abilities of the students reading English language narrative texts. Similarly, five, low-achieving 7<sup>th</sup> grade Latino/a students were the subjects in Jimenez (1997). The study focused on comparing the strategic literacy knowledge, abilities, and

potential of the students when reading (in Spanish and English) trade books and texts containing culturally relevant material.

One study conducted with junior high and secondary students focused on students' literacy skills in a specific discipline. Huang's (2000) study was conducted with 23 students ranging from grades 8 to 10 and focused on the content learning and academic literacy skills of L2 students in an ESL science class.

The only study conducted with post secondary students examined the transfer of reading skills. Tang (1997) looked at 8 native Mandarin Chinese speakers from the Chinese Student and Scholar Association at the University of Victoria, Canada. The researcher utilized authentic expository texts. This study was included because it provided information regarding the transfer of skills based on the performance of students deemed to be fully bilingual and biliterate.

While the above studies focused on students, three studies, Gersten, and Jimenez (1994), Kucer (1995), and Jimenez (2000) focus on teachers. Gersten and Jimenez (1994), targeted three teachers: a) an experienced 5<sup>th</sup> grade teacher, b) a novice fourth grade teacher, and c) and an experienced 3<sup>rd</sup> grade teacher. The goal of the study was to describe the effective L2 reading instruction practices of the teachers, especially with those students identified as having difficulties reading. Kucer (1995) takes a similar observational approach in examining the developing literacy strategies of 3<sup>rd</sup> grade Spanish-English bilingual students as a result of their teacher's reading strategy instruction. The writer of the article, who coordinated with the students' teacher in developing the reading strategy instruction curriculum, observed the impact of the reading strategy instruction on the students' development as independent readers.

Jimenez (2000) is an article in which the researcher presents selected findings from previous research conducted with six Latino/a teachers in order to observe their literacy instruction practices.

Other sources of data include programs being implemented in different schools in order to improve the literacy development of ELL students. Silbert, Carnine, and Alvarez (1994) looks at the impact of L1 instruction on L2 literacy development. The subjects of the project were first grade ELL students at Wilson Elementary in Houston, Texas. The project targeted the lack of success that ELL students were having in learning to read in English. Walqui (2000b) presents the curricular/philosophical changes and the impact that these changes have had at Celexico High School as part of their efforts to better meet the needs of second language learners.

The areas of need identified

The areas of need in the content area literacy education of ELL students identified by the author are: a) developing proficiency in the second language, b) how students perceive their primary language in the context of the second language learning environment, c) understanding the purpose of reading d) developing metacognitive awareness, e) dealing with unknown vocabulary, and f) using bilingual strategies. These areas of need, moreover, are consistent with Collins' (1994) components of reading to learn discussed earlier. In the following sections, the studies are discussed in order to support the selection of the above areas of need based on the strategies used and not used by effective monolingual English readers and effective and less effective bilingual Latino/a readers.

One of the most often referred to and controversial areas of need for ELL students is the need to concurrently develop literacy and proficiency in the target language. The general attitude of the US government toward the learning of English by non-native English speakers is summed up by former Secretary of Education William Bennet who, in 1986, wrote that ELL students must be speaking, reading, and writing English as soon as possible (Reyhner & García, 1989). More recently, in 1998, Secretary of Education Richard Riley established a new policy based on the goal of having virtually all ELL students develop English language proficiency in three years (Gersten, 1999). In contrast, Jimenez (1994b) argues that it is disingenuous and potentially harmful for both teachers and students to expect language minority children to develop L2 proficiency within the two to three-year period that most ESL and bilingual programs allow. Krashen (1992) supports this argument pointing to positive correlations that have been found between the amount of time a person has been a resident in a country where the target language is spoken and the development of second language acquisition. Essentially, ELL students need more time to acquire the language.

Furthermore, according to García (2000), there are a number of factors that play a role in the development of English proficiency. First, there are few children from homes where languages other than English are spoken that grow up speaking fluent English. As previously noted, the US Census Bureau (2001b) found that, in 1999, there were 8.8 million children ages 5 to 17 in the United States who spoke languages other than English at home. It also found that, of the 8.8 million children who spoke a language other than English at home, 2.6 million had difficulty speaking English. More specifically, 23.4 percent of the 2.6 million students who had difficulty speaking English were from



Hispanic origin. García (2000) also states that many children who come from homes where languages other than English are spoken also come from homes where more than one language other than English is spoken. Consequently, these often children fail in school because they have not developed the level of English proficiency needed to be successful in a mainstream all-English classroom, and many of them simply drop out of school. This assertion is supported in part by the Hispanic dropout rate noted earlier. In contrast, monolingual English speakers face a totally different reality. Monolingual English speakers, be they Latino or not, generally come to school having had extensive prior experience in developing their English language proficiency, giving them an edge over foreign born students whose first exposure to the target language comes when they enroll in school.

In addition to the home factors that influence the development of L2 proficiency of ELL learners, a number of school factors also present serious obstacles. As noted earlier, states have recently placed a number of limitations of two to three years on the time that ELL students can spend in special language courses such as sheltered English classrooms. Consequently, many ELL students are prematurely placed in mainstream, all-English classrooms, especially at the middle and secondary school levels where language support services are rare and/or generally of low quality and brief in duration (García, 2000). In addition, Cummins (1994) found that schools neglect to consider that there are two levels of language proficiency (conversational and academic) that students must develop in order to be successful in school and that each level of proficiency requires a different amount of time to develop.

It has been the author's experience, however, that time is a luxury that is not available to ELL students and their teachers. At his school, the author's students who are new arrivals can take ESOL (English as a Second or Other Language) classes for only two years and still receive English credit toward graduation. After taking ESOL II, however, students are expected to take English III (American Literature), a course whose content is some of the most difficult of all the English courses, even for English proficient students. If ELL students are not ready for English III and have to take an ESL (English as a Second Language) class, they no longer receive English credit toward graduation. Consequently, the educational system is set up in a manner that penalizes students academically despite not providing students the adequate time to develop the necessary language proficiency.

The entire situation is paradoxical, to the detriment of second language learners. As previously mentioned, Cummins (1994) argues that Cognitive Academic Language Proficiency (CALP), the higher-level, academic language knowledge that ELL students need to be successful in school, takes from five to seven years to develop. This is due to the fact that more knowledge of the language is needed to function academically than it does to function in interpersonal communication. At the same time, ELL students are faced with what Cummins (1994) calls a moving target since they constantly have to match their level of English language proficiency with that of native English speakers whose proficiency also continues to increase. Thus, despite having less time to develop English language proficiency, ELL students continuously have to perform at ever-increasing levels of language complexity.

This disparity represents an especially difficult problem in the content area reading classroom. While ELL students are attempting to match their English language proficiency with that of their monolingual peers, they are also trying to match up with the level of proficiency needed to read content area textbooks. Doing so, however, is challenging given the nature of content area reading that can be problematic even for native English speakers. As previously stated, content area reading involves a tremendous amount of specialized and technical vocabulary and concepts for which many ELL students often have little or no background (Bryant, Ugel, & Thompson, 1999). Add the problem of the difficult structure and format of many content-area text books (Crawley & Mountain, 1995), and it is clear that there is a definite need for providing ELL students ample opportunity to develop proficiency in English so that they can be more successful in content area classes.

The level of vocabulary knowledge that bilingual Latino/a readers have in comparison to Anglo readers best exemplifies the importance of the issue of developing L2 proficiency. According to a comparison of proficient bilingual Latino/a readers to proficient monolingual English Anglo readers (Jimenez, García, & Pearson, 1994a, 1994b, 1995, 1996), a key difference between the proficient monolingual readers and the proficient bilingual Latino/a readers was the bilingual readers' preoccupation with unknown vocabulary as they read. In contrast to the monolingual readers, who made few references to words that they did not know, the proficient and less-proficient bilingual Latino/a readers made frequent references to unknown vocabulary. The researchers hypothesize that the lack of reference to unknown vocabulary by the monolingual readers was due to their more extensive knowledge of the English language. At the same time,

however, the researchers also note that the successful bilingual readers were better able to deal with and resolve problems of unknown vocabulary than the less-successful bilingual Latino/a readers. This was due to the fact that the successful readers used different reading strategies to ascertain the meaning of unknown vocabulary words while the less successful readers were unable to determine the meanings of unknown words.

Based on the above findings, it is possible to conclude that the need for L2 proficiency and the vocabulary knowledge that comes with it are of particular importance to ELL students reading in the content area. However, that is not to say that reading instruction should not begin until students have become highly proficient in the English language. Huddelson (1984) argues that students who speak little to no English actively read print in their environment even though they have not developed complete oral control of the language. She also argues that the daily efforts of ELL students to live and cope with English in their daily lives helps them to acquire a lot of English and actually begin reading because of the salient quality of what they see in the media and real life.

On the surface, the use of reading strategies by monolingual and bilingual readers appears to rely solely on the skills and metacognitive dimensions of reading. However, the reality is that reading, as a psycholinguistic activity, also involves an affective dimension. Similarly, learning a second language has an affective dimension. The affective filter is a barrier triggered by anxiety, motivation, and self-confidence. This concept is known as the Affective Filter Hypothesis (Ruddell, 2000). This barrier stands in the way of learning when triggered. Thus, second language learners who have a positive outlook about their skills and abilities are more likely to experience success,

while those with a more negative perception of their skills or the learning/reading situation are more likely to fail.

Given the affective dimensions of both reading and second language acquisition, it is possible to deduce that students' attitudes and self-concept play a crucial role in reading in a second language. For example, Jimenez, García, and Pearson (1994a, 1995) conducted a case study in which they evaluated how Latino/a readers at different levels of literacy development perceived bilingualism. The participants of the case studies were one proficient and marginally proficient bilingual reader along with a proficient monolingual reader. In creating profiles of the two bilingual readers, the researchers found that there was a clear difference in the perception that each student had of bilingualism. On one hand, the proficient bilingual reader expressed having an understanding of the valuable relationship between Spanish and English which she then demonstrated by noting that the word chocolate had the same spelling and meaning in English and Spanish as well as very similar pronunciations, as did *liquid* and *líquido* and *carnivorous* and *carnívoro*. She told the researchers that she benefited from using both languages in order to understand texts, especially science books.

The fact that the proficient student successfully applied her knowledge of Spanish and English while reading science textbooks represents an especially important finding for the author given that the sciences (biology, chemistry, and physics) are subject areas in which many of his students are currently struggling. The author also believes that searching for cognates is a promising strategy to further explore given the fact that Spanish and many scientific terms share a Latin origin or base (see section on cognates below).

In contrast, the less-proficient bilingual reader had a more negative view of bilingualism. Jimenez, García, and Pearson (1994a, 1995) state that this student lacked an understanding of the relationship between reading in English and reading in Spanish because she believed that her English helped her read in Spanish but that her Spanish could not help her read in English. The student stated that her difficulties were caused by the confusing words and sounds in English and Spanish. Furthermore, the less-proficient student had a negative view of how her Spanish could help her read as was made evident when she mentioned that a bilingual reader would not be as good an English reader as a monolingual reader because bilingualism was confusing.

Jimenez, García and Pearson (1996) found that a key difference between the successful and unsuccessful Latino/a readers in their study was that the successful students were more likely to view their bilingualism as an asset while the less successful students viewed their bilingualism as a damaging factor, if not as an actual cause of their problems in reading. The more successful students stated that they believed that English and Spanish had more commonalities than differences, while the less successful students argued that the languages were not only different but that knowledge of one language (Spanish) caused them confusion when working with the other (English).

Students are not the only ones expressing negative views of bilingualism. In Westfield, Massachusetts, a petition to ban the hiring of teachers with an accent, like the Puerto Rican teacher who had just been hired, was signed by 400 people who were afraid that accents were catching (Macedo, 2000). Similarly, even though the bilingual students in Jimenez (1997) did not express negative views of bilingualism, the students' teachers did have negative perceptions of bilingualism and bilingual instruction. One teacher said

she believed that Spanish instruction was not necessary since the students in her class had low levels of both Spanish and English proficiency, and the teacher aide in the same classroom said she believed that only English should be used in class in order to avoid confusing the students. Gersten (1999) observed similar teacher opinions in noting that a survey of 420 members of the Association of Texas Educators found that many believed that too much time was spent providing children native language instruction.

Additionally, Walqui (2000a) states that the language attitudes of schools can have both a positive and negative impact on the L2 learning process. She argues that it is important for teachers and students to consider what their attitudes are toward learning a second language as well as the level of status or prestige that students' primary language is given in the classroom. According to Jimenez (1997), such erroneous and potentially harmful views of bilingualism make the issue of students' and teachers' perceptions of primary language within the context of school an important area of need that must be addressed.

One explanation for the lack of success experienced by bilingual Latino/a readers is that they do not understand what reading is. Collins (1994) states that in order for a student to learn from what they read, the student must have an awareness of the fact that the purpose of reading is to construct meaning and be able to modify their behavior according to the specific tasks of reading.

Based on studies included in this analysis, less successful Latino/a exhibit reading behaviors that are not in keeping with reading as characterized by Collins (1994). In Jimenez, García, and Pearson (1994a), the researchers observed that Catalina, the less-proficient bilingual reader in their case study, had a misguided view of reading. She was

more focused on finishing the reading task rather than whether or not she had understood the material. Whenever Catalina came upon unknown vocabulary words or sections that did not make sense to her, the researchers noted that she often skipped the problematic word or section and never addressed it again. On the other hand, Pamela, the proficient bilingual reader in the study, was found to believe that comprehension was the goal of reading. Pamela demonstrated her belief by maintaining a continual focus on unknown vocabulary that she worked to understand as she read in both Spanish and English. Unlike Catalina, Pamela focused on meaning construction, focusing on vocabulary to comprehend. Even when reading in Spanish, Pamela targeted unknown vocabulary as part of her meaning making process. Consequently, the researchers concluded that Pamela's preoccupation with vocabulary as a tool for addressing her concerns with meaning making were much more balanced than that of Catalina, who was unable to transfer her ability to identify unknown vocabulary into successful meaning making.

The determination with which Pamela continually checked and addressed breakdowns in comprehension using reading strategies prompted the researchers to compare her to the successful monolingual reader in the study. Michelle, the monolingual reader, was described as having a global reflection about her comprehension and utilizing a multi-strategic approach to reading. Her view of comprehension as the main goal of reading is seen in how she focused on comprehension by monitoring her reading, rereading, and using inferences and prior knowledge to understand what she read. A poignant observation about the monolingual reader was the researchers' characterization of Michelle as being action oriented because she monitored her comprehension, and when comprehension broke down, she took steps to clarify the



problem. Moreover, when she came up with an alternative meaning construction that didn't fully satisfy her, Michelle continued implementing strategies and reading until she was satisfied. This type of effort is in stark contrast to that of Catalina, the less-proficient bilingual student in the study who, as already mentioned, skipped over words or parts of the text that caused her problems.

Later, Jimenez, García and Pearson (1996) found similar examples of a student's misguided view of reading in another study that compared the reading behaviors of successful and unsuccessful Latino/a readers with the reading behaviors of successful monolingual Anglo readers. The researchers concluded that the unsuccessful bilingual Latino/a readers viewed finishing the task of reading their selection as more important than the goal of understanding what they were reading.

In contrast, the researchers found that the successful bilingual readers that participated in the study had a unitary view of reading, meaning that they saw reading in Spanish as being similar to reading in English because they believed that learning to read in English only involved learning new vocabulary and a new phonological system. They concluded this because they already knew how to read in Spanish. Some of the participants believed that learning to read in English was simply a matter of learning to pronounce words in English since they already knew how to read in Spanish. As overly simplistic as this explanation is, it is indicative of the different, more positive state of mind that the successful Latino/a readers possessed and the subsequent advantage that they had over the less successful students as well.

Jimenez (1997) made similar observations. While some of the students did appear to have an understanding of the value of reading and the effort that it took to read,

in general the participants had problems giving concrete answers about reading. The researcher noted that the five struggling readers in the study had very little to say in response to questions designed to encourage them to talk about what reading is. Instead, low-performing Latino/a readers' responses indicated that they saw the process of reading as a mystery. These students failed to describe even the most basic aspects of reading. One student went as far as to say that he really did not know what reading was. Additionally, the students' perception of reading in Spanish was similar to their view of reading in English. When asked about reading in Spanish, one student stated that knowing the alphabet was important while another student replied that in order to read Spanish a person needed to know the sounds be able to read quickly.

With regard to comprehension and understanding, the strategies employed by less successful Latino/a bilingual readers versus the strategies used by monolingual English readers also indicate that the former lack an understanding of what reading really is. Padrón, Knight, and Waxman (1986) conducted a study that compared the reading behaviors of monolingual students to those of bilingual students. In this study, the researchers found that the monolingual students most often named concentrating as the strategy they used the most--by concentrating, the students meant that they thought about the story, kept it in mind, and remembered it. The least mentioned strategy for the monolingual students was thinking about what questions the teacher might ask. These strategies are indicative of a view of reading in which the reader is ultimately in charge of what and how comprehension takes place. In contrast, the bilingual readers responded that they primarily focused on the teacher's perceptions (what the teacher might ask). The researchers also noted that none of the bilingual students were observed using

reading strategies such as imaging, noting/searching for salient details, or predicting outcomes and that the monolingual students used twice as many strategies as the bilingual students in the study.

The author also found that a lack of metacognitive awareness is one of the leading causes of the difficulties faced by bilingual Latino/a students. According to Ruddell (2000), metacognition involves the ability to be reflective about one's own thinking as well as being able to know when one does not know. Thus, thinking metacognitively, helps us to answer the question "What is wrong with this picture?" which alerts us and causes us to stop in situations that do not make sense (Ruddell, 2000, 34). For the reader, metacognition serves as an alert mechanism that lets him/her know when comprehension has not taken place. Therefore, a reader that has developed their metacognitive skills is able to know when he/she has failed to understand a text. Equally important is the fact that a reader who has developed strong metacognitive abilities is then able to proceed with addressing their lack of comprehension, assuming that they have also learned *how* to use critical reading strategies. However, a reader who has not developed the metacognitive ability to monitor her comprehension is never able to address their lack of understanding because she is unaware of the problem in the first place.

Jimenez, García, and Pearson's (1996) study provides an important glimpse into the metacognitive knowledge and understanding of unsuccessful bilingual readers. As noted earlier, one of the key findings in this study was that the less successful Latino/a readers were more concerned with finishing what they were reading than with understanding what they were reading. This finding points to a lack of metacognitive skill on the part of the less successful bilingual Latino/a readers. On the other hand, the

less successful bilingual Latino/a readers who were able to identify comprehension problems while they were reading were not able to find a solution to their problem. Therefore, they were unable to address their lack of comprehension. The less successful readers were also more likely to accept their interpretations of what they read even when presented with viable information that contradicted their viewpoint. Some of these students went as far as to try to force the new information they read to fit their own erroneous interpretations of the text.

The author identified self monitoring and self-questioning as important strategies that can help struggling bilingual readers to develop their metacognitive awareness. Support for self-monitoring and self-questioning as critical reading strategies is found in Jimenez (1997). Here, 5 struggling readers participating in the study were observed making use of self-monitoring and self-questioning after receiving instruction in the use of critical reading strategies. Following instruction, the students demonstrated effective use of questioning and self-monitoring. In addition, the researcher found that the students' comprehension improved and also noted that their response to learning and using the strategies was positive, adding that the participants eventually began to spontaneously and explicitly call out the strategy they were using.

In addition to addressing the area of developing metacognitive awareness, the self-monitoring and self-questioning strategies also address the issue of understanding reading. Because the effective use of these strategies focuses the students' attention on whether or not they understand what they are reading, strategy instruction may also change the students' perception of the purpose of reading in the process. Rather than simply working hard to finish the paragraph, page, or book, the readers' consistent self-

questioning and self-monitoring presents them with comprehension and understanding as the ultimate goal of reading.

As previously stated, having a strong vocabulary base is important in reading, especially when engaged in reading content area textbooks. The importance of vocabulary knowledge is underscored by the threshold hypothesis in reading comprehension. The hypothesis states that there is a vocabulary threshold that impacts the reader's performance (Qian, 1999). If a reader falls below the comprehension threshold (approximately 95 percent lexical coverage of a text which translates to about 5,000 individual word forms), he/she will be handicapped, but if the reader is above the threshold, he/she will achieve better results by applying his or her reading strategies to enhance comprehension. Similarly, Bryant, Ugel, and Thompson (1999) state that difficulties with reading and comprehending content area text are results of limited vocabulary knowledge.

Thus, because of lower levels of English language proficiency and because of the nature of content area vocabulary, many ELL students find themselves below the 95 percent threshold. Consequently, dealing with unknown vocabulary is a critical issue for ELL students reading in the content area. In fact, Qian (1999) found that ELL students are not only impacted by the number of vocabulary words they know and don't know but also by the depth of knowledge that they have about the vocabulary they know as well. Therefore, even words that ELL students may be familiar with can turn out to be problematic because they do not possess knowledge of the different nuances and shades of meaning of those words.

García (1991) offers a glimpse into the challenges that unknown vocabulary poses for ELL in content area reading. Based on interviews, the researcher first found that the Hispanic students in the study knew less of the vocabulary found in the reading passages and the test questions than indicated on a previous vocabulary assessment. This lack of vocabulary knowledge caused problems for the ELL Hispanic students. For example, 50 percent of the Hispanic students missed a question that contained textually implicit information while that same question was answered correctly by all of the monolingual English speaking Anglo children. Problems even occurred when the ELL Hispanic students came across words that were a part of their everyday experience but were used in a context that changed the meaning of the word. Finally, the researcher found that the paraphrasing of the text in the questions that students had to answer caused further misinterpretation of vocabulary.

Jimenez, García, and Pearson (1994a, 1994b) found that unknown vocabulary was a common problem for both proficient and less-proficient bilingual readers. The key difference between the proficient and less-proficient bilingual reader in the study, however, was the manner in which each viewed unknown vocabulary. Michelle, the proficient reader, viewed unknown vocabulary as a barrier and a bridge to understanding what she was reading. The researchers attributed this belief to Michelle's status as a second language learner. She understood that not knowing words in English would get in the way of her being able to comprehend what she read. However, because of her view of unknown vocabulary as a bridge, Michelle implemented various reading strategies including accessing prior knowledge, inferencing, questioning, and rereading in order to discern the meaning of the vocabulary she didn't know, thereby eliminating the barriers.

Catalina, the less proficient reader, also viewed unknown vocabulary as a barrier. However, she indicated that the purpose of reading was to learn new vocabulary rather than viewing vocabulary as a bridge to developing literacy. In addition, even though Catalina pointed out when she came to word she did not know, she lacked the strategy knowledge to solve the problem.

Jimenez, García, and Pearson (1996) also found that one of the commonalities among the successful and unsuccessful bilingual Latino/a readers in the case study was their frequent identification of unknown vocabulary items. The difference, however, was that the successful Latino/a readers were more determined in resolving the problems they had with unknown vocabulary and were more successful at constructing working definitions of unknown vocabulary using a variety of strategies such as context, invoking relevant prior knowledge, questioning, inferencing, searching for cognates, and translating.

The challenge that ELL students face as a consequence of unknown vocabulary, moreover, is further underscored by the researchers' finding that the successful monolingual English readers in the study did not demonstrate overt instances of focusing on vocabulary. With regard to these observations, the researchers concluded, that the successful monolingual Anglo readers did not focus on unknown vocabulary because they didn't *need* to, given their greater knowledge of English. However, as is discussed in the following section, it is also important to note that the successful bilingual readers were better able to deal with unknown vocabulary than their less successful bilingual counterparts.

Bryant, Ugel, and Thompson (1999) have found that learning to use critical reading strategies is an effective way to deal with unknown vocabulary. They argue in favor of using critical reading strategies for addressing unknown vocabulary because using the strategies to identify the meaning of words creates an interactive dynamic between the reader and the text. These researchers also note that students who make words their own by interacting with them as part of the meaning making process often experience improvement in their overall understanding of the text they are reading.

One of the key areas of need found by the author is teaching ELL students how to use context clues to deal with unknown vocabulary words and enhance understanding. Jimenez, García, and Pearson (1996) and Jimenez and Gámez (1996) found that teaching ELL students to use context relationships had a positive impact on the students' ability to deal with unknown vocabulary. They also found that instruction in using context clues had an impact on students' metacognitive processes. The impact was evidenced when the students began to discuss reading in terms similar to those of successful, more experienced bilingual readers. Students' comments also served to demonstrate that they had begun to develop metacognitive knowledge about themselves as readers as well as knowledge about the impact of using reading strategies to enhance comprehension.

Inferencing and drawing conclusions is strategy that ELL students can use to address problems with unknown vocabulary. According to Jimenez, García, and Pearson (1996) inferencing and drawing conclusions is a predominant skill used by the successful bilingual readers in their study. They observed that these students engaged in inferencing and drawing conclusions throughout their reading and did so when reading in either Spanish or English. Furthermore, the successful readers were focusing on higher-level



elements of the texts they were reading in order to infer and draw conclusions, and they often checked to see if their inferences made sense.

Furthermore, Jimenez (1997) demonstrates the impact that teaching students to infer and draw conclusions can have on students' comprehension. After receiving instruction on how to make inferences and draw conclusion, the five students participating in the study demonstrated that they could and wanted to use the inferencing and drawing of conclusions as a strategy to help them comprehend what they read. In addition, the researcher noted that the students were very willing to learn and implement these and other strategies.

Another area of need identified in this analysis is the effective use of prior knowledge and experience. Ruddell (2000) identifies world knowledge and text knowledge as two kinds of prior knowledge and experience that are critical to reading. World knowledge is the accumulated information that the reader has obtained through day-to-day living experiences. Text knowledge consists of the knowledge that readers obtain from their experiences with print. Thus, the reader, as part of the meaning making process, calls upon these two forms of knowledge to enhance comprehension or to assist overcoming breakdowns in comprehension. Furthermore, Huddelson (1984) notes that L2 reading comprehension is influenced as much by the reader's background knowledge as is L1 reading comprehension.

Prior knowledge and experience are especially important in secondary level content area classes. As noted above, the very nature of content area reading requires that the student have and make use of specific content area knowledge in order to make effective use of textbooks. Also, Armbruster (1988) states that content area reading is

often made difficult because students: 1) lack the appropriate prior knowledge, 2) fail to access the appropriate prior knowledge they possess, and 3) fail to learn because the prior knowledge they used interfered with learning because of their misinterpretations of the text.

One way in which prior knowledge affects content area reading originates from the fact that many students, in this case ELL students, often come to the classroom lacking the appropriate kind of prior knowledge (i.e. vocabulary knowledge and knowledge of a particular topic) needed. García (1991) found that the difficulty that some of the Hispanic children in the study experienced stemmed from a lack of background knowledge about the reading topics (erosion and chimpanzees).

Content area reading is also affected by prior knowledge when a student's use of prior knowledge actually interferes with learning. This negative impact is often due to the misapplication of prior vocabulary knowledge. For example, García (1991) reports that one of the bilingual students confused the word *erosion* for the word *explosion* while another student thought that chimpanzee was a chipmunk. Similarly, evidence in the study suggested that the incorrect answers chosen by the Hispanic students resulted from misinterpretations of the questions based on inappropriate or less developed schemata. Such errors by the students are not surprising given that, as noted earlier, content area books contain vocabulary with subject-matter specific meanings (Armbruster, 1988).

Given that ELL students often have gaps in their educational history and that they possess a limited proficiency in English (Swicegood-Muñiz, 1994), it is evident that content area reading poses a major challenge for ELL vis-à-vis background knowledge and experience. The author has often met with content area teachers who underscore the

importance of the skills and knowledge that they expect their students to have learned and developed in middle school and grade school. Many times, the students they are referring to are ELL students. However, these same teachers have often complained that a number of their proficient English speakers don't come into their classes possessing the necessary levels of background knowledge and experience.

While it is important to possess certain levels of skills and prior knowledge, it is equally important to be able to demonstrate effective *use* of prior knowledge. Effective use of prior knowledge is of specific interest in reading since the reader must be able to enlist prior knowledge that is appropriate for the particular text that is being read. For example, in one study, less successful Latino/a readers were found to rarely rely on prior knowledge to enhance their understanding of what they read, and when they did invoke prior knowledge, it was irrelevant to the text with which they were working (Jimenez, García, & Pearson, 1996).

Nonetheless, the effective use of prior knowledge is a strategy that successful Latino/a readers use to enhance their comprehension of content area texts. In contrast to the less successful Latino/a readers participating in the same study, the successful Latino/a readers made explicit their use of prior knowledge in their efforts to understand what they were reading. These students used knowledge gained experientially as part of their everyday lives as well as knowledge gained in the classroom (Jimenez, García, & Pearson, 1996). Similarly, both the proficient bilingual reader and the monolingual reader in Jimenez, García, and Pearson (1994b, 1995) made effective use of their prior knowledge to make inferences. On one occasion, Michelle, the monolingual reader, was especially adept at using what the researchers called high-level inferences in conjunction

with self-monitoring as part of her meaning making process. Her inferencing using background knowledge led her to the author's intended meaning of the story "The King of the Beasts." While not at the same proficiency level as Michelle, Pamela, the proficient bilingual reader, also used inferences to get the gist of the Spanish-language story "Como estos hay pocos," a comical story in which the author purposely tries to confuse the reader.

In Jimenez (1997), the researcher found that all of the participants demonstrated different degrees of improvement and use of critical reading strategies, including invoking prior knowledge. As with the strategies of self-monitoring, self-questioning, inferring, and drawing conclusions, the students also exhibited positive responses to the strategy instruction as well as a willingness to use the strategy when they read. This positive response to strategy instruction is mirrored in Jimenez and Gámez (1996) where the researchers noticed visible changes in how the students felt about themselves and their abilities. The students were also eager to continue to read and apply what they had been taught. Gersten and Jimenez (1994) observed an equally positive response from the students of Nancy, one of the expert teachers participating in their study. Nancy invited her students to incorporate their prior knowledge in class that resulted in considerable student participation and dialogue.

To this point, this analysis has dealt with critical reading strategies that all readers can use regardless of their language background. However, one of the most critical findings in this analysis is a set of bilingual reading strategies that bilingual students can implement to improve their content area reading. Jimenez, García, and Pearson (1996) and Jimenez (1997) identified bilingual reading strategies that are only available to

bilingual students because of their knowledge of two languages. Furthermore, in their studies, Jimenez, García, and Pearson (1994a, 1994b) suggest that these strategies are bilingual-specific given that a monolingual reader could be made aware of the relationship between the two languages but only a bilingual reader would be able to perform ongoing meaning making by actively using this knowledge. These strategies are a) looking for cognates, b) translating, c) code-switching, and d) transferring.

It is important to identify the use of bilingual strategies as a set of tools that provide support for successful bilingual Latino/a readers. For example, Jimenez, García, and Pearson (1996) and Jimenez (1997) demonstrated that successful bilingual readers take advantage of their understanding and knowledge of Spanish- and English-literacy systems. They also found that the lack of reading success experienced by many Latino/a bilingual students was due in part to their lack of awareness, knowledge, and subsequent use of the bilingual strategies that are available to them because of their dual language knowledge.

One of the bilingual strategies that bilingual Latino/a students can employ to improve their content-area reading performance is to use their knowledge of cognates to deal with unknown vocabulary. Jimenez, García, and Pearson (1996) define cognates as words whose common ties to an ancestral language give them a cross linguistic similarity in spelling and meaning. Nagy, García, Durgunoglu, and Hancin-Bhatt (1993) conducted a case study that focused specifically on the use of cognates by Spanish-English bilingual students reading in English. In this study, the researchers found a high correlation between vocabulary knowledge in English and cognate knowledge in Spanish. While the participants knew only 37% of the English words whose Spanish cognate they did not

know, the participants did know 67% of the English words whose Spanish cognate they did know. At the same time, the students in the study demonstrated that they had an understanding of the concept of cognates given that the students identified more cognates than noncognates despite there being fewer cognates than noncognates in the list of words used in the case study. Based on their findings, the researchers concluded that the bilingual students in the study could successfully identify cognates as well as distinguish between true and false cognates.

Additionally, Nagy, García, Durgunoglu, and Hancin-Bhatt (1993) found that the participants also performed better on multiple-choice tests when they knew words in Spanish and were able to identify their cognates in English. This finding suggests that bilingual Latino/a students can enhance their comprehension by developing their knowledge of cognates. However, the researchers also concluded that students need substantial development of their skills in working with cognate relationships. Nonetheless, the study provided evidence of the content-area reading potential that the teaching of cognate relationships represents for bilingual Latino/a readers at the secondary level.

Another bilingual-specific strategy that can be used by second language learners is translating. Jimenez (1994b) states that within the context of reading, translating involves bilingual students using their other language to paraphrase parts of the text they are reading for the purpose of clarification. Klingner and Vaughn (2000) conducted a study examining the helping behaviors of bilingual students. The students, who were observed while they used the Collaborative Strategic Reading (CSR) process, worked in groups as they read, and when one of the group members came upon a word or section

that she did not understand, the rest of the group was expected to assist in clarifying the unknown word.

The methods or helping behaviors by which the students provided assistance included a) showing the student how to figure out the meaning of the word using the text, b) giving a conceptual explanation of the unknown vocabulary word instead of just giving the definition, and c) giving the definition of the word without elaboration or explanation. Of the helping behaviors exhibited by the students, translating (giving the Spanish equivalent of the unknown word without giving its actual definition) was the second most used helping behavior behind giving the actual definition.

García (1991) also found examples in which students benefited from translation. She notes that, when the Hispanic students in the study experienced problems in answering the questions for the reading selections, the researcher translated the questions and the answer choices. Remarkably, a number of the students who had chosen incorrect answers before the translation were then able to answer the questions correctly. This is a critical finding because it points to the possibility that the problem may occur not just with the students' comprehension of the reading selection but also as a result of the language level in which the questions on the test are written. The finding provides another possible explanation as to why ELL learners do not experience academic success in content area classes. It is not just a case of the content area texts causing problems for the students because the language of the tests given in content area classroom can also cause students to fail. This phenomenon is possible given that, as already mentioned, the questions on the tests are often paraphrased from the actual texts that students read.

On a personal level, the author of this review has seen the positive impact of translating on a number of occasions when working with ELL students taking exams in geography. One of the geography teachers at the author's school mentioned that in reviewing the questions that students had missed on a recent exam, she found that many of the ELL students as well as native English speakers missed questions because of the way that they had been written. She noted that when she restated the question in a different manner, many of the students who had missed the question chose the correct answer. At the same time, students who came in to author's classroom for help with a geography tests performed better when author translated the questions. Thus, in addition to pointing out the possible benefits of translating, these finding also support the possibility that that reading content area tests poses a challenge for ELL students, even when they have learned the necessary material.

Jimenez (2000) argues that children must be allowed to code-switch. Within the context of reading, code-switching occurs when speakers switch back and forth from one language to another while discussing text (Jimenez, 1994b). The switch is generally unconscious and may occur because the student finds it easier to use their other language in order to explain what they are thinking. This shift is different from translating which involves giving the Spanish equivalent of everything that was stated in English and vice versa. In the study by Jimenez (2000), three teachers were interviewed regarding their instructional practices. One teacher stated that even though she had designated Spanish and English times in her class, she did not discourage students from using Spanish during English time. The researcher then observed that students in the classes of one of the teachers in the study switched freely from English to Spanish even though the instruction



was conducted in English. During math instruction the teacher spoke mostly English but switched to Spanish when there was a clear problem. When teaching social studies, the teacher switched to mostly Spanish. In reading, a similar strategy was employed by allowing students who became flustered to switch to Spanish when discussing literature. Moreover, the researcher observed that code-switching was beneficial for the teachers when interacting with students because it enabled the teachers to provide new information rather than just translating what she had already said. By using code-switching herself, the teacher was able to relate necessary knowledge to her students.

In Pérez (1994), the researcher found that all but one of the children made use of code-switching. Moreover, code-switching was not only used in speaking but also in writing. The researcher, however, notes that only six of the participants in the study used code-switching in their written discussion of their reading.

Nevertheless, there is a basis for further exploration of code-switching as an effective literacy strategy. The author himself has seen the benefit of code-switching in his classroom. When discussing literature, a number of his students often code-switched in order to clarify their explanations. In doing so, the author noticed that students became more involved in class discussion and later were more willing to voice their opinions in class.

#### Other strategy-related findings

In addition to information about critical reading strategy use of bilingual Latino/a students, the literature reviewed also contained valuable data regarding other aspects of L2 reading. Among these aspects were a) the transferability of skills, b) the use of culturally relevant texts, and c) the use of students' first language in the classroom.

While this information did not represent strategies that students could be taught to use, it remains within the scope of this analysis because the concepts discussed below have a direct impact on the reading and critical reading strategy use of bilingual Latino/a students. As such, these concepts represent strategies that teachers can use in their classrooms to enhance the content area reading skills of bilingual Latino/a students.

One of the most promising findings in a number of the studies (Swicegood-Muñiz, 1994; Pérez, 1994; Silber, Carnine, & Alvarez, 1994; Verhoeven, 1994; Jimenez, García, & Pearson, 1996; Tang, 1997; & Jimenez, 2000) included here was the potential for the transfer of reading skills (e.g. decoding, self monitoring, self questioning, etc.) from one language to another. Transferability relates to the belief that the skills that a person learns in their primary (L1) language can transfer over to their secondary (L2) language. The transfer of literacy skills has been and continues to be a topic of controversy. Cummins (2000), a major proponent and researcher in the area of the transfer hypothesis, bases his belief in the transferability of skills on the interdependence hypothesis. The interdependence hypothesis states that students with well-developed literacy in their L1 will have strong progress in acquiring L2 literacy because proficiency in academic language transfers across language. Cummins (2000) argues that if a student comes to the classroom with at least a minimum of competency in their L1, then, given sufficient stimulus for maintaining the L1, rapid development in the L2 can be predicted.

Verhoeven (1994) found that L2 (Dutch) reading comprehension was positively predicted by reading ability in L1 (Turkish). He also found an extremely high level of transfer at the level of word reading efficiency (i.e. ability to read words with consonant cluster and bisyllabic words) as well as with the reading comprehension ability acquired

in Dutch to similar skills acquired in Turkish. These conclusions were based on the correlation between age and skill development. What Verhoeven found was that as the children in the study got older (from age 6 to age 8), their L2 skill developed close to or up to par with their L1. For example, with respect to the grammar skill (i.e. syntactic knowledge of word order and function words) and their use of content words in response to prompts, the differences between performance in Dutch and Turkish tended to disappear as the children got older.

Moreover, the findings of this study prompted the researcher to conclude that there was a two-way or bi-directional transfer of literacy skills between the L1 and L2 depending on the order of instruction, meaning that skills taught in the L1 would transfer to the L2 and skills taught in the L2 would transfer to the L1. This is an important finding in that it provides support for the inclusion of ELL students' primary language in literacy instruction, which, as mentioned above, plays a very important role in the literacy instruction of bilingual children.

The bi-directional nature of transferability also presents the possibility that the critical strategies that are taught to students in their L2 will then transfer to their L1 and vice versa, enabling students to achieve higher levels of skills and knowledge in both languages. Jimenez, García, and Pearson (1996) reported that some of the successful readers in this study specifically identified questioning and monitoring as strategies that they were able to transfer from one language to another and even stated that they knew what to do when reading in Spanish because they had already been taught how to read in English. Similarly, Tang (1997) states that the case study participants frequently used a number of the 24 targeted reading strategies, including self-monitoring, incorporating

prior knowledge, self-questioning, drawing conclusions, code-switching and translating, in both Chinese and English reading. The researcher also found that the frequencies of strategies used and the number of the strategies used in Chinese and English were also similar and concluded that this finding suggested that the texts were similarly processed in both languages.

Additionally, in his study of successful Latino/a bilingual education teachers, Jimenez (2000) observed various examples of the transfer of skills. One of the teachers in the study was observed taking her students back to their Spanish by having them write in Spanish and then take what they had written and translate it into English. In doing so, students were able to make full use of their Spanish writing skills and then transfer them over to English. Other students wrote mostly in English and only wrote words they did not know in Spanish. Moreover, the researcher noted that this process demonstrated how facilitating transfer of skills was an explicit goal and that it enabled the teacher to move beyond a deficit perception of her students.

Silber, Carnine, and Alvarez's (1994) report of the success of an elementary school's use of a beginning Spanish reading program to prepare bilingual students to read in English also represents an example of the promise of skill transfer. The program targeted students who entered the school speaking very little English. Taking advantage of the consistency in letter-sound correspondence of Spanish and English, the instructors first taught their students to decode in Spanish. After several months of implementing the program, the instructors were surprised by the ease with which the students had transferred the blending skills they learned while reading Spanish to their reading of English. Combined with extensive instruction in English vocabulary and sentence

structure, the program eventually had practically all of the students reading proficiently in Spanish and nearly two thirds reading at or above grade level in English.

Swicegood-Muñiz (1994) also found evidence of skills transfer in her study of 95 bilingual 8-9 year olds. In evaluating the participants, the researcher found that the students had improved in the types and frequency of metacognitive strategy use, especially in the use of self-generated questions. Furthermore, the metacognitive improvement exhibited by the participants who had received instruction in using critical reading strategies was characterized by a positive directionality showing that Spanish instruction in strategy use had improved the participants reading in Spanish and English.

In addition to teaching ELL students how to implement critical reading strategies in order to enhance their comprehension, using culturally relevant and familiar texts is a teacher strategy that must be implemented as part of this process. Huddelson (1984) emphasizes the equal impact of prior knowledge on L1 and L2 reading comprehension. In addition to prior knowledge, however, she also underscores the influence of the reader's cultural framework, arguing that it is important for the teacher to use pre-reading strategies and reading materials that reflect the cultural and experiential background of the reader.

Krashen's (1992) Input Hypothesis supports the use of culturally relevant and familiar text. The Input Hypothesis is based on the idea that comprehensible input, that which we hear and/or read and are able to understand, is crucial to acquiring a language. By framing content area knowledge in ways and situations that relate to students' everyday lives and home cultures, teachers are presenting new information in comprehensible ways. Thus, rather than spending time and cognitive energy attempting

to make sense of the situation or context within which new information is being presented or demonstrated, ELL students focus strictly on what they need to learn.

Walqui (2000a, 2000b) argues that culturally relevant and familiar materials are a necessity in the classroom. She notes that the homogenous materials and curricula of schools present problems (e.g. ignoring ELL students prior knowledge and not affirming their linguistic and cultural background) for students learning a second language even in classes made up of students with similar linguistic and cultural backgrounds. Because immigrant students bring with them extensive knowledge about the world, this knowledge must be used as a basis for learning new concepts in a new language.

Walqui's (2000a, 2000b) argument is supported by the author's findings for this review. For example, Droop and Verhoeven (1998) found that the Dutch students did better on comprehension questions related to texts that were linguistically simple and neutral or Dutch in cultural reference. In contrast, the scores for the Turkish and Moroccan children were higher with texts referring to their Turkish and Moroccan culture. Similarly, these children performed better when using linguistically complex texts related to Turkish cultures while the Dutch children's comprehension performance was better when using linguistically complex texts that were Dutch or neutral in cultural reference. These findings help to underscore the value and impact that using culturally relevant texts can have for students learning a language.

Droop and Verhoeven (1998) found that the cultural background of the texts also influenced other aspects of the participants' reading. First, the reading fluency of the children was clearly impacted by the cultural background of the linguistically simple texts. The researchers found a similar correlation between cultural background and

reading efficiency, which they noted was also limited to the linguistically simple texts. However, they do mention that both the native Dutch speakers and the second language learners in the study had trouble with the linguistically complex texts.

Nonetheless, it is important to note that the Turkish and Moroccan students, all of whom were from homes where Dutch was not spoken, out-performed the native Dutch speakers when reading linguistically complex that was Turkish in cultural orientation. This finding points to the possibility that the low performance of Latino ELL students in the US can be addressed in part by changing the materials that they use in the classroom setting. Equally important, however, is the fact that Verhoeven and Droop (1998) did conclude that as the linguistic complexity of the text increased, the positive impact that culturally relevant text has on comprehension decreases, especially for second language learners. This finding could point to the fact that, as much as cultural relevance and familiarity can assist in comprehension, continuing to develop L2 proficiency is necessary in order to maximize the helping effect.

Other researchers found that using culturally relevant and familiar materials is one way to address the lack of reading success experienced by less successful Latino/a readers. Gersten and Jimenez (1994) conducted a study in which they compared the literacy instruction strategies of three teachers serving Latino/a ESL students. One of the teachers, considered an expert teacher by her administrators and the researchers, made use of multicultural materials including children's literature (e.g. *The Rain on Kapiiti Plain*) as part of her literacy instruction. The researchers observed high levels of student involvement and that the students in the class experienced great success in learning to read. The researchers attributed this success, in part, to the teacher's use of culturally

relevant materials. In Jimenez (1997), the researcher found that the use of culturally relevant and familiar text encouraged some of the participants to choose books they deemed difficult because they appreciated the message in the book. Furthermore, the students stated that the culturally relevant texts used in the study helped them to more meaningfully interact or transact with the text.

Jimenez (1997) also noted that a key characteristic of the texts was that they contained language that was tightly connected and contained highly abbreviated explanations. The descriptions in the book matched the illustrations and the explanations were not long and drawn out. These characteristics are in keeping with Cummins (1994) assertion that second language learners are better able to work with highly context-embedded text, texts in which language is supported by cues which facilitate meaning making for the participant. In this case study, the use of culturally familiar and relevant materials provided the contextual support that the students needed in order to enhance their comprehension. Similarly, Jimenez and Gámez (1996) found that the use of culturally relevant and recognizable materials was beneficial. The texts used in this study contained events and information that were within the students' experience. The researchers used this literature in order to develop students' prior knowledge as well as to help the students make connections between what they had read and the community in which they lived. The use of these materials, the researchers concluded, resulted in a positive change in the participants' attitude toward reading.

The importance of using culturally relevant and familiar texts transcends the academic and cognitive aspects of reading. In their research, Watts-Taffe and Truscott (2000) found that immigrant children often describe their school experiences in terms of



extreme loneliness, frustration, fear, and mental and emotional exhaustion. The researchers also emphasize that recent immigrants are learning a second culture along with a second language, both of which can make every-day life for ELL students daunting and intimidating. Therefore, the personal validation that comes with the incorporation of culturally relevant materials in the classroom can go a long way in alleviating the negative feelings that in turn present affective barriers to literacy development in the content area classroom. Moreover, the use of culturally relevant literature affirms students by making use of what they already know.

Jimenez (2000) notes that one of the successful teachers in the study said that she did not insult her students by using English books that were too easy. Instead, she used more challenging books like a *Wrinkle in Time* because her students were good readers in Spanish. Another successful teacher in the same study stated that she incorporated the information that the school saw as important by using culturally responsive frameworks in her class.

Furthermore, finding culturally relevant contexts in which to teach ELL students is not as difficult as one might think. Often, teachers with whom I have spoken have been concerned by the prospect of having to learn about all the cultures of their students. However, many times, having culturally relevant contexts in the classroom simply means finding out what is within the realm of students' experiences. Basurto (1999) notes that many of the words and situations presented in word problems are irrelevant to the lifestyles of ELL students. However, two teachers she observed in a traditional bilingual program had transformed their classroom into an ice cream parlor, a video store, a restaurant, and even a television station in order to teach students math. Students in the

class wrote menus, calculated costs of food and accessories, and calculated interest payments all the while working in both Spanish and English. The researcher added that in observing the students' response to the activities, it was clear that the teacher used scenarios that made use of knowledge structures the students already had in order to teach the students to problem solve.

The role that the use of bilingual strategies such as finding cognates, translating, code-switching and transferring, along with the use of culturally relevant/familiar texts and the bi-directional transferability of L1/L2 skills, underscores the importance of using students' native language in literacy instruction. This is because students' native language (L1) serves as a basis for the use of bilingual strategies and can serve as a pathway toward making texts more culturally familiar and relevant. According to Gersten (1999), using ELL students' native language strategically can be helpful during instruction if the teacher is careful to not rely too much on simultaneous translations.

Moreover, as with the use of culturally relevant and familiar texts, the use of students' primary language in the content area classroom is in keeping with Krashen's (1992) concept of comprehensible input. If the goal of a content area classroom is for students to learn content, then providing comprehensible input via their L1 is one of the best ways for ELL to get the knowledge they need while they are still developing their L2 proficiency. Given that content area texts have been shown to present complex information in complex ways, it only makes sense to alleviate some of the burden placed on ELL students by providing comprehensible instruction so that students can build their knowledge base before tackling the text books.

On numerous occasions, the author has been approached by ELL students who are completely lost and failing content area classes in science, history, and mathematics simply because they do not understand the instruction being given. However, once I or another teacher provided additional instruction in Spanish, they began to improve their performance in the class and to expand their English language knowledge base. More importantly, many began to feel better about the class and their ability to do well in the class.

Walqui (2000a) argues that ELL students will have fewer problems learning a second language if they have developed academic sophistication in their primary language. This facility is of great importance for content area reading given that, as already noted, the development of L2 proficiency comes as a result of an increase in the students' L2 vocabulary knowledge base.

In the author's opinion, an example of this relationship is found in foreign exchange students whose high school level of proficiency in their native language helps them to be successful in American high school classes. The author also points out the fact that many foreign exchange students that he has encountered have benefited greatly from having had the opportunity to develop fluency in English in environments that view learning more than one language not only as being positive, but also as a must. A number of these foreign exchange students have mentioned that learning English and other languages is considered a necessity in their countries. This is in contrast to the negative view of bilingualism found in the US that was noted earlier. Thus, given these observations, it is possible to also hypothesize that the success experienced by many

foreign exchange students is also due to the more balanced bilingualism of these students as compared to many ELL students.

Other researchers found additional reasons for incorporating students' native language in the classroom. Tinajero and Dunlap (1985) recommend the use of students' primary language in teaching them to solve story problems because doing so enhances the conceptualization and internalization of the processes. Eventually, as students develop their L2 proficiency the thought processes and strategies are then applied to story problems in English, but in the meantime, students are given the opportunity to engage in the interchange between students and teacher in meaningful ways. Nagy, García, Durgunoglu and Hancin-Bhatt (1993) also found that incorporating students' native language in the classroom was beneficial. The researchers found that students' success in finding cognates is impacted by the degree of bilingualism that the student had developed. Thus, the continued reinforcement of the use of the primary language in the classroom can assist in further developing students' ability to work with cognate relationship.

Additionally, in describing one of the ten principles of instruction for immigrant children, Walqui (2000a) argues that tapping the numerous experiences that immigrant children bring to the classroom can help teachers and students build a class culture that is respectful of students' interests, abilities, and languages. Such a classroom culture is crucial to overcoming the affective barriers the ELL students face. As an example, the researcher cites the changes that have been made in Calexico High School in Calexico, California. At Calexico High School, administrators and teachers implement a philosophy based on respect for students' culture, language and background. Students'

prior knowledge in language is tapped by offering three language options for required courses that include being taught in English, Spanish, or sheltered English.

In order to identify the areas of need in ELL content area literacy and the core critical reading strategies that would address these needs, the author found that case studies were the most appropriate of data and information (Afflerbach & Johnston, 1984; Harste, Woodward & Burke, 1984; Spiro et al., 1987; & Wade, 1990). The case studies used for this analysis covered a wide range of age groups and student backgrounds including elementary level students (Padrón, Knight, & Waxman, 1986; Padrón, 1992; Calero-Breckheimer & Goetz, 1993; Swicegood-Muñiz, 1994; Pérez, 1994; Verhoeven, 1994; & Droop & Verhoeven, 1998), middle school level students (Langer, Bartolomé, Vásquez, & Lucas, 1990; García, 1991; Nagy, García, Durgunoglu, & Hancin-Bhatt, 1993; Jimenez, García, & Pearson, 1994a, 1994b, 1995, 1996; & Klingner & Vaughn, 2000), junior high and secondary students (Jimenez, 1996; & Jimenez, 1997), and post secondary level students (Tang, 1997).

In addition to these case studies, the author also included case studies that focused on the teaching methods of teachers (Gersten & Jimenez, 1994; Kucer, 1995; & Jimenez, 2000), as well as descriptions of programs in which bilingual and ESL techniques were implemented (Silbert, Carnine, & Alvarez, 1994 & Walqui 2000a). Based on these sources of data and information, 6 areas of need were identified: 1) developing proficiency in the L2, 2) students' perception of the L1 in the context of the L2 learning environment, 3) understanding the purpose of reading, 4) developing metacognitive awareness, 5) dealing with unknown vocabulary, and 6) using bilingual strategies. Additionally, the analysis of the data and information yielded a list of strategies that ELL

students could use to overcome the areas of need 1) self monitoring/questioning and general critical strategy use for developing metacognitive awareness and understanding the purpose of reading, 2) inferencing/drawing conclusions and using prior knowledge and previous experience to address unknown vocabulary, and 3) using bilingual-specific strategies including finding cognates, translating, and code-switching. Finally, the author also identified a set of teacher strategies including taking advantage of the transferability of skills, using culturally relevant and familiar texts, and using students' L1 during instruction that also help to address the negative perception that students have of their L1 and the time it takes students to develop L2 proficiency.

## CHAPTER IV

### RECOMMENDATIONS

#### Addressing the skills and affective needs of ELL students

The analysis of the case studies for this research resulted in identifying several significant areas of need with regard to improving the content area reading ability of bilingual Latino/a students: a) developing proficiency in the second language, b) students' positive perception of their primary language in the context of the second language learning environment, c) understanding the purpose of reading d) developing metacognitive awareness, e) dealing with unknown vocabulary, and f) enhancing comprehension, and g) using bilingual strategies. Similarly, in reviewing the literature, the author identified a core list of critical reading strategies implemented by successful bilingual Latina/o students used to enhance their comprehension and overcome breakdowns in comprehension: a) self-questioning/self-monitoring, b) inferencing and drawing conclusions, c) using prior knowledge and previous experience, d) finding cognates, e) translating, and f) code-switching. In addition, the author also identified areas of need for the teachers of struggling bilingual readers: a) the transferability of skills, b) using culturally familiar and relevant text, and c) using students' native language during instruction.

The manner in which to best address the issue of the time needed to develop proficiency in a second language (L2) was not addressed directly in the case studies included in this review; no particular strategy or course of action was presented in the research. The author ascribes this finding to the fact that, in general, the students participating in the studies and research had developed a significant amount of L2

proficiency. In fact, only one of the studies (Pérez, 1994) dealt exclusively with Spanish literacy development. The remaining case studies (Verhoeven, 1994; Jimenez, 1997; Jimenez & Gámez, 1996; Jimenez, García, & Pearson, 1994a, 1994b, 1995, 1996; Jimenez, 1997; Tang, 1997; & Droop & Verhoeven, 1998) evaluated students' L2 reading ability and strategy use because they had developed various levels of L2 speaking and reading proficiency.

However, the fact that the author did find that evidence of transferability of skills in a number of the case studies (Swicegood-Muñiz, 1994; Pérez, 1994; Silber, Carnine, & Alvarez, 1994; Verhoeven, 1994; Jimenez, García, & Pearson, 1996; & Tang, 1997) shifts the focus regarding students' primary language. The issue of the time it takes ELL students to gain L2 proficiency, currently viewed as an obstacle in developing L2 literacy, now becomes less of a focus. Of greater importance becomes the issue of L1 critical reading strategy instruction in preparing ELL students for L2 literacy development. Additionally, as Silber, Carnine and Alvarez, (1994) point, out the development of students' L1 literacy skills can translate into gains in L2 literacy skill as well.

Shifting toward a more positive view of the L1 skills that ELL bring into the classroom also addresses the challenge of students' and teachers' perception of the primary language in the learning environment. Various studies (Jimenez, García, & Pearson, 1994a, 1994b, 1996; & Jimenez, 1997) found that struggling ELL readers and the teachers of ELL students had negative perceptions of the role that native language plays in second language instruction. As such it is possible to conclude that this negative



perception of bilingualism is one source of the students' inability to comprehend what they read and to achieve academically

Additionally, in one study (Jimenez, 1997) argued that the teachers' negative perception of the students' L1 was harmful. Moreover, Jimenez, García, and Pearson (1996) argued that the negative view of bilingualism on the part of the less successful students might serve as one explanation as to why they did not make use of bilingual reading strategies such as translating and searching for cognates, strategies that could have enhanced their learning and comprehension. Therefore, in the author's opinion, making the shift in perception of students' primary language is crucial because it creates a view of ELL students as already having something to contribute to their L2 reading instruction and provides teachers with a knowledge base from which to begin L2 reading instruction.

To address the issue of developing metacognitive awareness, the author found that successful bilingual readers relied on self-monitoring and self-questioning as part of their meaning making process. In particular, Jimenez (1997) and Jimenez, García, and Pearson, (1996) provided key examples of the impact that self questioning and self monitoring can have on the development of metacognitive awareness by developing students' ability to point out instances when comprehension breaks down as a result of unknown vocabulary.

Similarly, if the full definition of metacognition is taken into account, especially Ruddell's (2000) assertion that metacognition includes readers' ability to address the cause of and find a solution for the breakdown of comprehension, then the author finds that teaching struggling ELL students to trouble-shoot using critical reading strategies

will also enhance their metacognitive ability. This assertion, however, should not be taken to mean that ELL students will automatically develop metacognitive awareness by learning to implement critical reading strategies nor that critical reading strategy instruction (CRSI) alone will improve the academic performance of ELL students. Baker and Brown (1984) note that students fail to benefit as much as they might from reading strategy instruction because they have received skills training but were not instructed in self-regulation (i.e. self-questioning and self-monitoring). Therefore, the author concludes that developing the literacy abilities and academic performance of struggling ELL readers must involve instruction in self-regulation/monitoring and comprehension trouble shooting.

At the same time, in developing ELL students' metacognitive awareness through self-regulation and critical reading skills instruction, the author also found that skills and self-monitoring training address the issue of ELL students' perception of the purpose of reading. As noted earlier, a number researchers (Jimenez, García and Pearson 1994a, 1994b, 1995, 1996; and Jimenez, 1997) concluded that the less successful bilingual Latino/a readers had a misguided view of reading based on their focus on finishing the reading task rather than on creating meaning from what they read. In contrast, these same researchers also found that the successful bilingual Latino/a readers focused on creating meaning from what they read. If the definition of metacognition is again considered, in particular the notion that metacognition involves the readers' continual process of checking for and dealing with break downs in comprehension (Ruddell, 2000), it is possible to surmise that in developing metacognitive awareness, the erroneous perception that struggling ELL readers may have of the reading changes. By beginning

to actively evaluate their level of comprehension as well as their ability to deal with comprehension breakdowns, struggling readers begin to see comprehension as the goal of reading. This finding is supported by the case studies (Padrón, Knight, and Waxman 1986; Jimenez, García, & Pearson 1994a, 1994b, 1995, 1996) in which the researchers argued that the monolingual students, whom the researchers concluded had developed metacognitive awareness, already understood that the purpose of reading was to comprehend, based on the kinds of reading strategies they did and did not employ.

#### Strategies for addressing unknown vocabulary

The author found that the solution to the comprehension problems that unknown vocabulary cause for ELL students in content area reading is two-fold. First, teaching struggling ELL readers to use inferencing/drawing conclusions (Jimenez, García, & Pearson, 1996 and Jimenez, 1997), context clues (Jimenez & Gámez, 1996 and Jimenez, García, & Pearson, 1996) and invoking prior knowledge and previous experience (Huddelson, 1984; Gersten & Jimenez, 1997; Jimenez, García, & Pearson, 1994a, 1994b, 1996; and Jimenez, 1997) as strategies can assist ELL students in dealing with unknown vocabulary in content area reading.

At the same time, however, skills instruction alone will address this problem in its entirety. As noted earlier, the issue of L2 proficiency and the time it takes to develop L2 proficiency were not addressed directly in the studies used for this review, given that the majority of the studies were conducted with students who had developed L2 oral and reading proficiency to varying degrees. It must be acknowledged that students' L2 literacy skills will improve as they develop L2 proficiency. It is also important to recall Qian's (1999) description of the vocabulary threshold above which ELL students need to

be in order to have enough vocabulary knowledge to be better able to apply critical reading strategies. Especially important here is the acquisition and development of the academic vocabulary noted by Cummins (1994).

Moreover, the author contends that having an extensive amount of vocabulary knowledge facilitates and enhances reading comprehension because it frees up readers' cognitive capacity in order to effectively employ critical reading strategies because the texts become less cognitively demanding if not more context-embedded (Cummins, 1994). By not having to constantly focus on unknown vocabulary (García, 1991, Jimenez, García, & Pearson, 1994a, 1994b, 1996; and Jimenez, 1997) both successful and struggling ELL readers can focus more of their cognitive and metacognitive energy and resources on implementing critical reading strategies in order to understand content area concepts and ideas. As such, the author believes that the second facet of the solution to the problem of unknown vocabulary is continual and direct vocabulary instruction as part of content area reading and instruction. While none of the studies included in this review made note of direct vocabulary instruction as a solution, the author points out that vocabulary instruction is a teaching strategy that may also be effective as part of an overall ELL literacy curriculum.

One of the most important findings of this review is the relatively untapped potential of bilingual reading strategies. This is because of the potential that bilingual strategies have for addressing all of the areas of need identified in this review. The potential impact of the effective use of bilingual strategies (e.g. looking for cognates, translating, and code-switching) was indicated in a number of the case studies (García, 1991; Nagy, García, Durgunoglu, & Hancin-Bhatt, 1993; Jimenez, García, & Pearson,

1994a, 1994b, 1996; Pérez, 1994; Jimenez, 1997; and Klingner & Vaughn, 2000).

Therefore, just as the author believes that teaching students to use critical reading strategies such as invoking prior knowledge, inferencing and drawing conclusions, he also believes that teaching ELL students to use bilingual reading strategies will help them develop metacognitive awareness while assisting struggling ELL readers to deal with unknown vocabulary and enhance their comprehension.

The author also finds that, unlike strategies such as inferencing, drawing conclusions, self questioning, and self monitoring, using bilingual strategies also addresses the challenges of the negative perceptions of students' L1 on the part of teachers and students by acknowledging the value of the primary language and then incorporating it as part of instruction in a meaningful and authentic manner. Moreover, teaching struggling ELL students to implement bilingual reading strategies can address the issue of L2 proficiency. By translating and finding cognates, ELL students could increase their L2 vocabulary. As such, bilingual strategy instruction could greatly increase the content area reading success of struggling ELL readers.

#### Incorporating teacher strategies for ELL literacy instruction

While this review began with the goal of identifying critical reading strategies that struggling, secondary English language learners (ELL) could use to improve their content area reading, the author also identified strategies that content area teachers can implement in their classrooms. The author identified a number of strategies such as the transferability of skills (Swicegood-Muñiz, 1994; Pérez, 1994; Silber, Carnine, & Alvarez, 1994; Verhoeven, 1994; Jimenez, García, & Pearson, 1996; Tang, 1997; & Jimenez, 2000), using culturally relevant and familiar texts (Gersten & Jimenez, 1994;

Jimenez & Gámez, 1996; Jimenez, 1997; & Droop & Verhoeven, 1998) and using students' native language (L1) during instruction (Nagy, García, & Durgunoglu, 1993; Hancin-Bhatt, 1993; Jimenez, 2000; & Walqui, 2000a), that he believes secondary content area teachers can implement in their classrooms to improve the content area reading performance. The significance of these findings is that they provide further support for the shift in the negative view that some teachers' have of ELL students' native language. By using ELL students' native language in content area instruction, teachers build bridges between students and content area knowledge in the same way that the teacher in Jimenez (2000) did by translating and code-switching when teaching her students. Furthermore, using L1 when teaching also incorporates the added shift in the kind of texts and literature that content area teachers use to teach ELL students by calling for the use of literature and texts that present content area knowledge within frameworks that are within student's experience. Consequently, in incorporating culturally relevant and familiar texts in content area instruction, teachers would also be taking advantage of ELL students' prior knowledge and experience called for by Basurto (1999).

#### Using case studies in reading research

Finally, in conducting this analysis, the author found that the interrelatedness of reading supports the use of case studies in future reading research with ELL students. Despite the fact that this analysis is divided into sections according to strategies, the reality is that the use of critical reading strategies while reading is far from decompartmentalized (Spiro et al., 1984) or isolated. The participants in the studies were often described as implementing any number of strategies in addressing one particular problem. Jimenez, García, and Pearson (1995) argue that the successful monolingual

reader in the study had a multi-strategic approach to reading noting that she acknowledged having used monitoring, visualizing, invoking prior knowledge, inferencing, questioning, and rereading throughout the reading process. This approach was especially evident when she read expository text. The researchers came to the same conclusion with regards to the proficient bilingual reader. This student made use of context, monitoring, prior knowledge, restating, and inferencing. In fact, the main differences between the proficient bilingual reader and the proficient monolingual reader were that the bilingual reader also took advantage of her understanding of the relationship between Spanish and English by using bilingual specific strategies and that the monolingual reader rarely focused on unknown vocabulary.

At the same time, the author includes the role of the students' L1 within the concept of interrelatedness. As noted in the studies above (Jimenez, García, & Pearson, 1994a, 1994b, 1995; 1996; Jimenez & Gamez, 1996; Jimenez, 1997; and Tang, 1997;), the proficient bilingual readers made effective use of their knowledge primary language in order to understand what they were reading through a continual and interrelated use of both languages. The fact of the matter is that it is difficult and not recommended to separate ELL learners from their primary language. Thus, it only makes sense to incorporate the two languages in the literacy learning process.

CRSI is the next step in addressing ELL student academic failure

Based on the findings of this review, the author concludes that the development and implementation of a critical reading strategy instruction (CRSI), has potential as a next step toward addressing the lack academic success experienced by secondary level ELL students, particularly in content area classrooms. The use of critical reading

strategies on the part of the successful bilingual readers in the case studies provides support for providing CSRI as part of the second language learning curriculum. However, the author also acknowledges that this analysis is only the first step in improving the academic performance secondary level ELL students, and that further research that specifically targets critical reading strategy use by secondary ELL students is needed.

In particular, research regarding the general critical reading strategies (i.e. self monitoring/questioning, using prior knowledge, and inferencing/drawing conclusions) and bilingual strategies are needed, as is research regarding the strategy vehicles to be used by teachers in implementing CRSI curricula. Moreover, research must also be conducted regarding secondary level ELL students' use of critical reading strategies in the pre- and post-reading phases.

#### Developing a bilingual vision

Based on this analysis, the author also concludes that implementing a CSRI curriculum as part of literacy instruction for secondary level ELL students will not address all of the areas of need identified in this analysis. Given all of the variables affecting the academic performance of ELL students in content area classes (i.e. home and academic background, untrained teachers, and the nature of content area reading and content area textbooks), expecting a few reading strategies to effectively address this problem is overly simplistic and unrealistic. While CSRI addresses the skill-oriented issues of developing metacognitive awareness, dealing with unknown vocabulary, and general comprehension, it does not address affective issues such as the perceptions that



many ELL students and their teachers have of the role that primary language plays in the learning environment.

Thus, for the author, the most important conclusion that he has come to is that there is a definite need to explore the impact of helping students develop a bilingual vision for reading in the content area and literacy in general. In part, a bilingual vision of literacy and literacy instruction requires helping students to develop what Jimenez (1997) calls a bilingual schema by implementing a strategic approach. This schema includes an understanding of the relevance and value of the primary language in learning as well as knowledge and understanding of bilingual reading strategies such as finding cognates, translating, and code-switching.

Similarly, creating a bilingual vision of literacy instruction also calls for a fundamental change on the part of teachers. The evidence presented here supports the questioning of current teacher practices in order to develop new methodologies in which educators stop approaching second language literacy according to models based on the thinking and behavior of monolingual Anglo readers (Jimenez, García, & Pearson, 1995). Moreover, the author believes that teachers need to develop a bilingual schema that includes knowledge of the language learning process, the transfer of skills across languages, bilingual reading strategies and, ultimately, an understanding and appreciation of bilingualism and biliteracy. Furthermore, teachers need to create a bilingual friendly environment that includes culturally relevant and familiar materials. In essence, the development of a bilingual vision of literacy instruction requires that teachers become students of the culture and language of the children they teach by learning from their students.

Finally, the development of a bilingual vision for literacy instruction of bilingual Latino/a readers transcends the development of CRSI curricula by challenging educators and students to change by engaging in a two way or transactive model of teaching and learning in which cultural, linguistic, and academic knowledge and skill are continually exchanged and manipulated by teachers and students. The author believes that the analysis of the current literature points to the need for a more profound shift in pedagogy in which developing a critical, research based bilingual vision for reading and reading instruction represents the next great challenge in bilingual education. In essence, achieving this vision becomes the guiding principle because only through such a profound change can we begin to have an impact on the current reading and overall academic performance secondary level ELL students.

#### Limitations of the review

Two key limitations presented themselves in conducting this research. One of the principle limitations that the author found was the lack of case studies that specifically targeted ELL students at the secondary level. Therefore, it was necessary to determine the grade range of students that would be considered applicable to this study. As noted at the outset of this review, the dearth of research focusing on secondary level ELL students forced the author to consider a broader range of case studies including those conducted with students at elementary, middle, junior high, and post secondary school levels. The other limitation was the use of small samples of students in many of the case studies. This limitation reduces the extent to which the findings can be generalized. However, given the goal of this review, generalizability of the findings was not as critical as the identification of the core set of reading strategies. This research was conducted with the

understanding that it would not be possible to provide a “tried-and-tested” list of strategic reading strategies that had been implemented with secondary ELL students. Instead, the key goal was to establish a core set of strategies that would serve as a starting point for further research.

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