

Reading Comprehension from a First to a Second Language

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Abstract/Resumen

The purpose of this action research paper is to disseminate the results of a 2-month study which focuses on how a student's first language (L1) reading comprehension skills affect the same skills in their second language (L2). The subjects of the study are sixth grade girls, ranging in age from 11 to 13 years old. They attend a private bilingual school in Bogotá, Colombia. The school instructs young people mostly from the higher socio-economic population. Outcomes presented are correlated with both established theories and research.

El objetivo de este trabajo de investigación activa es difundir los resultados de un estudio de 2 meses realizado a estudiantes con el fin de dilucidar la manera en que las habilidades de comprensión de lectura de la primera lengua (L1) afectan estas mismas destrezas en la segunda lengua (L2). Los sujetos de esta investigación son adolescentes entre los 11 y 13 años de edad quienes cursan sexto de secundaria en un colegio bilingüe de estrato socio-económico alto ubicado en la ciudad de

Bogotá, Colombia. Los resultados descritos se correlacionan con teorías e investigaciones establecidas.

Keywords/Palabras claves: reading comprehension, literacy, competency, transference, assessment; comprensión de lectura, alfabetismo, competencia, transferencia, evaluación

Introduction

The research presented focuses on the important and significant influence of a student's L1 (Spanish) on the reading comprehension process of their L2 (English). Although the students under research were sixth grade schoolgirls, the principles involve learners of all ages. Students of all levels of maturity build, broaden, and strengthen their L1 by acquiring new vocabulary and developing reading comprehension skills. It makes sense to suppose that those same skills are transferred to reading comprehension abilities in their L2, but only scientific experimentation can verify the hypothesis.

As skill transference takes place, learners begin to enjoy much more the process of reading, often discovering that it may be done for pleasurable as well as academic purposes. This joy of reading also develops because, as one begins to really comprehend a literary piece, one more easily relates it to prior learning, background experience and knowledge. A strong concern and interest among teachers is for this to occur more frequently and to a larger number of their students. Since literacy is essential to intellectual development, this action research project investigates how the development of one's L1 affects the reading comprehension process in one's L2.

The research was carried out at a high socio-economic profile private school in Bogotá, Colombia during the months of February and March of 2009. It is an all-girls Catholic school offering grades K-12 and was established 45 years ago by Benedictine nuns from the United States. Most students from the school have had opportunities to travel abroad, participate in summer camps and school-sponsored international education programs with emphases in the English language. This international educational experience is for fifth graders and has an 80% participation rate.

In elementary school (first to fifth-grade), students are involved in an immersion program with math, science and social studies being taught in English.¹ When they arrive at high school (sixth to eleventh-grade), students only receive English and English Speech classes in English.

¹ The statement is true, with one exception: the Colombian History social studies class, which is taught in Spanish.

This is done to ensure an in depth understanding of the more difficult content in other subjects.

The number of students per classroom ranges from 20 to 30. There are usually 3 groups per grade. At the start of a student's experience, in the nursery school program, girls are randomly assigned to a group. Every year those groups are reorganized trying to get a positive balance of achievement and behavior, taking friendship groupings into account as well as recommendations from teachers, psychologists and parents. The particular group selected to participate in the study was group 6B. Twenty-nine energetic girls were in the group. Their ages ranged from 11 to 13 years old. They represented a third of the sixth-grade student population.

Area of Focus Statement

The purpose of this study is to describe the effects of L1 (Spanish) reading comprehension on L2 (English) reading comprehension in sixth grade students at an all-girls Catholic school in Bogotá, Colombia.

Research Question

How does L1 reading comprehension affect L2 reading comprehension?

Theoretical Framework

There is a growing number of English language learners (ELLs) who are experiencing difficulties in reading comprehension more than any other linguistic skill. Many struggle during the reading process with how to decipher a text in English, grasping isolated bits which, in the end, are not harmonized. Understanding where these difficulties originate in order to design a smooth pedagogical transition from L1 to L2 would allow teachers to give considerable assistance to their ELLs. Understanding how one's L1 skills influence or *transfer* to one's L2 development, especially during the reading comprehension process, is a key for improving ELL performance. The researchers of this study supposed that an ELL's competence in L1 reading comprehension affects or transfers to competency in L2 reading comprehension. The theorists and theories which supported that idea were both James Cummins (the threshold theory as well as the developmental interdependence theory), as well as Virginia Collier and Wayne Thomas (the prism model).

The study refers to a student's first language as *L1*, and second language as *L2*, terms found in the Glossary of TEFL Acronyms (2008). For this study, *reading comprehension* will be defined as a process for constructing meaning (Fountas & Pinell, 1991). During the reading process, readers try to understand the text and the world. Comprehension is essential in

constructing the foundation of the self-extending system (Fountas & Pinell, 1991); a system that is constantly growing and improving, consequently empowering the reader to continue in the process of learning. A reader's understanding of the text is influenced by background knowledge, expectation to make sense out of the text, and the meaning the student seeks to unravel. Before reading, the reader's predictions and anticipation of the text marks the onset of reading comprehension. This will continue after reading begins as the student applies personal experience and expands upon it (Fountas & Pinnell, 1991).

The Threshold Theory

Cummins' threshold theory proposes that the degree to which bilingualism is developed in a child will trigger either positive or negative cognitive consequences (Ahearn et al., 2002). The theory has been portrayed as a 3-floor house separated by 2 *thresholds* or levels (See Figure 1).

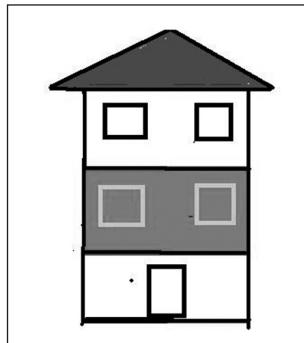


Figure 1. An illustration of J. Cummins' threshold theory.

The first floor represents students with below age-level bilingual competence resulting in negative cognitive effects with bilingualism (Ahearn et al., 2002). This is known as either subtractive bilingualism or *semi-lingualism*. By these terms we mean to say that the students lack the vocabulary, abstract thinking and other cognitive aspects of the language (Cummins, 1979). As for the second floor of the threshold theory, Cummins suggests that children with age-level proficiency in at least one of the two languages might experience both positive and negative cognitive effects (Ahearn, Childs-Bowen, Coady et al., 2002), which is what he called *dominant bilingualism* (Cummins, 1979). The third floor (which is also the top floor) symbolizes children with age-level competency or proficiency in both languages enjoying positive cognitive,

linguistic and academic advantages in bilingualism (Ahearn et al., 2002), referred to as *additive bilingualism* (Cummins, 1979).

The Common Underlying Proficiency Theory

From Cummins' theory another originated, the *developmental interdependence theory*, also known as the *CUP* or common underlying proficiency theory (Cummins, 1992). With it, Cummins proposes that there is a shared operating system between L1 and L2, the CUP. He believes that a child develops a set of skills and knowledge, the CUP, from which he draws when learning an L2. This underlying proficiency is the base and foundation which supports the development of L1 and L2 or any additional languages.

The L1 and L2 have also been illustrated as dual icebergs, joined together underwater by the CUP (Ahearn et al., 2002). What these icebergs show is that the CUP of L1 unites and completes the underlying knowledge of a child's L2 (Shoebottom, 1996). What Cummins illustrates is that if an ELL has fully developed a conceptual framework or conceptual abilities in his L1, these concepts are, in great part, shared with those of the L2 (Cummins, 1992). Therefore, a child should not have to work as hard relearning concepts, but can concentrate only on adding a new label, or *renaming* the concept in the L2 (Shoebottom, 1996). Cummins believes literacy proficiency and academic skills in L1 transfer to L2 (Cummins, 1992). He says that to the degree that L1 instruction is effective in supporting L1 proficiency, transfer of proficiency to L2 can occur, but only if there is an appropriate exposure to the L2 as well as appropriate stimulation to learn it (Cummins, 1998).

The Prism Model

Wayne Thomas and Virginia Collier's prism model is closely related to Cummins' theory on the interdependence of the first and second language. The prism model explains the developmental processes children go through when acquiring an L2, and the need to be supported at school. The prism model consists of 4 major components that promote language acquisition: socio-cultural, linguistic, academic and cognitive. At the heart of the prism is the ELL whose learning is influenced by socio-cultural processes (Collier & Thomas, 2007).

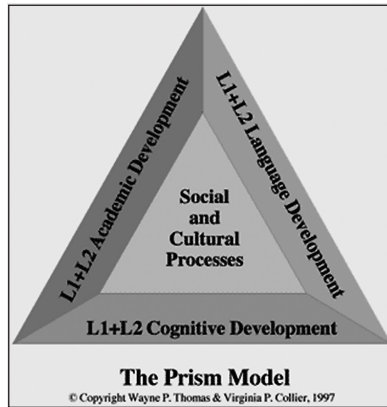


Figure 2. The prism model.

The socio-cultural processes are emotional, social and cultural factors that may inhibit or enhance a student’s L2 learning. Particularly, a supportive home environment will help the ELL to successfully transfer academic language proficiency in the L1 to academic language proficiency in the L2 (Collier, 1996). The linguistic component is closely related to the ELL’s language development (Collier & Thomas, 2007). It “targets four literacy domains of listening, speaking, reading, and writing” (Collier, 1996, p. 1). It is the subconscious and formal teaching of language. A student’s highly developed oral and written system in the L1 will trigger cognitive success in the L2. The third component, the academic component, argues that the ELL’s academic development in the L1 will immediately transfer to the student’s L2. The final component of the prism model is the cognitive component. This represents an ongoing process that begins from birth and extends beyond schooling. First language and L2 cognitive developments guarantee academic success in the student’s L2. These 4 components or processes are both interconnected and interdependent, through L1 and L2 (Collier & Thomas, 2007).

Numerous theories have been disproved while others have survived the criticism of their opponents. Cummins, in spite of criticism, has been able to explain the influence and transfer of L1 to L2 (Cummins, 1998). Beneath the superficial language features (the “tips” of the icebergs) lies a great common operating system that needs to be expanded and nurtured if it is expected that ELLs are to experience the long-term positive effects of bilingualism. It can be assumed in this study based on Cummins, Collier and Thomas’ theories, that a sturdy L1 academic and language framework is the cornerstone for bilingual and cognitive success in L2. It may also be assumed that the ELL’s proficiency in L1

reading comprehension affects or transfers to competence in L2 reading comprehension.

Review of Related Literature

For centuries, but especially in the present post-modern era of globalization, grade-school teachers, university professors, researchers and institutions in the field of language education have been challenged to develop efficient L2 programs. One of the recurring inquiries expressed by such professionals has been with reference to the transference of reading strategies from a native language to the L2. In order to compare the related studies to the investigation at hand, a thorough literature review is presented. The review is organized according to 4 variables or areas of focus, which can be seen in the following 4 headings:

The Transference of Literacy Knowledge Strategies from L1 to L2

Watkins-Goffman and Cummings (1997) researched the context in which Dominican ELLs acquire L1 literacy (reading and writing skills) in order to improve English instruction. They found that a high literacy in L1 increased L2 content area comprehension. Rivera (1999) found similar results in her research about the role of L1 literacy in ELLs. When describing the foundations of native language and literacy improvement, she mentions the results of two studies, one with adults and another with children. These results indicated that second language learners' reading ability in their L1 facilitates and supports the learning and reading processes of an L2. Regardless of the students' age and first language, a transfer of literacy skills from L1 to L2 was observed and described. She concludes that L1 increases L2 reading comprehension because it provides strategies and foundations to read L2 texts. In conclusion, the research cited on bilingual education validates the helping role which L1 literacy represents in the learning and reading processes of an SLL (Watkins-Goffman & Cummings, 1997; Rivera, 1999).

The Influence of L1 and L2 Proficiency Level in L2 Reading Comprehension

Multiple studies indicate that intermediate and high proficiency L2 readers have the ability to identify ways to apply reading strategies during reading (Rivera, 1999; Kong, 2006). Moreover, these studies specify that while successful L1 and L2 readers applied meta-cognitive and cognitive reading strategies, the less effective readers had difficulties or lacked the ability to do so (McKeown & Gentilucci, 2007; Avalos, 2003; Butler & Hakuta, 2006). Thus, the researchers conclude that the bilingual student readers' L1 proficiency level either enhances or diminishes the L2 reading comprehension process. Similarly, Singhal (2001) describes Hosenfeld's

study in which a relationship was identified between the use of reading strategies and the L2 proficiency level. As in McKeown and Gentilucci's (2007) study, it was indicated that while reading, the *successful reader* ignored unimportant words, never lost the meaning of the text, and read using a holistic strategy. However, the *unsuccessful reader* demonstrated the opposite reading behaviors. Since their attention was focused on decoding and understanding words, the meaning of the text as a whole vanished. Highly proficient SLLs applied reading strategies more, and with greater frequency and effectiveness than the low-proficiency readers. Readers who had a high proficiency level in L1 also developed a high proficiency level in L2 and transferred the reading strategies from L1 to L2, improving their reading comprehension process in L2.

L1 as a Teaching Strategy and Tool to Improve L2 Reading Comprehension

Watkins-Goffman and Cummings (1997) and Rivera (1999) concluded that when bilingual students' L1 literacy, experiences, cultural and social backgrounds were considered for instruction, there was improvement in their L2 literacy. These researchers concluded that instructional programs that focused on making meaning out of L2 texts, benefitted by incorporating the learners' native tongue because students' L1 strengths and strategies were transferred to the English (L2) reading comprehension process.

McKeown and Gentilucci (2007) concluded that the success of *think-aloud strategies* in ELLs depends on their L1 and English (L2) language proficiency. They state that while reading, low-intermediate English learners are focused on decoding: the mechanics of reading. On the other hand, proficient readers have reached a level of linguistic development in L1 adequate enough for building up metacognitive strategies (schema, predicting, inferring, etc.) in an L2 content area (such as social studies or science) reading comprehension.

Avalos suggested some instructional strategies. He recognized that proficient L1 and L2 readers had the necessary literacy level to be taught the L2 strategy of "reading to learn rather than learning to read" (2003, p. 195). Therefore, the instruction of these students could be oriented towards the development of new academic, cognitive and reading skills. Additionally, Avalos cites Cummins' and Krashen's statements about the benefits of extensive L2 reading in bilingual students. That is, he also recognizes that readers who interact with large amounts and varieties of texts "have access to the low-frequency vocabulary and grammatical structures found in texts, as opposed to the high-frequency vocabulary and syntax of everyday conversational language" (2003, p. 175). These studies concluded by stating that bilingual instruction should not only be

oriented towards the improvement of L2 literacy skills, but also towards that of L1 literacy skills (Avalos, 2003; Haritos & Nelson, 2001).

Cognitive Factors Involved in L1 & L2 Reading Comprehension

McKeown and Gentilucci (2007) described the effects of the think-aloud strategy on L2 content-area reading comprehension in middle school students. To explain their study, the researchers defined the concept of *meta-cognition* as the mental process readers assume while reading, a process which consists of both thinking and being aware of their own (reading and thinking) processes. The think-aloud strategy is explained as a method that activates meta-cognition and thus increases the reading comprehension of SLLs. The purpose of the think-aloud strategy is to assist L2 learners in the application of monitoring (self-regulating) strategies to increase their L2 reading comprehension. McKeown and Gentilucci concluded that in a middle school social studies class they had researched, the intermediate English learners had success with think-aloud strategies because they had reached an adequate linguistic development in L1 to build up meta-cognitive comprehension strategies in L2.

Butler and Hakuta (2006) described the similarities and differences in cognitive and meta-cognitive skills of L2 and native English (NE) elementary students. They found that NE students and ELLs with high literacy levels had similar reading skills and behaviors. Also, the same traits were found among the struggling readers in both groups. According to the authors, these results confirm the connection between the cognitive and meta-cognitive competencies and the reading comprehension process. When reading an English text, the receptive vocabulary size and the vocabulary related skills were the only differences between NE students and ELLs.

August (2006) identifies and describes the factors involved in the acquisition of L2 reading strategies in adults. He concludes that the cognitive processes which take place during adult L2 reading are different from those of children. This confirms the importance of taking into account the age variable in bilingual students. Like Singhal (2001), August explains that adults have developed higher-level thinking skills, have learned reading strategies, and have had more personal and academic experiences in L1 to which they can refer to as a means to understand an L2 text. On the other hand, children's cognitive and academic development as well as their social and emotional experiences (both in L1 and L2) are still in the process of being established.

In addition to the research purposes, this study attempts to identify teaching, learning and cognitive strategies that could improve the acquisition of English as a second language in the native Spanish speakers

who are the object of the study. The existence of a transference process will be determined through the study of L1 and L2 reading comprehension processes. Taking into account the research already carried out, it was predicted that L1 reading comprehension would positively influence L2 reading comprehension. The researchers admit their pre-research theorization that second language learners would refer to their L1 (Spanish) in order to improve reading comprehension in L2 (English).

Data Collection

For this study, the main sources of data were collected from the students themselves as well as their Spanish and English teachers. Both existing records and new records were taken into account.

Data Sources

Several data collection tools and techniques were used. First, existing records were examined: the first semester grades. First semester grades specifically include 2 sets of grades, 1 from the first grading period (the first bimester) and the other from the second grading period (second bimester). The records that were used included first semester (August-December 2008) reading comprehension grades and final grades in Spanish. When asking for the Spanish grades, a short informal interview was conducted with the Spanish teacher to better understand her grading system and the skills that were evaluated. Additionally, the first semester reading comprehension (RC) grades and final grades in English were used. The English teacher was a participant in the study; therefore, no further interviews were needed.

New records were established by having the students read identical RC passage assessments followed by a set of multiple-choice RC questions. The students were purposefully given the reading passages in English first, then in Spanish. The Spanish and English grades gathered were later compared on a matrix. This crosscheck was done to see if grades increased, decreased or remained the same. The RC passage assessment grades were also taken into consideration in the matrix. Next, inquiries were made by having the students answer 2 questionnaires about their reading behaviors. One questionnaire used closed questions and the other used open-ended questions. On a smaller matrix, the results from the 2 questionnaires were compared. It focused on the 4 most important questions from the short answer questionnaire and a summary of their answers from the open-ended questionnaire. This second matrix focused on the students whose patterns were not clear.

Finally, a video was made of 3 students. These were specifically chosen to represent an A, a B, and a C-or-lower student, based on the results of the previous information gathered. They were given a pre-

selected text to read aloud. The purpose of the oral experiment was to observe their reading behaviors. For instance, researchers observed what students would do when they encountered a word they didn't know or couldn't pronounce. The researcher watched to see if pupils were resigned to use L1 phonology or their L1 base to make observable transfers. Immediately after the reading, they were also tested orally on their comprehension.

Data Analysis and Interpretation

As a result of the analysis, several general themes on the class level emerged:

General Classroom Level Analysis

First, an overall analysis of the Spanish and English grades at the classroom level was carried out. Then, an overall analysis of the results of the 2 English and the 2 Spanish assessment passages was done. Next, we summarized the students' self-assessment questionnaire about their RC in L1 and L2. Finally, a summary of the long-answer questionnaire was written about writing behaviors by using coding while looking for themes to emerge. At that point, the researcher felt like the analysis was still not producing a specific answer to the research question. As additional support, 3 students were videotaped and observed while reading the same selection aloud followed by RC questions. To gather more insight, the preschool and primary school directors and the sixth-grade Spanish teacher were interviewed.

Step 1: Individual student analysis. After a 1-on-1 session, the instructor helped a researcher realize that she didn't need more data sources, but only needed to do a deeper analysis of the data that had already been collected. Instead of doing the analysis at the classroom level and generalizing, the decision was made to do the analysis at the individual student level and combine the 3 most valid data sources. Those sources were the first semester Spanish and English grades and the RC assessment grade. The analysis was to compare the first and second English grading periods (which make up the first semester grades) as well as the Spanish grades to see if they increased, decreased, or stayed the same; then to compare school grades with the RC assessment grade and evaluate whether they produced a pattern. This comparison was done on one large matrix. Additionally, the first period Spanish grades were compared to the English grades. This same analysis was done for the second period Spanish and English grades to confirm a pattern.

Comparing first to second grading period changes in Spanish and English grades. There were 5/29 students whose grade decreased in Spanish and 3/29 whose English grade decreased during the second grading period. One might assume that 3 of the 5 were the same students, however, the researchers found that 2 went down in Spanish, but up in English; 2 went down in Spanish, but stayed the same in English; 1 went down in both Spanish and English. Therefore only 1 followed the pattern of L1 affecting L2. These grades show no definite pattern. It could be assumed that when the Spanish grade went down and the English grade went up, that the students were putting more effort into the English class and less into the Spanish class, or that the content in Spanish was harder and the English content was easier. A final analysis can only presume that there were outside and individual circumstances that caused these random changes.

Comparing individual student's Spanish grades to their English grades. In plain terms, what is being sought is the answer to the issue of whether a student is an A student in Spanish, is she also an A student in English? If she is a B student in Spanish, is she also a B student in English?, and so forth. The analysis shows that 17 students had the same Spanish and English grades the first period and also 17 students had the same grades in Spanish and English the second period. The question is, were they the same 17 students? It was found that they were not exactly the same. Thirteen students that were B students in Spanish during the first grading period were also B students in English. Four students that were C students in Spanish were C students in English. In the second grading period, only 6 out of 13 B students were the same students that maintained the same grades in both Spanish and English. Only 3 out of 4 C students remained the same during the second grading period. The other 7 B students all went up in English; only 1 went down. These findings support the prediction that the content in English is easier than the content in Spanish. The findings also support the theory that their progress in L1 helped them excel in L2.

Comparing RC assessment results with first and second period grades in English and Spanish. The assumption that the results of a student who had high grades in Spanish and English was that she would also have a high score on the RC assessment. As the curtain unfolded, the expected pattern emerged. The girls with high first semester grades in both L1 and L2 had high scores on the RC assessment (usually 5/5 correct). One observation was surprising. Four consistently low-mark students in L1 and L2 had high scores on the RC assessment. The researchers found no explanation for this phenomenon. The other element that was confirmed was that students who showed a lower L1 and higher L2 throughout their grading history tend to show the same on the RC

assessment: they scored better on the English version than the Spanish version. The students who have the same grades in L1 and L2 seem to score exactly the same on both the English and Spanish versions of the assessment. Again, all these previously mentioned patterns support the theories in the review of literature.

Step 2 of individual student analysis: Small matrix. Secondly, a smaller matrix was made based on the 4 most important questions from the short answer questionnaire and a summary of the students' comments from the long open-ended question questionnaire. This matrix focused on the students whose patterns were not quite clear. Recommendations for these students were also made. The patterns that evolved allowed researchers to move closer to answering their questions.

Short matrix: 4 main questions from short questionnaire and comments from long questionnaire. Students who excel in both L1 and L2 expressed a love for reading and had a positive attitude for reading in both languages. They expressed that through reading they had developed a larger vocabulary, expanded their cultural and academic knowledge, and felt that their general comprehension on varied topics more fluent.

It can be seen that students who had a high L1 and a low L2 in the first grading period improved their L2 in the second grading period. This improvement is explained by their attitude towards reading. They read in L1 and L2 for school, but enjoy reading in L2 for pleasure. The authors believe that recreational reading in L2 is a major reason for RC improvement in L2. This is particularly seen in 2 students who expressed their enjoyment reading in L2. (They reported that such pleasure was due to their delight in reading magazines and novels which highlight teenage issues).

Students who have a high L1 and a low L2 usually read for pleasure in L1. It was recommended that they begin looking for interesting short articles to read in L2 with the hope that their L2 grades would see improvement.

Even though this part of the study was only designed for looking at and focusing on the students whose patterns were not quite clear, the researchers decided to look at a few consistently low students and a few consistently high students to see what their opinions were about reading. There was a particular concern for one student who consistently has low grades and who scored poorly on the RC assessment. This particular student's self-evaluation of her reading behaviors is devastating. She doesn't like to read in either L1 or L2 and only reads when somebody obligates her. She reported that she might read when there is absolutely nothing else to do. She would like to read faster, but doesn't think anyone can help her. She consistently requires personalized motivation and attention from others.

The video recordings of one A student, one B student and one C student confirmed several points. First, reading aloud made comprehension more difficult. Students focused so much on pronunciation, intonation and fluency that they lost the semantics of the readings. New vocabulary was introduced, making comprehension even more difficult. For instance, the word *quarter*, not previously part of their lexicon, produced some difficulties. Students were less likely to answer the questions that pertained to the last part of the reading, probably because they were less focused at that point, being fatigued from the work. At times their pronunciation was poor, but this did not adversely affect RC. Overall, the A students answered more questions correctly, precisely and quickly.

After an interview with the primary school director, we concluded that the academic structure of the school strongly supports the threshold theory. The students are receiving a firm foundation in their L1, while living and socializing in their L1 environment. The immersion in L2 in grades 1-5 is not overwhelming for students because they have such a broad, solid base in their L1 upon which they are able to build a solid comprehension of L2. By fifth grade they are ready to successfully spend a month in Canada and come back feeling confident about their L2. This experience is later reinforced in grades 8-10 when the students are encouraged to travel to England. Also, their social background allows them the privilege to frequently travel to the US on vacation where they again have the opportunity to use their L2 in a native English-language environment. These international experiences, whether sponsored by the school or family, support the prism theory's socio-cultural aspect.

Findings

There is a correlation between the first and second grading period Spanish grades and the same grades in English. In step number 1 of the analysis, a correlation between the first grading period Spanish grades and the first grading period English grades was found. Each student had almost exactly the same grade in English as in Spanish. It was as if the sixth grade English teacher had conferred with the sixth grade Spanish teacher to give the same grade, when in truth the English teacher had never spoken to the Spanish teacher before this research project. They didn't even know each other, personally or professionally. This realization led to a strong recommendation (included the section entitled Action Plan). Additionally, based on the same comparison of the first grading period Spanish and English grades, it was found that 17/29 students had exactly the same grade in English as in Spanish, 9 English grades were 1 grade higher than the Spanish grades and only 3 Spanish grades were higher. For the 2nd grading period grades, it was again found that 17/29 students had exactly the same grade in English as in Spanish, 12 English

grades were 1 grade higher than the Spanish grades, and no Spanish grades were higher than the English grades.

These findings heavily support Cummins, Collier and Thomas' theories and related studies done by Watkins-Goffman and Rivera, that a student's L1 is strongly connected to a student's L2. The reason why 9 students had a higher English grade than Spanish grade is most likely due to the school's policy of deliberately maintaining the L2 (English) one grade level behind the L1 (Spanish), therefore, it is not as academically challenging as their L1.

Action Plan and Recommendations

Considering the conclusions and findings, it is recommended that the following steps be taken:

First, as a general recommendation, it is extremely important for grade-level teachers in all subjects to know each other in order to interact. Some may already do this because they know each other on a personal level, but the practice should be made deliberate. At the school which is participating in the research, employees seem to be very departmentally (or "vertically") focused. The researchers observed that teachers were satisfied with a "vertical alignment." Through an institutional self-evaluation carried out for the accreditation process, it had already been observed that a horizontal alignment is lacking in teachers on all grade levels. This present research project served to reinforce the critique of this deficiency.

As a result of the finding, it was highly recommended that teachers have bi-weekly grade-level meetings beginning in the next school year (August 2009-June 2010). The purpose of these grade-level meetings should be to discuss and share thoughts about students and revise cross-curriculum planning. To get cross-curriculum dialogue started, it was recommended that two additional meetings be held; one at the end of the year (June 2009) to study what cross-curricular planning entails and to build a general foundation for each teacher's particular cross-curricular planning; and one at the beginning of the next school year (August 2009) to fine-tune decisions made in June 2009.

To increase leisure reading in L2 and therefore increase student immersion in L2, it is recommended that a reading center, stocked with teen magazines, be set up in all sixth grade classrooms.

For those students who get consistently low marks, individual motivation and attention is needed from an outside source. The names of these students will be given to the Spanish teacher and the English Department director so they may monitor the students more closely to have them reading successfully soon.

The video showed that students should read silently for deeper comprehension. If the purpose is to work on intonation, fluency and pronunciation, then reading aloud is acceptable.

The most important discovery was in the area of pronunciation. While it is well known that the only advantage of having an immersion program any earlier than age 8 is to acquire a more native-like pronunciation, the school is not achieving its stated goals in this area, as the recording illustrated so vividly. To improve pronunciation, primary school teachers should put more emphasis on phonics and phonetic awareness.

Final Thoughts and Conclusions

In conclusion, several connections between the theoretical framework, the literature review, and this particular study were found. First and foremost is the study by Watkins-Goffman and Cummings (1997) in which they researched the context of how Dominican ELL students acquire L1 literacy in order to improve English instruction. They found that high literacy in L1 increased L2 content-area comprehension. Based on Cummins' CUP (1992), there is a common operating system underlying student L1 and L2 knowledge from which students draw their literacy knowledge and skills. Likewise, the linguistic processes in the prism model (Collier & Thomas, 2007) that involve the 4 literacy components of speaking, listening, reading and writing sustain that an ELL's highly developed literacy will allow her to succeed in L2 literacy as well. Similarly, this study found that Colombian students with high literacy in L1 (Spanish) were able to transfer that high level of literacy to their L2 (English). This was seen by comparing their Spanish and English grades, testing their reading comprehension in a cold reading, asking oral comprehension questions after reading a selection aloud, and by analyzing their feelings on L1 and L2 reading.

According to Rivera (1999) SLL's reading abilities in their L1 facilitate and support the learning and reading processes in their L2. In another similar finding, Kong (2006) suggests that there is an obvious transference process of reading strategies from L1 to L2 in moderate to high L2 proficiency-level students. Just like Cummins (1992), Collier and Thomas (2007) uphold that there is an L1/L2 language interdependence from which the ELL transfers literacy skills from L1 to L2. However, this pattern was not observed in students with low L2 proficiency levels. Moreover, ELLs showed more confidence when reading in their L1 than when reading a text in English. In addition to these previous findings, this study found that when reading aloud, students dip back into their L1 for pronunciation. Surprisingly, these pronunciation mistakes do not interfere in their comprehension of the selection being read. What is affected is the *listener's* comprehension.

Avalos (2003) cites Cummins and Krashen's views that bilingual students "have access to the low-frequency vocabulary and grammatical structures found in texts, as opposed to the high-frequency vocabulary and syntax of everyday conversational language" (p. 175). Very closely related to these findings, this study found through different interviews with preschool and primary directors, the sixth grade Spanish teacher, and the sixth grade English teacher, that these particular sixth grade students have been exposed to an array of fictional novels starting in third grade. They will continue to be exposed to American and British literature combined with biographies throughout their high school careers. Therefore, these sixth grade students have and will continue to develop stronger L2 reading abilities by extensively reading in their L2 as Cummins and Krashen state when cited by Avalos (2006).

Cummins (1998) stated that, to the extent that instruction in L1 is effective in supporting proficiency in L1, transfer of this proficiency to L2 will only occur if there is an appropriate exposure to L2 and an appropriate stimulation to learn L2. Based on this statement, it was also seen that many of the sixth grade students in this study rely on their Spanish foundation during RC. They translate concepts into English, search for cognates, manipulate prefixes, suffixes and root words. They transfer their background and content knowledge from their L1 to their L2 to support them in interacting with the text.

Based on the theories mentioned in the theoretical framework and the reviewed studies, an ELL is more likely to develop and apply cognitive and meta-cognitive reading strategies (inferences, predictions and prior knowledge) during the reading process if he/she is highly proficient in L1 and L2 (Butler & Hakuta, 2006, McKeown & Gentilucci, 2007). In our study, this theory was made evident among some of the fully bilingual students whose command of both Spanish and English allows them to enjoy meta-cognitive advantages over their peers. They are better able to monitor their RC and are aware of the strategies they use to better understand the text.

Overall, the school is on the right track by having first established a firm L1 foundation, its allowing for a non-threatening introduction to L2 through song and play during the early preschool years, and by first grade formalizing the way the L2 is taught through content in the curriculum. In order for them to continue this process, it is recommended that at least one other content course be taught in high school English, instead of only having English-intensive classes.

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