

TEACHING BILINGUAL STUDENTS
WITH SPECIFIC LANGUAGE IMPAIRMENT

by

Gretchen Lund

A Capstone submitted in partial fulfillment of the requirements
for the degree of Master of Arts in English as a Second Language

Hamline University
Saint Paul, Minnesota
May, 2007

Committee:

Pamela Telleen, Primary Advisor
Dr. Ann Mabbott, Secondary Advisor
Laura Willemsen, Peer Reader

Copyright by
GRETCHEN LUND
2007
All Rights Reserved

To Jeff, whose support has been unfailing,
may the completion of my thesis be as much of a blessing
and inspiration to our family as yours has been.

To Pedro's ESL teacher and SLP, Pam Telleen,
Dr. Ann Mabbott, Dr. Frank Cirrin, Marilyn Fairchild, and Laura Willemsen,
you have been generous with your time, knowledge and resources.
I am grateful. Thank you.

To Mom and Dad,
for always, for everything, thank you.

To my darling Maggie,
you have been the most wonderful distraction
a mother could ever ask for.

TABLE OF CONTENTS

Chapter One: Introduction.....	1
Chapter Two: Literature Review	7
Introduction.....	7
Definition of Terms.....	7
SLA and SLI: How are They Alike and Different?.....	12
SLA and SLI: Relevant Research.....	17
Treating Bilingual Children with SLI: Current Best Practice.....	20
Chapter Three: Methods.....	28
Introduction.....	28
Research Design.....	28
Site.....	30
Participants.....	31
Data Collection Techniques.....	33
Data Analysis Techniques.....	36
Chapter Four: Results.....	38
Introduction.....	38
Identifying a Research Subject.....	38
The Files.....	43
Observations in the Speech/Language Therapy Classroom.....	45
Observations in the ESL Classroom.....	58
Development of Teaching Techniques.....	67

Implementing the Lesson Plan.....	70
Results.....	75
Discussion.....	78
Chapter Five: Conclusion.....	85
Introduction.....	85
Reflections.....	85
Limitations and Recommendations for Future Research.....	86
Implications.....	90
Summary.....	92
Appendices.....	93
Appendix A: Cloze Worksheet from ESL Observation Three.....	93
Appendix B: Sample “Matching” Test.....	95
References.....	97

LIST OF TABLES AND FIGURES

Table 4.1	Timeline of Student Vocabulary Acquisition for “The Keeping Quilt”.....	48
Table 4.2	Timeline of Student Vocabulary Acquisition for “Miss Rumphius”.....	52
Table 4.3	Timeline of Student Vocabulary Acquisition for “Celebrating Chinese New Year”.....	72
Table 4.4	Onomatopoeic/Kinesthetic Devices used in ESL Observation Four”.....	75

CHAPTER ONE: INTRODUCTION

In the fall of 2003, I was hired straight out of my teaching licensure program to develop and head a new English as a Second Language (ESL) program in a middle school in the upper Midwest. I faced a number of challenges at first, including the issue of how to place students in their ESL and mainstream classes. Thankfully, the decisions I made for my students bore out to be appropriate, by and large, and I was able to turn my attention to other matters. Several weeks into the first quarter, however, I was presented with my first real placement problem.

An eighth grade English teacher asked me to look at some writing samples from a student in her class who I had on my list of “monitored” ESL students. I had never met this student before because monitored students are entirely in mainstream classes. They have gone through all of the other ESL levels successfully and are observed for a year or two in mainstream classes before being exited from the ESL program. Students that are having difficulty in that context can be drawn back into ESL classes at any time, and this teacher approached me because she believed that Mai Ying* (names have been changed) might need such extra help.

I read the writing sample and discovered that Mai Ying’s language was disordered and littered with grammatical errors so as to make the writing nearly incomprehensible. This homework, which could have been handwritten, was written on a computer and was turned in for extra credit, so I was certain that the errors were not due to carelessness. This student had obviously put a good deal of time and effort into her work. The errors

in the writing were not at all the kinds of mistakes one would expect from a student nearly fluent in English. It seemed abundantly clear to me that Mai Ying had been moved up to monitored status in error.

Despite my confidence that Mai Ying would do far better in an ESL English literature class than a mainstream one, I had never drawn a student back in to ESL classes from monitored status before, and was nervous about the process. Besides, as I looked into things I discovered that Mai Ying had gone through the special education assessment process and was labeled as a student receiving “Speech/Language” support.

Knowing how to assess and teach children who may have education needs for both a learning disability and second language acquisition is a very complex issue. This is in no small part due to the fact that a large number of the symptoms presented by children with learning disabilities and those learning a second language are the same. Fradd, McGee, and Willen (1994) identify over thirty such characteristics, including delayed language acquisition, anxiety, limited attention span, and poor progress in content areas. Things become even more difficult when a child’s learning disability is a language disorder of some kind. To this point, there is not a single clinical marker that distinguishes the language of a child with a language disorder from one who has not yet fully acquired the target language as a second language (Genesee, Paradis & Crago, 2004).

My uncertainty as to what specific combination of factors were causing Mai Ying’s difficulties in English class left me very unsure as to what to do for her. She needed help badly. It was clear that she could not do the work demanded of her in her

mainstream 8th grade classes, but should the help come from the ESL department, the speech and language resource room, or both?

Fortunately, I did not have to struggle with this question for very long. Mai Ying approached her English teacher shortly after I was given the work sample and requested to be accepted back into ESL English classes. Her mainstream English teacher already thought that ESL was a more appropriate place for Mai Ying than her English class, I felt Mai Ying would benefit from the combination of language and content objectives I focused on in my class, and the child herself wanted more help. Suddenly, my first real placement challenge as an ESL teacher seemed to have resolved of its own accord.

The school year progressed, and Mai Ying proved to be the hard working student I assumed her to be. She made progress in my class, but I soon found that while she was learning something from my content instruction, my language instruction did not seem to be helping her. I had assumed that because Mai Ying's mistakes in her writing were all language errors, my focus on syntax, verb formation, and the like would address her needs neatly. On the contrary, it seemed that the nature of the language errors she was making, in both her speech and writing, was somehow fundamentally different than the mistakes made by my other students. For example, she did not leave off past tense or plural endings like I grew accustomed to seeing from other students, but seemed to add them in at random. Rather than avoiding complex sentence structures or relatively low frequency words, Mai Ying used them frequently and incorrectly. The following passage is a paraphrase of work Mai Ying turned in to me with words changed, but error patterns left intact:

I was showing up these pictures that peoples are means to other people. But I will tell girls that they're trying to teased me or meaned me. I know that I was small or taller. One of my friends, they teased me or meaned over and they have groups too. But I has no friends. They're say I'm stupids, but I feel so sad to my self. I want to screamed them but I have to follow the rules in school. When I fight I be I have to attention. And I can hold temperature.

Note that in the preceding passage, Mai Ying misused the following words: up, peoples, means, teased, meaned, has, they're, stupids, be, attention (meaning detention?) and temperature (meaning temper?).

It appeared that my choice to draw Mai Ying back into ESL classes was not the silver bullet I hoped it might be. She had consistent trouble following directions that most or all of the rest of the class understood. Her writing and speaking abilities did not improve, and her standardized test results were only marginally better, if at all. Most disheartening of all was her score on the Idea Proficiency Test, or IPT, (Aomori, Dalton, & Tighe, 2004) at the end of her eighth grade year. The IPT is intended to determine whether a new student is limited English proficient and therefore in need of ESL services or is ready for mainstream classes. The test may also be used as a periodic check with current students to see if they are ready for mainstream classes. The reading portion of the test categorizes scores into three groups: non-English reader, limited English reader, and competent English reader. While I had no expectation that Mai Ying would test as a competent English reader, the fact that her score fell in the non-English reader score bracket was extremely worrying.

My inability to help Mai Ying to my satisfaction raised a host of questions concerning how to teach her and students like her. Should she be in ESL at all, for example? Mai Ying, was born in the U.S. and has been in the U.S. public school system since she was in kindergarten. According to Thomas and Collier (1997) it takes on average five to seven years for a child who has some education in his/her first language to be able to perform on par with grade level peers in academic content and up to 10 to 13 years for students who have not had any education in their first languages. Mai Ying has been educated in U.S. schools for 9 years, and is nowhere near being able to perform at grade level on tasks requiring language proficiency. Even by Thomas and Collier's most generous count, this is atypical and concerning. Does her difficulty stem from her language disability, and not from English acquisition at all? Or perhaps, is it possible that a language impairment will lengthen the average time it takes a child to acquire a second language?

Perhaps more concerning than of all the questions that Mai Ying's situation presents is that she is not alone. Specific language impairments affect approximately 7% of all five-year olds in North America (Leonard, 1998). Of course, the incidence of this disorder must be assumed to be the same among native speakers of English and those learning English as a second language.

Even within my limited tenure as an ESL professional, at the time I worked with Mai Ying I had already worked with two students who were identified as needing speech and language therapy and ESL. As this forms just under 3% of the ESL population at that school, I know that there are likely more students struggling with these same issues who have not even been identified. Also, as the number of children with potential

language learning disabilities is so high, it is very likely that nearly every ESL teacher will need to address the specific needs of such a child a number of times within his or her career. A close and careful examination of how to help second language learners with language impairments is vital.

In order to best address this problem, I have identified a specific question to direct my research. Specifically, my goal is to improve instruction of students who are learning English as a second language and have a language disorder within my ESL classroom. To do this, I will do a case study of one language disordered English language learner to see how he/she is being serviced within ESL and speech and language services. This review will serve to address the question: How can an ESL teacher and a Speech/Language clinician collaborate to serve a bilingual child with a language impairment?

In the next chapter I will examine current pedagogy and research pertinent to my question. I will define specific language impairment and second language acquisition and review the history of both fields of study. I will also discuss general teaching techniques used in both fields. Finally, I will discuss research done that most closely matches my topic.

In chapter three, I will present an overview of the research design, participants, setting, and data collection and analysis techniques. In the following chapter, findings of the study will be presented and their implications will be discussed. Finally, in chapter five I will conclude the capstone by stating the limitations of the study and present recommendations for future research.

CHAPTER TWO: LITERATURE REVIEW

In this chapter, I will present the history of this field of study and the development of current theory by defining specific language impairment (SLI) and second language acquisition (SLA). To address SLI and SLA as they relate to each other, I will refer to studies comparing and contrasting the language development of those with SLI and those learning a second language and address assessment issues. Next, I will summarize the body of research relevant to students who have a specific language impairment that are potentially bilingual and reference current best practice recommendations for teaching such children. This review will serve to address the question: How can an ESL teacher and a Speech/Language pathologist (SLP) collaborate to serve a bilingual child with a language impairment?

Definition of Terms

Specific Language Impairment

Throughout this capstone, I will use the term specific language impairment, or SLI, to refer to the language problems encountered by the populations I am studying. The term specific language impairment is primarily a diagnosis of exclusion. Researchers have spent significant amounts of time attempting to isolate a specific clinical marker to distinguish SLI from other language problems, but have not yet done so (Paradis & Crago, 2000). Therefore, its definition focuses on what it is not, rather than on what it is.

Children with SLI have delayed or disordered speech and no other ostensible learning problem. They are of normal intelligence and have normal hearing. They do not have any kind of neurological disorder and have normal social and motor development. Difficulty in learning language is not labeled SLI if it is part of any larger problem like autism or a social-emotional disturbance. While SLI in and of itself is not considered a learning disability, it is often associated with learning disabilities. (Genesee, Paradis, & Crago, 2004; Leonard, 1998). SLI affects approximately 7% of all five-year olds in North America (Leonard, 1998).

SLI and other language problems are distinct from speech issues. An articulation disorder, or speech disorder, is the absence of or incorrect production of speech sounds or atypically developing phonological processes. (Minnesota Rules, 2005). Children with SLI, on the other hand, have difficulty learning and using language. They have difficulty mastering grammatical forms and their language development tends to be delayed (Genesee, Paradis, & Crago, 2004).

Although a number of terms have been used to describe children fitting the SLI profile, the term specific language impairment will be used in this capstone, and in this chapter in particular, largely because it is the expression currently being used within speech-language literature. It is not, however, used as frequently as a diagnostic label in speech-language clinicians' practices as the problems of real children tend to be messier than the theoretically "clean" diagnosis of SLI. I will, however, use other, related distinctions when referring to actual clinical cases.

Among the other terms that have been used to describe what is now called SLI include "language handicap", (Juarez, 1983) "language problem", (Miller, 1984),

“language disability”, (Miller, 1984, Windsor, Scott, & Street, 2000) “language impairment”, (Bruck 1982; Kayser, 1995; Curtiss, Katz, Tallal, 1992) and “language disorder” (Perozzi, 1985; Lahey, 1990).

Second Language Acquisition

Second language acquisition (SLA) is the process by which a person learns a language after their first one. Second language is the term used primarily to describe a language that is learned after early childhood. Bilingual people are generally separated into two groups: simultaneous bilinguals and sequential bilinguals. A simultaneous bilingual has learned two languages from birth. A sequential bilingual begins to learn another language later in life (Lightbown & Spada, 1999; Paradis, Crago, Genessee & Rice, 2003). Therefore, only sequential bilinguals can be accurately said to have a second language. In truth, because both languages are native-like, a simultaneous bilingual has two “first” languages. Thus, this capstone is concerned only with sequential bilingualism.

Second language acquisition bears some resemblance to first language (L1) acquisition, and for obvious reasons, the study of second language acquisition sprang from that of first language acquisition. Theorists on first language acquisition fall into several primary camps: the behaviorists, the innatists, the interactionists and the cognitive theorists. Behaviorists believe language is learned primarily through repetition and habit-formation. Innatists contend that the behaviorist view is limited and fails to explain phenomena such as the production of novel utterances by a language learner. In

other words, if a language learner is merely parroting phrases he/she has learned before within an appropriate context, how is it that children are constantly uttering phrases and sentences they've never heard before? More recently, interactionist and cognitive theorists have refined and added to a largely innatist point-of-view. As the name implies, interactionists believe that language learning is best done if a learner has the opportunity to interact with others through the target language. Cognitive theorists focus on the concept of automaticity. Learners rely on metacognitive functions to produce new forms, but as the learner's language develops, use of those forms becomes automatic and the learner can focus on a new set of forms (Lightbown & Spada, 1999). Chomsky, an innatist, posited the theory of a "Universal Grammar" which claims that each language follows basic principles, and that each child is born with an intrinsic mental framework for understanding those linguistic principles (Cook, 1988).

Until the mid-seventies, behaviorist theories like Lado's Contrastive Analysis Hypothesis held sway within the field of second language acquisition research. This theory claimed that second language learners would experience "interference" from their first causing greater difficulties for those learning a second language very different from their primary language (Duncan, 1989). However, since that time researchers such as Dulay and Burt in 1974 discovered that learners of a second language (or L2) followed basic patterns of language development, and that interference was only very rarely a factor in second language development. By the mid 1970's, innatist, theories soon were largely accepted within the SLA field.

In the early 80's, Cummins put forth a number of theories that continue to inform second language teaching approaches. Not only is interference not a significant factor in

second language acquisition, learning a second language is interrelated and interconnected to learning and maintaining the first. If a child has attained a high level of competency in his or her L1, he or she is then equipped to make similar gains in the acquisition of a second language (Cummins, 1984). Additionally, at this time Cummins posited the theories of “BICS,” or “basic interpersonal communicative skills” (social language) and “CALP,” or cognitive academic language proficiency” (academic language). These two concepts were part of Cummins’ threshold hypothesis. In essence, this theory states that a second language learner must have developed a degree of proficiency in his/her basic communicative skills in a new language before she/he can expect to develop proficiency in abstract academic skills in that language (Cummins, 1984).

Also at this time Krashen (1982) published a number of theories on second language acquisition that are still widely discussed. For one, Krashen made a distinction between language learning and language acquisition, stating that learning a language through study and repetition could never produce near native proficiency in a language, but that acquisition, through experimentation and exposure to what he calls “comprehensible input,” can do so. Krashen still allows that language learning has some value within his “monitor hypothesis,” stating that grammatical rules which are learned can act as a sort of editor to check the output of acquired language for errors. Krashen’s “comprehensible input” theory claims that language acquisition occurs only when a learner is exposed to language that he/she is capable at that point, to comprehend. In other words, a person could sit and listen to college lectures in another language for years and learn little or none of that language because the input was not comprehensible to

him/her. The last of Krashen's principles is the "affective filter hypothesis". An affective filter is an impediment to second language acquisition brought on by stress, self-consciousness, or a lack of motivation. This theory has brought about efforts to change language teaching to minimize these language-learning impediments as much as possible.

Recently, Collier and Thomas (1997) did exhaustive research to determine how second-language English speakers were being served by current practices. Collier and Thomas determined that a typical ESL program closed the academic achievement gap between native and non-native speakers of English within 8-12 years; long after children are typically exited from an ESL program and long after all but the earliest of arrivals are of school-age. They also discovered that certain types of programs, especially bilingual programs that teach English through the content areas, can help children achieve at or above the mean on standardized tests by grade 11. Collier and Thomas's work shows that while much has been discovered within the last several decades about how second languages are acquired, second language learners are still at considerable risk and the field itself is still developing, as are ESL programs.

SLA and SLI: How are They Alike and Different?

As the diagnosis of Specific Language Impairment is a new one, many researchers have sought to define it and distinguish it from other language problems. A number of studies, for example, have been conducted to determine if tense marking could be used as a clinical marker to distinguish impaired language from that of normally developing children and have determined that improper tense marking, or incorrect use of

suffixes that alter a verb's tense, is an acceptable clinical marker (Rice & Wexler, 1996; Windsor, Scott, & Street, 2000).

These findings seem to address the issue nicely until one considers that the studies were conducted exclusively on speakers of a first language. Paradis and Crago (2000) compared the speech of native speakers of French with SLI, normally developing French-as-a-second-language students, and native French speaking controls and found that the second language learners and language-impaired children had similar error patterns. Studies in other languages have returned similar results. A longitudinal study by Salameh, Hakansson, and Nettelbladt (2004) of second-language Swedish speakers with and without SLI showed that the language-impaired children followed the same pattern of language acquisition, except that the language-impaired children were delayed in the development of both their first and second languages.

The results of these studies serve to show that as of yet, the speech output of non-native speakers of a language who have not yet fully acquired the language and the speech of native-speaking children with SLI is indistinguishable (Genesee, Paradis & Crago, 2004). However, Kohnert and Windsor (2004) have determined that certain nonlinguistic differences exist between English-speaking children who have SLI and their native and non-native English speaking peers. Kohnert and Windsor conjectured that differences might exist between the sublinguistic processing skills of normally developing children and those with a language impairment. The results of their study bear this out. The children were given four tasks which test the cognitive processes underlying language production. In one task, the children had to tap a button or pedal as quickly as possible when they heard a tone on a set of headphones. The next task was

identical except that the children responded to a visual stimulus. In the third task the study participants needed to differentiate between a high tone and low tone and tap the corresponding one of two buttons or foot pedals according to which tone they heard. The final task was the same only the children needed to differentiate between two visual stimuli. Kohnert and Windsor discovered that the bilingual and normally developing monolingual children performed better on all tasks except the first auditory task, and that the children with language impairments had results several standard deviations lower, and therefore statistically significantly different, than those for both normally developing native speakers of English and normally developing speakers of English as a second language in the choice visual detection task. This finding is exciting as it may help theorists move, as is Kohnert and Windsor's hope, toward a broader theory of language development that encompasses learners with more than one language as well as those who are deviant in their language development.

Although Kohnert and Windsor's work is exciting in that it has identified a way to distinguish between these groups, there still exists no practical way, aside for the rate of acquisition compared to other second language learning peers, for speech pathologists in the schools to distinguish between the English speech of students with SLI and those who have not yet fully acquired English. This, as one might imagine, has caused considerable problems for speech language and ESL professionals attempting to assess children for eligibility for speech-language services. Over-identification and under-identification of bilingual children as learning disabled has been a persistent problem for some time (Westernoff, 1991; Laing & Kamhi, 2003). Over-identification occurs when the language characteristics that naturally present themselves during the normal second language

acquisition process are assumed to be a special education issue, and under-identification occurs when language problems due to a language impairment are mistakenly attributed to the second language acquisition process.

In spite of this, current best practice for appropriate assessment of speech and language disorders in bilingual populations is fairly well settled. It is taken as established fact that a true language disorder will manifest in all languages that the child speaks (Juarez, 1983; Westernoff, 1991). Many researchers and experts agree that these children should be assessed in every language to which they have been exposed (Stow & Dodd, 2003; Genesee, Paradis, & Crago, 2004). As simple as this solution appears, assessment becomes complicated when appropriate assessment materials do not exist in all languages, or if a trained bilingual speech language professional is not available, as is often the case (Juarez, 1983; Crutchley, Conti-Ramsden, & Botting, 1997; Stow & Dodd, 2003). Many times, assessments are not available in the particular dialect that the student speaks and test validity is severely compromised when tests are translated from one language to another. In addition, tests may contain items which are culturally bound or the way in which the test is conducted may not fit with the communication styles of some cultures (Stow & Dodd, 2003, Laing & Kamhi, 2003, Genesee, Paradis & Crago, 2004). For example, a test item dealing with snow would undoubtedly prove unduly challenging to a recent immigrant from Thailand. Also, a child that has been taught to listen to and respond nonverbally to adults, as is typical in the Hmong culture and some Native American and Spanish-speaking cultures, would certainly perform more poorly than his/her actual level of language proficiency in a one-on-one oral proficiency testing situation.

Therefore, assessment teams are often left with informal assessment as their best option to test in the child's native language(s). In such a case, assessment teams must rely on parent interviews, observation of the child interacting with peers in familiar surroundings, and other types of informal assessment to assess a child's performance in the language or languages not spoken by the majority culture. (Stow & Dodd, 2003; Genesee, Paradis, & Crago, 2004; Westernoff, 1991). As one might imagine, there are problems with the informal testing approach. In parent interviews, for example, the parent may feel intimidated by the examiner or perhaps alter his/her responses based on what kind of answers he/she perceives the examiner as wanting (Westernoff, 1991). In spite of these problems, informal testing procedures generally predict communicative competence better than formal measures in such cases (Juarez, 1983).

Finally, those on an assessment team must also be cautious when interpreting results of assessments on the child's majority language skills as results may appear depressed as compared to monolingual peers in both or all languages because language competence is spread across the languages (Genesee, Paradis, & Crago, 2004). For example, if a child is not being educated in his or her first language, it is unreasonable to expect that the child will be able to speak easily and knowledgeably about scientific or historical concepts in his or her L1 because the child has not been in a context to learn the requisite vocabulary and grammatical structures related to the concepts in the first language. The same child may well be able to communicate on such topics in L2. Similarly, the child may have difficulty describing in his or her second language family traditions or other home activities normally conducted in L1.

SLA and SLI: Relevant Research

In the introduction chapter, I related my experience with a language impaired student who was a second language learner that was not experiencing academic success. Unfortunately, it appears that this experience is not atypical. A number of researchers have determined that children with this particular set of needs are not, in general, doing well (Kayser, 1995; Crutchley, Conti-Ramsden, & Botting, 1997). Crutchley, Conti-Ramsden, and Botting (1997) found that bilingual children in special classes for children with language impairments were doing significantly more poorly than monolingual children with SLI.

Crutchley, et al, (1997) gathered test data on children who spoke English as a second or other language who were being taught in “language units” which are special classes for children with SLI. The test results of these children were compared to those of other children in the units who spoke English as their first language. The children who spoke English as a second language scored lower on every type of test administered by the researchers. The determination of the researchers was that the bilingual children were somehow fundamentally different from their monolingual peers, but were unable to say how, exactly. They examined their data exhaustively to isolate a specific type of difficulty that was unique to the bilingual children; semantic and pragmatic difficulties, for example, but could not clearly isolate any discreet difference. These results would seem to indicate that learning two languages complicates the effects of SLI and has a deleterious effect on language learning as a whole.

As Paradis, Crago, Genesee and Rice (2003) note about this research, however, the data is corrupted because the researchers did not draw a distinction between

simultaneous and sequential bilinguals in their research. If they had done so, it is entirely possible that the greater severity of difficulties shown by the children who were learning the languages sequentially could be entirely attributed to their not yet having completed the second language acquisition process.

All this goes to show that, first, at least some children with SLI who are potentially bilingual are not doing well compared to their monolingual peers. However, it is not clear that this lack of academic success is due to an inherent set of difficulties or inadequate remediation of difficulties. Second, this field of study is new and even among experts basic misunderstandings of either second language acquisition or language impairments remain, leaving a void of clearly established theory and best practices in the teaching of such children.

As researchers looking in to this field of study have noted, the body of work on children who are learning a second language who have a specific language disorder is quite small. (Genesee, Paradis & Crago, 2004; Crutchley, Conti-Ramsden, & Botting, 1997; Stow & Dodd, 2003; Gutierrez-Clellan, 1999; Kohnert & Windsor, 2004). Largely, experts concern themselves with what should be happening within the Speech/Language resource room, and not within the ESL classroom, leaving a dearth of guidance for the ESL teacher. However, some broad themes emerge.

While some data suggest that dual language children in language intervention programs are not making progress relative to their peers, (Kayser, 1995; Crutchley, Conti-Ramsden, & Botting, 1997) other studies reveal that either they are, under the correct circumstances, or that they could be. Two studies in particular on French Immersion programs in Canada show that students with SLI tested similarly to students

in English-only classrooms who also had SLI (Bruck, 1982; Paradis, Crago, Genesee & Rice, 2003). The results indicate that these children were learning a second language with no detriment to their first. Several other studies have been conducted to see if dual language children with SLI learned new English words better if they were taught the new words in their first languages and then in English, or were taught the words in English only (Kiernan & Swisher, 1990; Perozzi, 1985; Perozzi & Chavez-Sanchez, 1992). Not only did the children learn new words in two languages in the bilingual approach, but they learned the words in both languages faster than the words they learned in the English-only approach. They essentially learned twice as many lexical items in less time. Gutierrez-Clellan (1999) reviewed findings from a number of studies of typically developing children and those with language impairments and concluded that intervention was more successful when L1 was used.

The results of such studies are certainly encouraging for those espousing a dual-language approach to language remediation, but several distinct problems persist. First, many language professionals remain of the opinion that remediation should be done in English, perhaps to the exclusion of a child's first language, because it is the language of power and instruction in the United States. Many are also concerned that instruction in two languages will prove unduly confusing to such children, or that bilingual remediation is simply too complicated, and will therefore service the child only in English (Kayser 1995; Juarez, 1983; Stow and Dodd, 2003). Secondly, determining how to remediate in two languages is a daunting task for a number of reasons; each child's language background is unique, qualified bilingual speech-language professionals are scarce, and

cultural differences can become barriers for effective instruction (Genesee, Paradis, & Crago, 2004).

Treating Bilingual Children with SLI: Current Best Practice

As is outlined above, the theoretical challenges posed by the learning needs those with language disorders who are bilingual are many. Addressing those needs in the classroom context has yet additional challenges, which I address below. As Genesee, Paradis, and Crago (2004) note, because research on children with this particular set of needs is still scant, and as particular situations vary so widely, best practice generalizations are difficult to draw at this point. Experts do provide some guidance, however.

Determining Language(s) of Instruction

Of primary concern in determining how to service dual language children with SLI is how to choose a language or languages of instruction. A number of researchers both early in the debate and more recently have argued that the addition of a second language may disrupt or slow the development of the first language in language impaired children. Therefore, they argue, the first language should be remediated first, and a second language should be addressed only after the first language is mastered, if at all. (Miller, 1984; Toppelberg, Snow, & Tager-Flusberg, 1999). The concern is that if their recommendation is not followed, the child will remain in a state of semilingualism. Semilingualism is a when a person has two languages, neither of which is developing and

do not meet the communicative and academic needs of the individual to fully participate in his/her surroundings. In fact, both languages may be regressing (Duncan, 1989). This, of course, would leave a child unable to comprehend abstract concepts in either language and usually spells academic failure.

However, a number of other experts argue that for many who have always spoken more than one language or who must speak two languages in order to function in all domains, cutting out one language is highly impractical and potentially damaging (Genesee, Paradis & Crago, 2004; Kohnert & Derr, 2004; Guitierrez-Clellan, 1999). In addition, Guitierrez-Clellan (1999) notes that bilingualism in no way slows language acquisition. Those that would argue otherwise compare the development of sequentially bilingual children to that of monolingual children. This appears to show that in their second language, the bilingual children have depressed language skills. However, if the total language competence of the bilingual children in all languages they speak is taken into account, their language skills are sound (Guitierrez-Clellan, 1999, Stow & Dodd, 2003). Additionally, at times when a child appears to have inadequate language skills in L2, it is simply because they need more time to become comfortable speaking the target language in a new context. Therefore, an assessment given too early can garner a false picture of the child's language competence.

Determining Language Dominance

Perhaps in an effort to avoid the specter of semilingualism, some researchers argue that language dominance should be determined in order to choose the language(s)

of instruction for a language disordered child. Those who are determined to have a language other than English as their primary language should receive remediation in that language (Ortiz, 1984, Genesee, Paradis, & Crago, 2004). Kayser (1995) argues that because attitudes of the dominant culture in the U.S. are often not positive toward native language use by non-native English speakers, it is far more crucial that instruction be given in a child's first language and instruction in English is helpful but not as imperative because the child is unlikely to get L1 reinforcement elsewhere. However, other researchers have asserted that language is far from static, and that language "dominance", if that term can even be appropriately used, is more of a continuum (Guitierrez-Clellan, 1999). All people with more than one language have areas of strength and weakness in both languages, and often the language that the person is stronger in overall will vacillate throughout a person's life. Therefore, once it is determined that a person has two languages, remediation should be given in both even if English appears to be the stronger language (Kohnert & Derr, 2004). Whether language dominance is determined or not, most experts agree that remediation in a child's first language is imperative.

Therefore, if a person who has two languages is in need of speech-language therapy in two languages, a bilingual approach should be used. Experts identify a number of ways of going about a bilingual approach. If a bilingual Speech/Language clinician can be found, as is best (Juarez, 1983), speech pathology can be conducted in the child's first language, and other school subjects can be taught in English (Guitierrez-Clellan, 1999).

Speech/Language Therapy in Two Languages

Kohnert and Derr (2004) identify two basic approaches to language remediation in two languages: the bilingual approach and the cross-linguistic approach. The bilingual approach, as Kohnert and Derr use the term, focuses largely on what the two languages have in common. A speech-language therapist who is employing this approach may concentrate on the information processing necessary for all language use, such as categorization techniques or naming tasks. Another part of this approach is to focus on the ways in which the two target languages are similar, that they, for example, both use suffixes to inflect verbs, or perhaps to highlight the use of a set of cognates.

A cross-linguistic approach, in brief, focuses on what is different about the two target languages. With this approach, the Speech/Language clinician will focus on one language in any given session. So, the clinician may help the child with the subject-verb-object word order in English in one session, and the subject-object-verb order of his/her first language in another. As Kohnert and Derr (2004) suggest, a clinician may choose to use both a bilingual and cross-linguistic approach with a child to achieve language goals.

Of course, finding a bilingual speech-language clinician is often not possible (Kohnert & Derr, 2004; Stow & Dodd, 2003). In such a case, a few options remain. Parents should be an integral part of any remediation team, but in the absence of a bilingual speech-language professional, parents can be trained in basic techniques to help the child in their first language at home (Guitierrez-Clellan, 1999; Kayser, 1995; Genesee, Paradis & Crago, 2004). Also, the monolingual speech-language therapist will need to be skilled in the use of translators and bilingual paraprofessionals (Kohnert & Derr, 2004; Juarez, 1983). In fact, Juarez (1983) writes that when treating bilingual

students, a monolingual speech-language clinician should focus on training others, like bilingual aides, in speech-language techniques rather than on conducting speech-language therapy sessions with the child him/herself.

Cultural and Affective Issues

In treating bilingual children with SLI, teachers and clinicians need to contend with cultural and affective issues in addition to the linguistic challenges. Stow and Dodd (2003) note that there are likely long-term negative effects of providing inadequate service to bilingual children with SLI. As Rice, Sell, and Hadley (1991) determined in their research, even among pre-school children, relative communicative competence is used as a marker for social attractiveness. Non-native English speakers and those with SLI were least likely to initiate interaction or be the recipient of initiation by a peer. Clearly, as both populations are at risk, children who are both non-native English speakers and have SLI are doubly so. Ensuring that children are ready and able to learn requires a “low affective filter,” meaning that the learner is motivated, feeling low anxiety, and has high self-esteem to motivate him/her to learn a second language (Krashen, 1982). Bruck (1982), for example, suggests that the success of the bilingual children with SLI that she studied was in part due to the positive attitudes held by stakeholders toward both the first and second languages of the children. Experts suggest a number of ways to bring about such a positive environment.

For one, teachers should learn all they can about the child’s home culture. This can be done by talking to the child and family in depth about ways they have noticed that their home culture differs from the majority culture. One can read and observe to

determine preferred modes of learning and interaction. Also, explicit attention should be paid to modes of interaction that are culturally bound so that children can learn both types of behavior and use them where appropriate. In addition, adults from the child's home culture can be involved in classroom activities (Barrera, 1993).

Classroom activities that incorporate several cultural perspectives are also suggested. Stow and Dodd (2003) condone the use of culturally appropriate clinic equipment, for example, toy food and cooking utensils representative of that used in the target culture. Other ideas include building a multicultural calendar, incorporating folk tales from the target culture into lesson plans, or asking children to bring in items unique to their home cultures to discuss them (Cheng, 1989).

SLA and Learning Disabilities

While the available research provides good data on many of the issues surrounding bilingual children with SLI, virtually nothing exists specifically to guide the ESL teacher in proper teaching techniques. Guidance on how to educate children learning English as a second (or other) language with learning disabilities does exist, however. As SLI is associated with language disabilities, it is appropriate to look to the body of literature on bilingualism and learning disabilities to gain insights on best practice.

The suggested approaches for educating bilingual children with learning disabilities are only slightly different from what is suggested for teaching normally developing children who are limited English proficient. Researchers stress parent and community involvement, cooperative learning strategies, and comprehensible input.

(Winzer & Mazurek, 1998; Cummins, 1984; Baca & Almanza, 1991; Collier, 2004).

They also recommend that a child's culture be reflected in class materials and suggest that teachers promote a positive class environment which encourages a low affective filter and the development of self-esteem. They tend to favor an interactionist approach rather than a lecture-recitation oriented approach (Winzer & Mazurek, 1998; Cummins, 1984).

A few of the approaches suggested by these researchers, while effective for typically developing students and native speakers of English, are more specifically focused on the particular needs of limited English proficient students with learning disabilities. For example, Winzer and Mazurek (1998) stress that teachers should target skills that will be immediately useful to the child. Because a child with a learning disability may not ever master all of the English language's complex forms, that which the child can use in the present should be primarily addressed.

Authors addressing this topic also purport that tasks should be broken down into as many discreet steps as possible and that it should never be assumed that a child will learn something implicitly addressed in class. When telling time, for example, a teacher should not assume a student will infer that the hour is the first number stated, but instead the teacher should break the task down to its smallest subtasks and each step should be taught explicitly (Collier, 2004). Pragmatics of language also, such as making requests, greetings and leave takings should be taught explicitly. As these forms are often culturally predicated and difficult for many children with learning disabilities, they should be taught overtly (Winzer and Mazurek, 1998).

In chapter three I describe my plans for conducting a case study on a bilingual child with SLI who is receiving speech-language therapy and ESL services. To do this, I incorporate what is known about how to service such children and by creating and testing new approaches. In chapter four I report on the results of the study and in the final chapter I detail limitations of the study and make suggestions for future research.

CHAPTER THREE: METHODS

The purpose of this study was to explore effective means of teaching learners of English as a second language with Specific Language Impairment (SLI) within the ESL classroom. Specifically, how can an ESL teacher and a Speech/Language pathologist (SLP) collaborate to serve a bilingual child with a language impairment? To that end, qualitative research was used blending elements of a case study design and an action research design. In this chapter, the research methods and the procedure used for data collection and analysis in this study are described.

Research Design

The results of this study were gathered through qualitative research methods. This is appropriate in large part because the inductive research methodologies used in qualitative research are ideal for conducting research in areas where there is a lack of theory (Mirriam, 1998). Such is the case here. This study is a hybridization of the two primary approaches to qualitative research: action research and case study (Miriam, 1998). I chose this unique approach for several reasons. First, children who have SLI and are bilingual have a set of needs and difficulties significantly more distinctive than a typically developing child, certainly, and more, even, than a child who may come from one of either group. Therefore, identifying effective techniques to address the needs of one child rather than that of a whole group was considerably less problematic and suited the size and scope of this study. Thus, a case study design was appropriate. Secondly, as

there is a lack of existent theory or research on what ESL teachers should do to best teach bilingual students with SLI, it is critical to develop an approach to teaching the child and then test the efficacy of that approach. This begged an action research approach. Finally, by combining the two basic approaches, I was able to use triangulation to its best effect by choosing the best sources of data from both designs to ensure the internal validity of my results (Mirriam 1998).

A Case Study Research Design

A case study research design was appropriate for this research in part because the information I sought was qualitative. The best approach for a child with SLI in the ESL classroom is not something that can be quantified, but is something that is unique to each child and each situation. The information I gleaned from this research was very contextualized and a qualitative approach allowed me to focus on the underlying meaning beneath my results. (Mirriam, 1998). Additionally, using a case study as the primary means of data collection permitted me to focus on the process of the research and learn and adjust as the research progressed. This allowed me to access unique knowledge particular to this child and this set of circumstances that I would not otherwise have had access to (Mirriam, 1998). Additionally, because a case study design allows the reader an in-depth view of a particular setting, those readers can make informed comparisons to other settings. The reader therefore, can “determine how closely their situations match the research situation, and hence, whether findings can be transferred” (Mirriam, 1998, p. 211).

An Action Research Study Design

As Cohen and Manion (1994) state, action research is primarily “an on-the-spot procedure designed to deal with a concrete problem located in an immediate situation” (p. 192). A case study design was used to gather data to determine the “concrete problems” to be dealt with in the study. The intent of the study was not to merely identify problems, however, but to posit and test solutions. Thusly, action research methods were used to develop approaches to mitigate the test subject’s language problems within the ESL classroom, and those approaches were used and tested within that context. This study differed from traditional action research design in that the research was not conducted by me on my own students in my own classroom. Therefore, it was imperative that I maintain close communication with all participants in the study, but most particularly with the ESL teacher, and observe closely the data gleaned by the study as it emerged. In that way, I was able to engage in the constant monitoring and fine-tuning of the study that denotes action research. (Cohen & Manion, 1994). I maintained this communication and observation through a variety of means: examination of a variety of evaluations of the student, direct observation, and conversation with the child’s ESL teacher, his Speech/Language pathologist, and my capstone advisor.

Site

The context for this study was a Midwestern public elementary school serving prekindergarten through fifth grade. At the time of this writing approximately 585

students attend this school. As almost three-quarters of the student population qualify for free or reduced-price lunch, it is clear that most of the students come from low-income households. The student body population is identified as one-third white American, one-third African American, and one-third Hispanic American. The Asian American and Native American populations at the school are both less than one percent of the total. The staff is overwhelmingly Caucasian. Nearly a quarter of the student population receives ESL services but only nine percent receives special education services, including Speech/Language services.

The school uses a number of different nationally known academic programs in its classrooms including Everyday Math, Houghton Mifflin Reading, Accelerated Reading and Accelerated Math. The school has a technical focus which is brought to bear through an annual science fair and through participation in a math, science, and engineering program for girls. The school has a special program for native Spanish speakers called “NLL” or “Native Language Literacy.” At this point there are three Speech/Language clinicians on staff and one ESL teacher.

The school building itself is neither small nor large and quite modern. There are two floors and the hallways are wide and carpeted. The school is climate-controlled and the windows do not open. The library is the central focus of the building as it is a high ceilinged room that one could see into through floor to ceiling windows as one walks into the building. The two wings of the building radiate from the centrally located library.

Participants

The student I observed is an American born male. I refer to him throughout the capstone as Pedro (not his real name). He was in the third grade and nine years old as of this study. His parents are Mexican and speak Spanish in the home. Pedro is the youngest of five children and his nearest sibling is six years older than he is.

I was able to glean the following anecdotal information about Pedro from his ESL teacher and Speech/Language clinician. Pedro's initial referral for Speech/Language services came four years ago from his pre-school teacher, but his parents appear to have also been concerned about his language development. His mother was very concerned about his Spanish-speaking ability. She has also been worried about his conduct. Two years ago she shared in an IEP meeting that she thought that his special education setting was a bad influence on him. At school he is known as a well-behaved child and is generally pleasant in class. At home, Pedro has difficulty talking to his mother in Spanish and will often ask his older brother to translate for him. Both Pedro's ESL teacher and Speech/Language clinician believe Pedro is semilingual, or unable to communicate effectively in either English or Spanish. In both English and Spanish, they shared, he has a poor vocabulary and has trouble using terms specific enough to convey his meaning. He will often answer questions inappropriately and miss details. His decoding skills are quite good, as is his pronunciation of both English and Spanish, but his use of articles, verb conjugation and tense in both languages is poor. He has difficulty using gender properly in Spanish also, a language feature which is not in English.

Data Collection Techniques

Data in this study came primarily from field notes and interviews. To ensure validity of results, triangulation was used to gather data from a number of sources. Also, it must be noted that all protocol for research using human subjects was followed and that the research subject's identity will remain anonymous.

To guide the research, I gathered as much information as possible on the child being studied in order to identify the language errors to attempt to remediate within the ESL classroom. To that end, I first analyzed Pedro's standardized test results. I looked over the results of the tests administered by the special education assessment team determining that he was eligible for special education services. I also gathered and reviewed Pedro's English language acquisition assessments; namely the Student Oral Language Observation Matrix (MN-SOLOM) (Minnesota Department of Education Website) and the Language Assessment Scales (LAS) (CTB/McGraw-Hill). I examined his individualized education plan (IEP) to determine what his stated goals were as determined within his last IEP revision meeting. Bearing in mind that documents are not infallible sources of information, (Mirriam, 1998) I also discussed with Pedro's Speech/Language Pathologist and ESL teacher what types of errors they were primarily concerned with to ensure that all sources of information were in agreement on the best set of difficulties to concentrate on.

Once a set of language difficulties was determined, I observed four of Pedro's sessions with his Speech/Language therapist within an "observer as participant" model. This means I was not actively participating in the classroom activities, but my role in the

classroom was known to both the student and the teacher I was observing (Mirriam, 1998). These observations were relatively unstructured and attempted to take in all of what went on in the classroom, from the physical setting to my own behavior in that context. However, I attempted to pay particular attention to several things. Specifically, I asked myself: What activities does the speech pathologist use to address the identified set of language problems? Which of these approaches seem most effective? And finally, how does the speech pathologist address the child's first language? I gathered field notes during those observations for review. I collected direct quotes and noted the types of activities and interactions that the child and the therapist engaged in. Also, I charted Pedro's acquisition of a set of vocabulary words, the identified area of language difficulty, within a matrix.

Next, I observed Pedro two times within his ESL classroom. Again, I gathered field notes on the proceedings, again noting the types of activities engaged in by the class and the child in question. I used an "observer as participant" model in this context as well. I also gathered direct quotes that illustrated Pedro's particular language difficulties and noted how those difficulties were addressed within the ESL classroom. In this context also I paid particular attention to how the teaching of vocabulary was addressed, what seemed to be effective in teaching Pedro, and how his first language was attended to. As in the observation in the Speech/Language pathology classroom, I recorded Pedro's acquisition of the target vocabulary words in an observation matrix. I also assessed his acquisition of the words in the unit with a final "matching" test.

At this point, I examined the collected data to determine how the area of language difficulty I was examining, vocabulary acquisition, was being dealt with in both contexts.

I also used this information to see what appeared to be most effective in remediating the problem. I used the body of research referred to in my Literature Review and the expertise of a Speech-Language professional, Pamela Telleen, to design a set of teaching techniques appropriate for the ESL classroom intended to address this student's particular set of needs.

I shared the teaching techniques I designed with Pamela Telleen's help with the ESL teacher. I then observed the ESL classroom two more times, this time co-teaching with the ESL teacher using the teaching techniques designed by me and Pamela Telleen. I charted Pedro's vocabulary acquisition for this unit in an observation matrix, as I did in previous observations. After the final observation I assessed Pedro's acquisition of the target vocabulary taught using the teaching techniques designed by me and Pamela Telleen again using a "matching" vocabulary test.

Finally, I interviewed several experts. I interviewed a teacher with a dual background in Speech/Language Pathology and ESL and I interviewed the director of Speech/Language services for a large metropolitan school district. In the interviews I reviewed my results with the interviewees and gathered insights on best practice for ameliorating the issues of children with SLI by asking hypothetical, ideal position, and interpretive questions (Merriam, 1998).

The following questions are a sampling of questions asked of the dual-background teacher and the expert in Speech/Language pathology:

- Imagine an overwhelmed ESL teacher with few speech-pathology resources who has a child with SLI in his or her classroom. What would be the first few things

you would suggest he/she should do to help the child with his/her language difficulties?

- Bearing in mind personnel and resources typical of a Minnesota school, what do you think a school well suited to aid a bilingual child with SLI would look like?
- Are the results that I've found in this research what you would expect? Why or why not?

Data Analysis Techniques

As the data was gathered, it was analyzed in a step-by-step manner to continually analyze results and guide additional research. After each observation session written notes were expanded upon. This helped me to distinguish “between the essential and the non-essential” (Kvale, 1996, p 190).

During the interviews with the dual-background teacher and the director of Speech/Language services, I summarized and repeated back to the interviewees what I understood them to be saying to ensure effective communication and accurate documentation of the interview. I then encouraged the interviewees to correct and elaborate on my summarization (Kvale, 1996). The recordings of these interviews were also listened to twice each and written notes were expanded upon. The content of the interviews was then distilled to core meanings to make the information gathered succinct and as relevant as possible to the rest of the study (Kvale, 1996).

Chapter three has presented an overview of the research design, participants, setting, and data collection and analysis techniques. In the following chapter, findings

and implications the observations and interview will be presented. In the final chapter, I will discuss the limitations of the study and suggest further areas of research.

CHAPTER FOUR: RESULTS

I wanted to find out how English as a Second Language (ESL) teachers and Speech Language Pathologists (SLPs) can best collaborate to serve a bilingual child with a language impairment in their school. This chapter presents and discusses the results of the research I conducted on a bilingual child with a language impairment within his school context. The first section of this chapter outlines the process and challenges involved with finding a suitable research subject and school site. The second section reports on what I discovered in Pedro's (not his real name) files. The third section details what I observed in the student's speech language therapy sessions and in his ESL classroom. The fourth section concerns the development of the remediation techniques developed by me and Pamela Telleen and their implementation in the classroom. The final discussion section delineates the results of the summative tests given to Pedro on the vocabulary items he was taught and reports the opinions of a number of experts and stakeholders I interviewed to interpret the results of the study.

In the fifth chapter of my capstone I summarize what was learned through the course of this research, reexamine the literature review, discuss the limitations of this study and recommend future areas of research.

Identifying a Research Subject

Although I wanted very much to help Mai Ying (not her real name), the student who inspired this study and is discussed in the introduction chapter, I was not able to structure my study around her for a variety of reasons. For one, she was moving up to the high school the next year and I had no relationship with her new Speech/Language pathologist. Also, the ESL department lead at that school was unsure if she would be scheduled in ESL classes at all and, if so, who her teachers might be. In addition, I chose to move to a new and distant school district that year as I had just given birth to my first child and therefore wanted a part-time rather than full-time position.

My lack of success in teaching Mai Ying stuck with me, however, as did the knowledge that I would very likely teach more students like her later in my career. I consequently chose to engage the subject anyway, and, with the help of my primary advisor, Pamela Telleen, began to seek out another child still acquiring English as a second language who had been diagnosed with a language impairment.

Pam quickly found a willing SLP at a nearby elementary school. The Speech/Language pathologist had a list of several bilingual kids that were on her caseload for language-only services, meaning that they had language but not speech or auditory problems. Unfortunately, unbeknownst to the SLP, none of these children were receiving ESL services. As mainstream elementary school teachers are often reluctant to allow students out of their classroom for too much of the day to see various specialists, a decision was made at that school to only send bilingual children with speech or language problems to Speech-Language Pathology, and not to ESL. We resumed our search.

Soon after I started my new job, I met the Speech Pathologist at my new school. After I described my intended study, she consulted with other members of the ESL staff and discovered that there was one child on her caseload that was language impaired and receiving ESL services. The SLP was willing to participate in the study as was the child's ESL teacher. The child's mother, however, was less than enthusiastic about the study. Although the child's mother had met months earlier with the SLP and ESL teachers and signed a consent form for her child to receive "extra help" in Speech and Language and ESL classes, she expressed surprise when the translator explained what the classes were, demanded to know whether I thought her child had a "defect", threatened to withdraw her child from both classes, and refused to let her child participate in the study. (Fortunately, the mother did not follow through on her threat to remove her child from ESL and Speech and Language services.)

After this discouraging event, my advisor, Pamela Telleen, sent out a new request to SLPs to direct us to appropriate research subjects. This time we found a willing SLP who had several language impaired students in mind for the study. I walked through the school with her to meet the ESL staff and ask them personally if they would like to participate in the study. When we met the ESL teachers, though, they informed us that although the students the SLP had in mind all had two languages, none of them were in ESL.

Shortly thereafter, another SLP responded to our call for clinicians with children on their caseload that fit our criteria. This child did actually receive ESL and Speech/Language services and was diagnosed with a language disorder. However, when I went to meet with the ESL teacher and SLP, the ESL teacher stated that she did not

believe that the child had a language disorder at all and that the child's error patterns were the same as other children in her class undergoing the second language acquisition process. Hearing this made me concerned that this child would not be appropriate for the study. In addition, I discovered at that meeting that both teachers were going to be transferred to another school before the study could begin, and so chose to pursue other leads.

At the next school we tried, the SLP had two candidates in mind but soon learned that both children were likely to move to new schools within the next few months.

As the beginning of the school year approached, we tried yet another site and discovered that both the SLP and the ESL teacher were willing to participate, and the child they had in mind sounded like a good research subject. All that needed to be done was to gain consent from the child's parents. The SLP, a Spanish speaker, volunteered to contact the child's parents as they were accustomed to communicating with her. After numerous phone calls and consent letters sent home in English and Spanish were not responded to, the SLP and I decided to wait until the child's upcoming IEP meeting to pursue the matter further. Finally, 10 weeks after we initially contacted the parents, the form was signed and Pedro became the child that I would study.

Implications

As frustrating as our search process was, some interesting data emerged. What was most striking was that effective and clear communication between the Speech/Language pathologists, ESL staff, parents and students was less than ideal in all instances.

First, three of the SLPs did not know which or how many of their students were also receiving ESL services at the point that they were asked to participate in the study. Two were so certain that they had students receiving ESL services they did not bother checking with the ESL staff before agreeing to the study and were astounded to learn otherwise when the matter was pursued. Clearly, if this is the case, then the SLPs and ESL teachers at these sites were not in close communication, and were certainly not meeting to discuss particular students that they have in common.

Second, in at least one instance the SLP and ESL teacher at a site were not in agreement about the child's diagnosis as language impaired and, presumably, therefore, how the child's language problems should be addressed. As this difference of opinion was not known to the SLP until our meeting, it is safe to assume that this would likely have been otherwise not discussed.

Next, the mobility of both students and teachers was an issue in a number of cases. At one school two teachers were being transferred within the district and at another two students were moving to new schools, precluding them all from participation in the study. In both instances teachers, students, and parents all had the challenge of starting over the next year to build relationships and open lines of communication to ensure optimal service for the students.

Finally, at my own school site and at the site where I finally did my research some disturbing failures of communication between the schools and parents were revealed. In the case of the child I attempted to study at my own school, it certainly seems that there was a communication breakdown when the child's mother originally consented to have her child in Speech/Language pathology and ESL. Pedro's SLP tried valiantly to contact

his parents with regard to the study with no success for ten full weeks. In both cases, a number of things, including language and cultural barriers and busy family and work lives kept messages from flowing freely between parents and the schools.

The Files

I reviewed Pedro's initial evaluation results with his SLP. Pedro was tested at the age of 5 years and 2 months. His evaluation was conducted in English and Spanish using the Test of Auditory Comprehension of Language or TACL (Carrow-Woolfolk, 1999), and the Preschool Language Scale III or the PLS-3 (Zimmerman, Steiner, & Pond, 2002). Questions were posed to Pedro in English and then, if he did not respond, were posed again in Spanish. Responses in Spanish or English were accepted at any time. Pedro's receptive language was evaluated as that of a normally-developing 1.11 year old and his expressive language as that of a 2 to a 2-and-a-half year old. Pedro's Spanish and English scores were combined and he was given a total score.

Pedro's SLP explained to me that in the school district in which Pedro attends school, dual language children do not have to be a certain number of standard deviations below the norm to qualify them for speech and language services as do English-only children. Rather, clinicians use their "best judgment" when determining if dual-language children should receive services, as these tests are not normed on them.

There is a high likelihood that Pedro's initial special education evaluation test results were accurate because he was tested in all the languages to which he was exposed, as researchers recommend (Stow & Dodd, 2003; Genesee, Paradis, & Crago, 2004.) In

addition, the use of “best judgment” rather than strict adherence to standard-deviation rules follows with best practice. As language competence is spread across known languages those on an assessment team must be cautious when interpreting results of assessments because results may appear depressed as compared to monolingual peers in both or all languages (Genesee, Paradis, & Crago, 2004).

Pedro was tested in 2003 using the Language Assessment Scales or LAS (CTB McGraw-Hill). The LAS is a standardized test intended to assess English language proficiency in non-native speakers of the language. He did not have a more recent LAS score in his file. Scores are divided by percentile levels into nine groups assessing English reading and writing proficiency, nine being a high score and one a low score. Pedro received a score of LAS 1. This indicates that at the time the test was administered Pedro’s English language proficiency was quite low even compared to non-native English speaking peers.

Interestingly, Pedro’s 2007 Student Oral Language Observation Matrix (MN-SOLOM) test scores give a much different picture of his English language proficiency (Minnesota Department of Education Website). The MN-SOLOM is a test of oral language proficiency required by the state of Minnesota to be given to limited-English proficient students. The MN-SOLOM breaks oral English language proficiency into five areas and a teacher familiar with the student will score each area of proficiency from one to five. A score of five indicates that in that specific area of oral English proficiency the child’s language output is on par with natively English speaking peers. In each of the categories of academic competence, fluency, vocabulary, pronunciation, and grammar Pedro was given a four, and in social competence he received a score of three. Clearly,

the teacher who administered Pedro's MN-SOLOM test believed Pedro's oral English proficiency to be quite high.

In Pedro's individualized education plan (IEP) his stated IEP goals were to be at seventy-five percent accuracy or above for three objectives. First, Pedro was to be able to understand and use a list of 10 curricular vocabulary words. As the words were mastered, new words were to be introduced. His second goal was to answer "wh-" questions related to his curriculum with a rate of accuracy of seventy-five percent or above. His final goal was to re-tell stories using appropriate sequencing, vocabulary, and details with seventy-five percent accuracy or higher.

Observations in the Speech and Language Therapy Classroom

Upon reviewing Pedro's files and discussing the matter in a meeting with his SLP, his ESL teacher, and my capstone advisor, I decided to focus on his IEP goal of acquiring 10 new vocabulary words per lesson. Pedro's SLP and ESL teacher were in agreement that Pedro has difficulty learning and using new vocabulary. My intention was to observe how the SLP and ESL teacher addressed vocabulary in Pedro's lessons and to eventually design and implement a lesson plan targeting vocabulary acquisition for the ESL classroom. The lesson plan would borrow techniques from Speech/Language pathology to attempt to improve Pedro's vocabulary acquisition overall.

Soon after this meeting, I began observing Pedro in his Speech/Language therapy sessions. During those four observations, I attempted to take in as much of the lessons, interaction, and context as I could within an "observer as participant" model. I paid

particular attention to each time Pedro used the target vocabulary. I also differentiated between spontaneous and programmed uses of the vocabulary.

Pedro's SLP informed me that the lesson plan framework she used to target Pedro's IEP goals are taken from an academic program that her school staff was trained in to improve achievement and build vocabulary. The instructors of this program used an amalgamation of several teaching approaches including Bringing Words to Life (Beck, McKeown, & Kucan, 2002), Text Talk (Beck & McKeown, 2001), Improving Comprehension with Think-Aloud Strategies: Modeling What Good Readers Do (Wilhelm, 2001) and QAR now: Question Answer Relationships (Raphael, 2006).

In this lesson plan framework, the teacher first selects key vocabulary from a classroom story and does a pre-test. The teacher asks the student to define words that he/she knows. The story is then read and the key words are pointed out while reading. The teacher may ask content questions about the story and then the student is post-tested on the key vocabulary.

During the first and second lessons, Pedro's SLP used the aforementioned lesson framework to address key vocabulary from the story "The Keeping Quilt" taken from the textbook used in his ESL classes, Rewards: Anthology Level 3.1 from the Houghton-Mifflin: Reading series. (Cooper & Pikulski, 2004).

The First Speech/Language Therapy Lesson

The SLP began the first lesson by asking Pedro if he knew the story “The Keeping Quilt”. He said that he did not. The SLP then showed Pedro the first page of the story and he changed his mind. The SLP therefore decided to proceed with the story.

The teacher began by writing the following nine words on the white board and asked Pedro to copy them: “border,” “gathering,” “needles,” “scraps,” “sewn,” “threaded,” “babushka,” “quilt,” and “wedding huppa.” Pedro’s teacher informed me that she chose these and all her key vocabulary for Pedro by finding words in the text that are either crucial to understanding the story or are high-frequency words.

The teacher asked in sequence if the student knew the words and, if so, she asked him to define them. Pedro knew two words, “gathering” and “quilt”. (See Table 4.1). The teacher proceeded by reiterating which words Pedro knew, which he did not know, and which he had an idea about the meaning of. The teacher then asked Pedro to read the story introduction in which the key vocabulary words were used. Pedro read sentence-by-sentence and at each target vocabulary word the teacher would stop him and ask him to explain the meaning of the word or she would explain it to him. The following is a typical interchange:

The student reads: “Sometimes they use large scraps to make a border around the edges of a quilt.”

T: “What’s a border?”

S: “To give them space.”

T: “Let’s read that again.”

Student reads: “Sometimes they use large scraps to make a border around the edges of the quilt.”

TABLE 4.1 Timeline of Student Vocabulary Acquisition for “The Keeping Quilt” X= Not addressed

	Beginning of lesson 11/27/06 (assessing prior knowledge)	While reading story intro 11/27/06	Beginning of lesson 11/28/06	While reading story 11/28/06	End of lesson 11/28/06
Vocabulary					X
Border	<i>Doesn't know</i>	Student thinks a border has something to do with “giving space”. Teacher asks him to point to the border on the quilt 2x, can't do it. Gives other examples, student understands	<i>Knows</i> Is able to point to several borders in the room	Teacher reinforces the word “border” in context, doesn't ask student to define. Student uses word to answer a question 1 time (incorrect answer)	
Gathering	<i>Knows</i> “put together and eat at a table”	<i>Knows</i> “family and friends squish”	<i>Knows</i> “like being together”	X	X
Needles	<i>Doesn't know</i>	X	“something that helps you knit” “yes, or sew” (teacher)	Uses the word to answer a question 1time	X
Scraps	<i>Doesn't know</i>	<i>Doesn't know</i> Says 2 times that scraps make designs.	Knows scraps of paper, doesn't know scraps of cloth.	“those are like papers you use for drawing designs” Teacher explains	<i>Knows?</i> “It's the thing for to put designs on a quilt. Papers”
Sewn	<i>Doesn't know</i>	<i>Knows?</i> Pronounces “soon”; shows that he knows it involves needles and is like knitting	Mispronounces, teacher does not test his understanding		<i>Knows?</i> “It's like you're knitting”
Threaded	<i>Doesn't know</i>	X	<i>Doesn't know</i> “threaded is like to apart” (teacher explains)	Teacher explains in context, doesn't ask student to define	<i>Knows</i> “to get the strings through the needle”
Babushka	<i>Doesn't know</i> Knows a different definition (“grandma”)	X	<i>Doesn't know</i>	Doesn't know Knows a different definition (“grandma”) Teacher explains Uses word to answer question 1 time. Answers a question with the word in it 1 time.	X
Quilt	<i>Knows</i>	<i>Knows?</i> Teacher explains again, doesn't ask student to define.	<i>Knows</i> “It's like a blanket”	Answers a question with the word in it 3 times. Uses word to answer a question 4 times. (1 time incorrectly)	X
Wedding Huppa	<i>Doesn't know</i>	X	<i>Doesn't know</i>	Uses word to answer a question 1 time.	<i>Knows</i> “[What's a] wedding huppa? ... “What do people do under it?” “They get married.”

T: “So what’s a border? Where’s the edge of the quilt?”

The student points to the middle of the quilt on the textbook page.

T: “Is that the edge or the middle?”

S: “Middle.”

T: “Ok, here’s the edge. Where’s the border?”

The student points to the middle of the quilt again.

T: “It’s this purple part.”

Teacher runs finger around the purple border of the quilt.

S: “Why didn’t they make it like rainbow?”

T: “I don’t know, they could have. So a border is something that goes around the edge of something.”

The teacher points out several things in the classroom with borders, including the table, the wood frame on the whiteboard, a small border design on the edge of the page, and the quilt again.

Student says, “oh, yeah, this black thing!” and points to the edge of the table and tried to find a border on the chair but decides there isn’t one. Student was also able to point to the border design on the page when the teacher described it.

This exchange typifies a number of patterns that emerged in Pedro’s language-therapy lessons. First, Pedro’s SLP used pantomime, pictures from the text, and real items in the classroom to try to illustrate concepts. She also often drew pictures or

diagrams on the white board, something not seen in this example. Pedro and his SLP also engaged in a lot of intensive dialog to negotiate the meaning of the word “border” as they did for most words. The classroom was rarely quiet and Pedro and his SLP talked in very equal amounts.

At the end of the first lesson, after Pedro had read through the entire story introduction and the SLP and Pedro had talked about the use of each key word in context, the SLP informed the student that he would read all the key vocabulary that he had learned that day in a story during the next lesson.

The Second Speech/Language Therapy Lesson

At the start of the second lesson, Pedro’s SLP informed me that Pedro’s ESL class was not, in fact, at that point working on the story “A Wedding Quilt” as she had thought. As Pedro was halfway through the lesson, she decided to proceed in teaching him the story anyway.

The teacher began the lesson by asking Pedro to look in the notebook in which he had written all of the target vocabulary words the previous day and asked him to define the words. Pedro knew three words; “border,” “gathering,” and “quilt.” Pedro did not know “babushka” or “wedding huppa.” For the remaining four words, Pedro gave an ambiguous answer or needed prompting to arrive at an answer. (See Table 4.1). When he had trouble remembering, the teacher asked Pedro leading questions to help him arrive at the correct answer or explicitly defined the word for him.

After reviewing the target vocabulary, Pedro read the story “A Wedding Quilt” and touched each target vocabulary word with his finger as he found it in the text. The SLP periodically asked Pedro story comprehension questions.

At the end of the lesson the SLP reviewed the meaning of several of the words that Pedro did not know; “scraps,” “sewn,” “threaded,” and “wedding huppa.” Pedro demonstrated good understanding of the word “threaded” by defining it as “to get strings through the needle,” but gave somewhat ambiguous answers for the remaining words. (See Table 4.1). The teacher dismissed the student.

The Third Speech/Language Therapy Lesson

In this lesson the SLP moved on to another story in the Rewards: Anthology Level 3.1 text, “Miss Rumphius.” (Cooper & Pikulski, 2004). She again followed the lesson plan framework mentioned earlier: do a pre-test, explain new vocabulary, read the story and identify words in context, and then do a post-test. All testing within the Speech/Language classroom was oral and informal.

The teacher began the lesson by asking Pedro to copy all the target vocabulary words from the white board into his notebook: “sparkle,” “delight,” “scattered,” “patches,” “curious,” “surrounded,” “bloomed,” “catalog,” “bushel,” and “flung.” (See Table 4.2). The teacher then asked Pedro which of the words he thought he might know. Pedro said that he thought he might know the word “surrounded,” but was unwilling to say that he knew any of the other words.

TABLE 4.2 Timeline of Student Vocabulary Acquisition for “Miss Rumphius” (continued next page) X=not addressed

	Beginning of lesson Speech-Pathology 12/4/06	Middle of lesson Speech-Pathology 12/4/06	End of lesson Speech-Pathology 12/4/06	Beginning of lesson Speech Pathology 12/5/06	Middle of lesson 12/5/06 Speech Pathology (While reading the story)	End of SLP lesson 12/5/06 (T: “What are words that were hard?”)	ESL Class 12/6/06	ESL Class 12/8/06	Final Matching Test 12/11/06	Vocab Retention Test 2/1/07
Vocabulary										
Sparkle	<i>Claims he doesn't know</i>	<i>Knows</i> is able to identify things that sparkle: lights, rings, stars, shiny things, ornaments, with little prompting	<i>Knows</i> It's that things are shiny might sparkle, like lights, ornaments, stars, rings, glass.	<i>Knows</i> “Sparkle is like shiny stuff like ring, glass, stars,maybe some computers.”	<i>Knows</i> Is able to say that the sun is sparkling		(Not part of the ESL target vocab)	“ “	<i>Correct</i>	<i>Correct</i>
Delight	<i>Claims he doesn't know</i>	<i>Knows</i> is able to use it in a sentence and define it as “happy and excited” with little prompting	X	<i>Knows?</i> Misdefines as “scatter,” then defines as “excited and happy, maybe a little crazy”	<i>Knows</i> “Excited and happy” (read from the board)		(not part of the ESL target vocab)	“ “	<i>Incorrect</i>	<i>Correct</i>
Scattered	<i>Claims he doesn't know</i>	<i>Claims he doesn't know again</i> , then with a little scaffolding is able to define it as “throwing it in different directions”	<i>Knows</i> “to throw in different directions” (reads from the board?)	<i>Knows</i> “Throw in different directions.”	<i>Knows</i> “throw in different directions” (read from the board)		(not part of the ESL target vocab)	“ “	<i>Incorrect</i>	<i>Correct</i>
Patches	<i>Doesn't know</i>	doesn't know and doesn't understand well after teacher explanation	X	Doesn't know Teacher explains	<i>Knows?</i> Is able to identify that Miss Rumphius saw “a little piece of land” [patch of land] More teacher explanation	Doesn't know? S: “Can you show me “patches”?” Teacher explains	(not part of the ESL target vocab)	“ “	<i>Correct</i>	<i>Correct</i>
Curious	<i>Claims he doesn't know</i>	<i>Likely knows</i> , is able to identify “curious” with Curious George and is able to say he is “curious about science and reading” after teacher explanation	X	<i>Knows</i> “It's like I wanna learn more about stuff, like I'm curious about science.”	<i>Knows</i> “You want to learn or discover more” (read from the board)		(not part of the ESL target vocab)	“ “	<i>Correct</i>	<i>Correct</i>

TABLE 4.2 CONTINUED Student Vocabulary Acquisition for “Miss Rumphius” X=not addressed

	Beginning of lesson Speech-Pathology 12/4/06	Middle of lesson Speech-Pathology 12/4/06	End of lesson Speech-Pathology 12/4/06	Beginning of lesson Speech Pathology 12/5/06	Middle of lesson 12/5/06 Speech Pathology (While reading the story)	End of SLP lesson 12/5/06 (T: “What are words that were hard?”)	ESL Class 12/6/06	ESL Class 12/8/06	Final Matching Test 12/11/06	Vocab Retention Test 2/1/07
Vocabulary										
Surrounded	<i>Knows</i> draws a picture of a “surrounded” person	X	X	<i>Knows</i> “It’s like when people, like when you get stuck in the middle.”	<i>Knows</i> identifies that Miss Rumphius’ house is surrounded by rocks		(Not part of the ESL target vocab)	“ “	<i>Correct</i>	<i>Correct</i>
Bloomed	<i>Claims he doesn’t know</i>	Likely understands after teacher explanation. Is able to say that bloom means flowers “open”	X	<i>Knows?</i> First, “I don’t know what is that.” But is able to remember that it means a flower opens after some teacher prompting			<i>Knows?</i> P: (to teacher) “What’s “bloomed” again?” Later: “I think it’s when flowers open.” Later: “What’s bloomed again?”		<i>Correct</i>	<i>Correct</i>
Catalog	<i>Claims he doesn’t know</i>	<i>Doesn’t know</i> “Never heard of it” teacher explains and he is able to tell us he gets “horror movie catalogs.”	<i>Knows?</i> “It’s like a thing you want to shop for”	<i>Knows?</i> Forgets at first, is able to say “It’s like a book when you want to shop for stuffs” after the teacher reminded him that I had one the previous day			(not part of the ESL target vocab) T: “Pedro, what does “glory” mean?” P: “I don’t know, is it a catalog?”	“ “	<i>Correct</i>	<i>Correct</i>
Bushel	<i>Doesn’t know</i>	Teacher explanation, doesn’t test student’s knowledge	X	Teacher explanation, doesn’t test student’s knowledge		<i>Doesn’t know?</i> “A bushel is... I don’t know.” Is able to say that T: “Miss Rumphius bought bushels of...” S: “seeds”	<i>Doesn’t know</i> P: (to teacher) “What’s bushel?” Teacher responds P: “I don’t know what you’re talking about.”		<i>Incorrect</i>	<i>Correct</i>
Flung	<i>Claims he doesn’t know</i>	<i>Knows?</i> Is able to tell a story about flinging a pencil after teacher explanation	X	<i>Knows?</i> Says, “that’s the only one I don’t know” but then says “Oh yeah, it’s like throw stuff, like when you do this to a pencil” (pantomimes flinging)	<i>Knows?</i> T: “What is she flinging?” S: “seeds”		<i>Knows</i> P: “It’s like you throw something across the room!”		<i>Correct</i>	<i>Correct</i>

The teacher spent the majority of the twenty-minute session going over each word in sequence and discussing its meaning with Pedro. The SLP used a variety of techniques to explain new concepts to Pedro, including asking him to illustrate a concept on the white board rather than explain a word orally, asking him to list things that sparkle rather than define the word “sparkle,” and reminding Pedro of instances in which he had read certain words in previous lessons. As in prior lessons, she also pointed to items in the classroom, used pantomime, made drawings, explicitly defined words and used words in sentences to illustrate their meanings.

About three-quarters of the way into the session, a student with whom Pedro sometimes shares a speech-pathology session entered the classroom. This student proved to be a somewhat disruptive force in the classroom. Pedro, fortunately, did not also engage in off-task questions and behavior after the arrival of the other student. Pedro still talked more in the class than the other student, but the amount of time that Pedro spent talking was reduced by roughly half after the arrival of the other student.

At the end of the lesson, the SLP reviewed a few of the words; “flung,” “scattered,” “catalog,” and “sparkle” with the students. She then dismissed them.

The Fourth Speech/Language Therapy Lesson

In this session Pedro was again the only student. The SLP structured the lesson as she had previous lessons. She began by reviewing the ten vocabulary words from the story “Miss Rumphius,” asking the student to read the story and point to the target vocabulary words as he read, and asking comprehension questions as Pedro moved

through the story. As the session ended before the SLP got a chance to review the target vocabulary words after reading the story, she skipped this step.

Implications

During the course of my observations within Pedro's Speech/Language therapy classroom a number of issues arose that bear mentioning. For one, I expected to see new and different approaches to language instruction and was surprised to discover that Pedro's SLP used many approaches that I have used in my own ESL teaching and that I was unfamiliar with none of the approaches. It is clear that the techniques she was using are not specific to Speech/Language pathology especially as the lesson plan framework the SLP used was taken from a training given to the entire school staff and not just to SLPs or special education staff.

In fact, the "mainstream" techniques used to select vocabulary words to meet Pedro's IEP goal may have neglected some areas of his lexicon that are necessary for full communicative competence. The words chosen by the SLP and later by the ESL teacher as target vocabulary words were all nouns, verbs and adjectives. Pronouns, adverbs, conjunctions, prepositions and interjections are often not explicitly taught to typically developing monolingual children as they are expected to naturally acquire them. Non-native speakers of English and language-impaired learners, however, cannot be expected to discern the meaning and usage of such words without direct instruction and practice. If Pedro's IEP goal is intended to improve his total vocabulary and communicative competence, these types of words cannot be overlooked.

The SLPs choices regarding the language of instruction were interesting also. Although many researchers (Kohnert & Derr, 2004, Juarez, 1983, Guitierrez-Clellan, 1999) strongly advise that a child's L1 be addressed in his/her speech therapy sessions, Pedro's SLP, a fluent Spanish speaker, conducted the sessions almost exclusively in English. Pedro's SLP explained to me that because Pedro's Spanish skills were so undeveloped, she believed it to be more helpful to him to conduct his sessions in English. In part to illustrate her point, in the first language therapy session she used Spanish to explain the word "sew" in the following excerpt:

Pedro read from his text: "A quilt is made of two layers of clothes sewn together using needles and thread."

T: "What does it mean to sew something?"

S: "I forgot, I can see it. It's like you knit."

T:" It's like "coser". You know "coser" in Spanish?"

S: "Ah, with needles."

T: "Yes. So, what's sewing?"

S: "Layers, clothes, clothes"

In this interchange, although Pedro ostensibly agreed that he knew the meaning of the word "coser," it is not clear that he truly did understand the word. As knitting is also done with needles, it is uncertain whether the introduction of the Spanish word for "sew" shifted the concept in Pedro's head from yarn and 10-inch-long needles to cloth, thread,

and a 1-inch-long needle. His final comment that “sew” means “layers, clothes, clothes” leaves one no more certain that Pedro at that point, understood. In fact, even in the last instance in which the SLP asked Pedro to define “sew” in the second observation, he still likened it to knitting. While this exchange is not proof that Pedro’s speech therapy sessions either should or should not include the use of Spanish, it is evident that the use of Spanish in this instance did not dramatically improve Pedro’s ability to comprehend a new concept.

As in the instance above, Pedro gave responses throughout the speech therapy sessions I observed that were difficult to interpret and failed to unequivocally show that he either did or did not understand a word. In the teacher-student interchange from the first Speech/Language session in which the teacher and the student negotiated the meaning of the word “border,” for example, I had great difficulty guessing what Pedro’s thought processes were. Why did he point to the middle of the quilt twice, for example? Pedro’s guess as to the meaning of “border,” “to give them space,” is typical of many responses he gave that were certainly not accurate definitions, but may have been somehow connected to the target vocabulary. Had Pedro been taught in his mainstream classroom at some point to respect the borders of others’ personal space, perhaps? Unfortunately, these presumed connections often seemed beyond Pedro’s ability to explain.

Observations in the ESL Classroom

The ESL room was medium-sized with a window and a group of tables gathered in the middle of it around which all the students sat. There were a total of ten students enrolled in the class. Pedro was the only Spanish speaker in the class. Four other language groups were represented in the class.

The First ESL Lesson

In this particular lesson, six students were present. The class was working on the story “Miss Rumphius” from the Rewards: Anthology Level 3.1 text (Cooper & Pikulski, 2004). The class had initially read the story two days prior. Pedro’s Speech/Language pathology sessions are scheduled during his ESL class, so Pedro was reading the story with the SLP at the time his classmates were reading the story in the ESL class. That particular lesson happened to be the fourth speech-therapy lesson that I observed.

The teacher started the lesson by asking the class content questions about the story. He then wrote the target vocabulary words on the overhead projector. Unlike the Speech/Language pathologist, the ESL teacher took the target vocabulary words out of the teacher’s manual. Therefore, the word list differed. The three words that were common to both lists were “bushels,” “bloomed,” and “flung.” The other words on the ESL class’ list were “glory,” “lupines,” “hollows,” “headlands,” “satisfaction,” and “bothering.” All told, the ESL class had nine target vocabulary words for the story.

After writing the target vocabulary words on the overhead, the ESL teacher read through the list of words with the students one-by-one. He asked students to volunteer the meaning of “bloomed” and defined the words “bushels,” “satisfaction,” “flung,” and

“bothering” for the students. He then asked “who doesn’t know a word?” Pedro and two other children raised their hands immediately. The teacher defined the word “headlands” for Pedro and “hollows” for another student.

The teacher then moved the students on to doing seatwork. He passed out papers that the students had begun working on in a prior lesson. Pedro was several steps behind because he had been in his speech pathology lesson when the other students had begun their worksheets.

The teacher stopped over to Pedro after passing out all of the papers and explained to him what he was to do. On a small, portable white board, the teacher wrote “Miss Rumphius” and the date at the top of the board and the author’s name and a squiggly line at the bottom of the board. The teacher explained to Pedro that he should write all of these things on his paper, that the squiggly line represented where his name should be written, and that he should illustrate the main idea of the story with a picture in the middle of his paper. Pedro wrote all the words on his paper that he was required to write, but did not draw a picture

Other students in the class were alphabetizing the list of target vocabulary words and drawing a picture next to each to illustrate it. Pedro eventually moved on to this task and managed to alphabetize his list with one mistake; he switched the words “bushel” and “bothering.” Pedro had time to draw pictures next to two words, “bloomed” and “bushel” before the class ended and the teacher dismissed the students.

The Second ESL Lesson

During this lesson, five out of the ten enrolled students were present. The teacher began the lesson by asking the five students to sit on the floor in front of him. The teacher sat in a chair. The teacher informed the students that they had two choices: to “mess around,” or to work hard and play games and have candy at the end of the class. The students voted to work hard.

The teacher then drew a student from the floor to role-play the introduction to the story. He spoke to the student as though he was her father and she was Miss Rumphius to review the main points of the introduction. He then prepared to re-read the story to the students, and reminded them to think about what happens in the beginning, middle, and end of the story. The teacher then read the story and digressed four times to add information to further clarify something from the story.

After finishing the story, the teacher wrote ten difficult words from the overhead on the story. He explained to the students that they were to re-tell the story in five sentences. The teacher explained to me that he wrote the difficult words on the overhead not because the students were required to use them in their retellings, but because he thought they likely would use those words and he wanted to avoid spelling them for individual students many times. Before telling the students to begin, the teacher offered the students a piece of candy if they did a good job with their first sentences, and a second piece of candy if they did well with the whole assignment.

The ESL teacher then dismissed the students from their seats on the floor to sit in their places around the table and work. The teacher checked in on the students individually as he passed by them, as they finished with their work, or as they asked for his help. Pedro sat in front of a blank piece of paper for some time and claimed he did

not know what to write. Finally, after some prompting from me, he began to work. After writing, “This story is about a old lady,” he raised his hand and he and the teacher had the following exchange:

P: (to teacher) What is the first thing she had to do? I know the second thing.

T: Well, what’s the second part?

P: What’s the second one? Come back home and make a house by the sea?

T: Ok, so where’d she come back from? She went around the....www

P: World?

T: yeah!

Pedro wrote a few sentences and then raised his hand again:

P: can we make the third thing is “make the world pretty” or what?

T: “Make the world pretty?” you can use your own words, that’s good.

P: or “glory”!

T: you can’t say “glory” you have to say “glor-i-ous”

Pedro raised his hand for help three more times before the end of class. For each sentence he tried to get teacher approval before writing. When Pedro finally finished his writing, it looked like this:

“The story is about a old lady. Her father told Her to do 3 things. 1st Travel around the world. 2nd is to live by the OCEan or sea. The 3rd thing is make the world glory. She did all the work.”

It is interesting that despite the fact that the teacher had told Pedro to use the word “glorious,” Pedro still used the word “glory.” The teacher gave Pedro a score of three out

of three for the assignment. After this free working period, the teacher dismissed the students.

Implications

During the course of my observations within Pedro's ESL classroom, I was able to note not only the approaches that the ESL teacher used, but I was able to compare the ESL and SLP classrooms and observe further how Pedro learned new concepts.

As in the speech-language pathology classroom, Pedro's first language, Spanish, was not used or addressed during my observations. As five different language groups were represented amongst the students in the class, use of Spanish as the language of instruction would have been impractical. The room did have wall decorations representing myriad cultures, including Spanish speaking cultures. During my observation the materials used did not reflect Mexican or Latin American culture, but the class text did have a multicultural scope. One can only presume that a story with a Mexican or Latin American theme will be read by the class at some point.

Through my observations, it became clear that the chief advantage of the SLP classroom is its private, one-on-one setting. This was largely because the setting allowed for constant feedback and individually tailored lessons. It was interesting to note that even though Pedro's ESL teacher called on him virtually every time he raised his hand, he spoke far less in the ESL classroom than in the SLP classroom. In fact, I had much less data to refer to from the ESL context than the speech pathology context to chart Pedro's acquisition of new vocabulary words. This was because Pedro's opportunities to

use and define new words within ESL classroom discussion were limited by the needs of nine other students to participate in class discussion as well.

The ESL teacher relied on written work to evaluate students to a much greater degree than the SLP did. As the larger class size in the ESL room made garnering frequent individual responses from each student difficult, this was a good technique for evaluating students. Unfortunately, Pedro seemed to respond much better to an oral, conversational approach. Pedro's unwillingness to write much of anything before first talking with the ESL teacher in the second observation in the ESL classroom supports this.

Although Pedro was largely engaged in the ESL class and was far from the least well behaved student, he engaged in considerably more off-task behavior than he had in the speech pathology classroom. He fidgeted far more and needed to be re-directed by the teacher several times, something that never had to happen in the speech pathology classroom. The ESL classroom seemed, in some ways, to be a somewhat more difficult place for him to learn. It is interesting that the addition of one off-task student within the SLP room was not enough to distract Pedro, but nine other students, three or four of whom were particularly difficult to manage, was enough to cause a deleterious effect on his behavior and focus. Even though Pedro was not especially focused in his ESL class, it is important to point out that his "affective filter" as defined by Stephen Krashen (1982) was relatively low in both contexts. Pedro raised his hand or engaged in conversation at virtually every opportunity, indicating that he was not stressed, self-conscious, or unmotivated in either class.

Through my observations in both classrooms, I discovered that the ESL teacher and SLP at this school did a far better job of meeting and sharing pertinent information with each other than did many of the teachers through whom I attempted but failed to find a research subject. The very fact that these teachers knew that Pedro was receiving both speech and language services and ESL was a significant step above what I saw from most school sites when seeking out a research subject. In addition, Pedro's ESL teacher and SLP shared materials and discussed students and curriculum when they met in the hallway or at lunch. As good as their communication was, some areas of improvement remain.

For example, the SLP informed me that she sometimes relies on Pedro to tell her what story he is working on in ESL if she did not get the chance to communicate with his ESL teacher. In the first lesson the SLP asked Pedro if he was reading the story "Miss Rumphius" with his class, and he gave a hesitant "yes." In the second lesson the SLP informed me that she had learned from another source that Pedro and his classmates were not yet, in fact, working on the story "Miss Rumphius." Pedro himself seemed to be an unreliable source for lesson coordination information.

In addition, although the ESL teacher and SLP were supporting one another's curriculum by using the same textbook and trying to coordinate their lessons, Pedro's classroom teacher was not making a similar effort to coordinate. She chose to continue using the text from the previous school year even though the Rewards: Anthology Level 3.1 text that the SLP and ESL teacher were using had been adopted for the whole school (Cooper & Pikulski, 2004). One can only assume that this additional source for reinforcement of vocabulary would have benefited Pedro and his classmates.

Also, even though Pedro's SLP and ESL teacher did coordinate their lesson plans for the most part, they chose different target vocabulary for the same story, "Miss Rumphius." Both teachers argued that the vocabulary lists do not need to match as all the words are from the story, explained within their classrooms, and used in context. Therefore, both lists are meeting Pedro's IEP goal. As logical as this argument is, the following excerpt from the first observation in the ESL classroom shows that this may not be an optimal approach:

P: (reads aloud) "Glory!"

T: "Is this Glory the teacher?"

All: "No."

T: How do you know that, Pedro?

P: "'cause we just read the story and that's what the speech teacher told me."

Teacher points out that their teacher's name needs a capital G, and the word they are learning needs a lower case g.

T: "Pedro, what does "glory" mean?"

P: I don't know is it a catalog?

Teacher pauses for a moment.

P: "That's a word that should be up there, too."

It is abundantly evident that Pedro wanted to share what he'd learned in his Speech/Language therapy session, and was confused that there were new vocabulary words to contend with in this context. By defining "glory" as "catalog," a word from the Speech/Language list, Pedro appeared to be trying to demonstrate his prior knowledge of the difficult words in the story as well as account for the meaning of a new vocabulary word that he had not studied. In addition, the comment, "that's a word that should be up there, too" illustrates that Pedro expected that the key vocabulary words from his SLP

classroom would be the same as those in his ESL classroom. During other portions of the lesson, Pedro enthusiastically defined two of the three words that overlapped the target vocabulary list from the SLP room; “bloom” and “flung,” in one instance shouting out the meaning without raising his hand even though the teacher had not asked if anyone could define the word. This, too, shows Pedro’s excitement to demonstrate the vocabulary knowledge he acquired in the SLP room in a new context.

If the SLP and ESL teacher continue to have different vocabulary lists for the same story, Pedro’s confusion will need to be addressed. In either context, if Pedro expresses perplexity because the lists do not match, the teacher should overtly explain that there are two different word lists for each classroom for the same story. As Pamela Telleen explained to me, language disordered children cannot be expected to make inferences, new concepts need to be made explicit. Telleen’s suggestion correlates with the methodologies for teaching bilingual students with learning disabilities suggested by some researchers (Collier, 2004; Winzer and Mazurek, 1998).

Pedro similarly appeared to be uncertain as to what he knows and does not know. In the course of the second speech-language pathology observation, Pedro was asked ten story comprehension questions during the lesson and got seven of them wrong on the first try. Five of the questions Pedro got wrong on the first try he got right on the second try with very little prompting from the SLP. Usually she would simply say, “Really?” or “No...” and simply knowing that his first guess was incorrect was enough to help Pedro access the right answer. He seemed to rely more on the SLP to filter right or wrong answers rather than on his own cognitive abilities. Also, a number of times, especially in the ESL classroom, Pedro would raise his hand to define a word and then claim he

couldn't remember what the word meant as soon as he was called on. Because he could neither determine that he did not know a word before raising his hand nor remain confident that he did know the word after being called on, I concluded that Pedro is a poor judge of what information he knows.

Pedro also demonstrated difficulty with paradigm shifts. For example, although Pedro was correct in thinking that "babushka" means "grandma," or "old woman," he seemed to have difficulty adding the additional meaning of "head covering" to his internal definition of the word. Also, Pedro had apparently had prior knowledge of the word "scrap" as related to the idea of "scraps of paper." He had great trouble expanding the meaning to mean "scraps of cloth" or little bits of anything else, for that matter. In addition, Pedro's difficulty in accepting that the set of target vocabulary words in the SLP room for "Miss Rumphius" was different from that in the ESL room evinced further problems with paradigm shifts.

Development of Teaching Techniques

After observing four of Pedro's Speech/Language therapy sessions and two of his ESL classes, I met with my primary advisor, Pamela Telleen, to design a lesson plan for the ESL classroom to target Pedro's IEP goal of learning ten new vocabulary words at a time.

Like the ESL teacher, we arrived at the conclusion that using Spanish as a means to target Pedro's goal was impractical in the ESL classroom. None of the other students in Pedro's class are Spanish speakers, Pedro's ESL teacher and I are not Spanish

speakers, and there is not a Spanish-speaking paraprofessional on staff whom we could ask to assist in the lesson. Also, the institution of a home program within the brief scope of the study would have been extremely difficult to implement and impossible to measure. Therefore, we agreed that the lesson we designed should be entirely in English.

First we agreed that in order to measure Pedro's progress, I should design and administer an assessment tool to formally gauge Pedro's acquisition and retention of the "Miss Rumphius" vocabulary to assess the efficacy of current approaches. Later I would design a similar test for the story that the ESL teacher and I would use. The test would list all of the target vocabulary on one half of the paper and their meanings as they were defined in the SLP and ESL classrooms on the other. Pedro would be expected to draw a line from each word to its definition.

In addition, Pam and I agreed that I should create a simple pre-test for the set of vocabulary words that the ESL teacher had selected for the next story, "Celebrating Chinese New Year." The intention was that the results of the pre-test could be compared to Pedro's final test to determine the effectiveness of the remediation lesson plan.

As the techniques used in the SLP room were such that might be used in any ESL or mainstream classroom, Pamela Telleen recommended the use of some techniques that are unique to speech-language pathology. In addition, as few recommendations exist for how best to teach dual-language children with language disorders outside of a bilingual or L1 approach to language remediation, integrating approaches that were being used in the SLP room into the ESL lessons seemed the most effective course of action.

I expressed my concerns to Pam about Pedro saying "I don't know" too frequently and pointed out evidence of his inability to accurately judge which words he

did and did not know from my observation notes. Pam agreed that was a problem and recommended the Speech/Language pathology approach of using a carrier phrase for use in both the ESL and Speech/Language pathology contexts to help him with these issues. A carrier phrase is a technique used within Speech/Language pathology that helps a student use new words correctly and place them within a context by giving the student a sentence or phrase in which only one or a few words will be changed each time. The particular carrier phrase that Pam suggested was “I know what _____ is, _____ is _____.” So, if Pedro said he did not know the meaning of a word that a teacher believed he likely did know the meaning of, the teacher could ask him to use the carrier phrase to help him access the definition in his mind. For example, “I know what delight is, delight is excited and happy.”

Pam and I talked further and agreed that helping Pedro learn to extract meaning from context would help him build his vocabulary on his own and might give him more confidence that he does understand new vocabulary. We decided that I should design a lesson in which students learn to guess the meaning of a word that is missing from a sentence. In such a way, Pedro and his peers could learn to derive meaning from the words and sentences around a new, unknown word.

Finally, Pam and I agreed that in addition to learning to extract meaning from context, we needed to find a way to help Pedro and his peers learn and remember the particular words on the target vocabulary list. Pam suggested another technique that she had used within her own Speech/Language pathology practice: kinesthetic/onomatopoeic devices. As Pam described the approach, the student is taught a mnemonic device targeting the meaning of a word which can be said concurrently with an action. The

mnemonic device helps link the word and its meaning, and the action helps to activate the student's kinesthetic memory.

After our meeting, I referred to the story in the Rewards: Anthology Level 3.1 text that the ESL class was to be studying next, "Celebrating Chinese New Year," as well as the target vocabulary list the ESL teacher had selected for the story (Cooper & Pikulski 2004). I then designed a lesson plan around the story and vocabulary words incorporating the aforementioned techniques. I apprised the SLP of our plan and asked that she use carrier phrases and kinesthetic/onomatopoetic devices in her upcoming sessions with Pedro to target the "Celebrating Chinese New Year" key vocabulary words that the ESL teacher had selected.

Implementing the Lesson Plan

The Third ESL Lesson

During this lesson, nine students were present. The ESL teacher and I co-taught the lesson, and I took the role of lead teacher. The ESL teacher began the lesson by formally introducing me to the class and explaining that I would help teach that day.

I began by showing the students an overhead projection of a horizontal line. I explained to the students that there was supposed to be a word on the line and asked them to guess what the word might be. Students guessed "day three," "name," "Gretchen," "date," "12-06," and Pedro guessed his own name, "Pedro."

I then informed the students that the word that was supposed to be on the line was banana. We noted that none of the guesses meant the same thing as banana.

I then revealed the sentence “I like to eat _____ of candy” on the overhead projector. I asked the students to attempt to guess again as to the meaning of the missing word. This time, the students’ guesses of “apple,” “cotton candy,” “a lot,” “all” “all of” and “tons” were much closer to the intended word, “lots.” Pedro’s guesses were “cotton candy” and “all of.” We noted which words were closest in meaning to “lots” and that our guesses were far more accurate this time.

I then told the students that one can figure out the meaning of a new word by looking at the words and sentences around it. I informed them that they would practice that skill in the lesson today. The ESL teacher grouped the students into writing pairs and told them that one partner would be a writer and the other an idea generator.

I passed out a worksheet (See appendix A) to each group in which they guessed the meaning of a word missing from a sentence. Each of the missing words was one of the target vocabulary words; “meal,” “unity,” “hosts,” “feast,” “chef,” “preparation,” “cooking,” and “elaborate.” The students made guesses as to a word that would fit in the blank. (See table 4.3 for Pedro’s responses.) After the groups worked together, the class reconvened to share responses to the worksheet.

Implications

This lesson went far less well than I had hoped. The students were loud and off-task and the ESL teacher needed to assist me by redirecting students several times.

TABLE 4.3 Timeline of Student Vocabulary Acquisition for “Celebrating Chinese New Year.” X=not addressed

	12/11/06 SLP conducted pre-test (researcher was not present) SLP had student explain the words he knew to demonstrate knowledge	12/12/06 Student Responses on Vocabulary-in-Contest worksheet (Student only did half as he had a partner)	12/2/06 Volunteered student in- class responses to things that would fit in the vocabulary-in-context worksheet	12/13/06 In ESL Class	12/19/06 Post-test (matching)	2/1/07 Post-test (matching)
Vocabulary	<i>Knows</i>	X			<i>Correct</i>	<i>Correct</i>
cooking meal	<i>Knows</i>	X	Turkey (written partner response: turkey)		<i>Correct</i>	<i>Correct</i>
hosts	<i>Doesn't know</i>	X	Host (written partner response: “hosts”)	<i>Knows</i> P: Host is like...people who comes over your house for Christmas and then you're the host you take care of everything. And you get everything	<i>Correct</i>	<i>Correct</i>
chef	<i>Knows</i>	X		<i>Knows</i> Chef is a person who makes food and he works at a restaurant.	<i>Correct</i>	<i>Correct</i>
unity	<i>Doesn't know</i>	Picao (sic)		<i>Knows</i> P: I'm gonna have a lot of unity...There are going to be like, 30 people come over for Christmas	<i>Correct</i>	<i>Correct</i>
preparation	<i>Doesn't know</i>	work		<i>Knows</i> P: It's like be prepared...and to be ready for something so special.	<i>Correct</i>	<i>Correct</i>
elaborate	<i>Doesn't know</i>	hard		<i>Doesn't know</i> Volunteered to define the word, but couldn't. “I can't remember.”	<i>Correct</i>	<i>Correct</i>
feast	<i>Knows</i>	eve		<i>Knows?</i> P: A lotta meal! A lotta meal! A lotta FOOD!	<i>Correct</i>	<i>Correct</i>

Although the students worked hard on the worksheet and produced some creative synonyms; “together,” “happiness” and “peace” to mean “unity,” for example, and “captains” to mean “hosts,” I was not certain that they had internalized the main point: that one can derive meaning from context. Pedro’s answers were not especially accurate, (see Table 4.3) nor was there any particular “a-ha” moment from him to indicate that he had learned a skill that he would apply later. I decided that I needed to reinforce this lesson’s main point in the next day’s lesson.

Before class I had stopped in to see the SLP to see how the previous day’s Speech/Language pathology lesson had gone. I learned that Pedro’s SLP had given him the “Celebrating Chinese New Year” pre-test I had designed and had explained the meaning of the words that Pedro did not know using the approaches I observed in her classroom previously. Unfortunately, she did not have sufficient class time to teach Pedro any kinesthetic/onomatopoeic devices for remembering the words or time to teach him the carrier phrase. I knew that Pedro would not have another SLP lesson before my study was concluded, so I decided to teach the entire class the kinesthetic/onomatopoeic devices and use the carrier phrase with Pedro if the opportunity arose.

The Fourth ESL Lesson

In the fourth ESL lesson, eight students were present. The ESL teacher and I again co-taught.

I began the lesson by teaching the students a Jazz Chant intended to reinforce and help students retain the previous day’s lesson about deriving meaning from context. The

students and I chanted, “If you don’t know the meaning of a word, stop, and read the words around it! Stop, and read the words around it!” Like the kinesthetic/onomatopoetic devices mentioned earlier, the students also were required to move in order to tap into their kinesthetic memory. So, as the students and I said “stop,” we held out their hands like traffic police officers, and as we said “and read the words around it,” we moved our index fingers around in a circle.

After practicing the chant several times, I revealed the word “perambulate” on the overhead projector and asked the students to define it. None of the students’ guesses were close to the meaning of the word. I then revealed the sentence, “I got up from my chair and perambulated over to Mr. Carpenter’s desk.” A student quickly guessed that “perambulated” means “walked,” and we re-read the sentence, replacing “perambulated” with “walked” to check the legitimacy of the guess. We determined that “walked” is a synonym of “perambulated.”

The students and I followed the same procedure to define the words “torte” and “cogitated.” Pedro guessed that “torte” meant “cake” and another student identified “thought” as a synonym for “cogitated.” After each example, the class repeated our chant, “If you don’t know the meaning of a word, stop, and read the words around it! Stop, and read the words around it!”

After reinforcing the previous day’s lesson, I moved on to teaching the students onomatopoetic/kinesthetic devices for remembering the target vocabulary. I instructed the students in each one and then we practiced several times. For example, I taught the students that “untied” and “unity” sound similar. But, while when one’s shoelaces are untied, the laces are apart, the word “unity” means all together. So, I taught the students

to chant, “Not untied, unity!” As they did so, the students were instructed to move their arms together in a bear hug and interlace their fingers at the word “unity.” (See Table 4.4 for all the kinesthetic/onomatopoetic devices.)

Table 4.4 Onomatopoetic/Kinesthetic Devices Used in ESL Observation Four

Word	Onomatopoetic/Kinesthetic Device
Meal	<i>Define:</i> breakfast, lunch and dinner are meals. <i>Device:</i> “MMMM! Meal!” Pantomime lifting a fork to mouth.
Unity	<i>Define:</i> unity means togetherness, and untied means “not together.” Remind students that they defined “unity” as togetherness, happiness, and peace. <i>Device:</i> “Not untied, unity” Bring arms together in a bear hug and interlace fingers. Point out that unity and untied have many of the same letters.
hosts	<i>Define:</i> explain that hosts are people who have a party or have guests to their house <i>Device:</i> “Welcome to my <u>house</u> , I am your <u>host</u> ” Pantomime bowing to guests and then gesturing for them to come in. Point out that house and host both start with “ho”.
feast	<i>Define:</i> explain that a feast is a really big meal. <i>Device:</i> “Eat is in feast.” Point out that the letters for the word “eat” are in “feast”. Pantomime patting a really round, full tummy after eating a really big meal.
chef	<i>Define:</i> Remind kids that they defined chef as a fancy cook. <i>Device:</i> “Chef!” Pantomime putting on a chef’s hat and chopping food.
preparation	<i>Define:</i> remind kids that they defined preparation as “the work to get ready for something,” and that “prepare” means “get ready.” <i>Device:</i> “prepare, prepare, preparation!” Tap table with hand as each word is said.
cooking	<i>Define:</i> cooking means to make food. <i>Device:</i> “cook, cook, I like your cooking!”
elaborate	<i>Define:</i> elaborate means fancy, the opposite of simple. Show them the words “simple” and “elaborate” on the overhead projector. <i>Device:</i> say “elaborate” in a fancy way. Pantomime writing the word “elaborate” in the air with index finger with lots of flourishes.

During the course of the lesson, two opportunities arose to ask Pedro to use the carrier phrase. The first time, Pedro raised his hand to define the word “host” and said he forgot the word as soon as I called on him. Immediately thereafter, by using the carrier

phrase he was able to define “host” as “people who comes over to your house for Christmas and then you’re the host. You take care of everything and you get everything.” The second time, Pedro was unable to define the word “elaborate” even when employing the carrier phrase. Unfortunately, a number of other students began blurting out comments like, “I know!” “Think!” and “It’s not working!” while Pedro was trying to use the carrier phrase. It is impossible to know if Pedro could have defined the word without the interruptions of his classmates, but it is reasonable to assume that the comments made things more difficult for him.

After defining each word, teaching the students each device, practicing several times, and asking the students to produce the devices as I shouted out their corresponding words, the teacher and I dismissed the class.

Results

In order to determine the effectiveness of the new techniques I used in Pedro’s ESL class, I administered a series of assessments. Upon the completion of the “Miss Rumphius” unit, which was the unit in which I observed both Pedro’s SLP and ESL teacher instruct him, I gave him a final “matching” test. (See appendix B for sample test.) Out of the ten words, Pedro got seven correct. He mismatched the words “delight,” “scattered,” and “bushel.” Prior to the unit, Pedro’s SLP had assessed him orally on all the words. At that point he knew one out of the ten words. (See Table 4.2.)

At the beginning of the “Celebrating Chinese New Year” unit, Pedro was given an oral assessment by his SLP in which he told her which words he already knew and

defined them for her. Prior to the lesson, he knew four out of eight words; “cooking,” “meal,” “chef,” and “feast.” In the final matching test for the “Celebrating Chinese New Year” unit, Pedro got all the words correct. (See Table 4.3)

While I was pleased by Pedro’s results on the final “Celebrating Chinese New Year” test, I was curious to know if Pedro would retain the vocabulary knowledge in the long-run. Therefore, I returned to Pedro’s school six weeks after implementing the lesson plan in his ESL classroom to re-test him on both the “Miss Rumphius” vocabulary and the “Celebrating Chinese New Year” vocabulary. I used the same “matching” test format as on the previous unit tests, but altered the position of the words and definitions on the page.

On both of these tests, Pedro scored one-hundred percent. (See Tables 4.2 and 4.3) In fact, Pedro’s ESL teacher, who proctored the tests, said that Pedro finished both tests with great speed and confidence. While I was pleased with Pedro’s retention of the vocabulary, I was surprised that he would have more confidence and quicker recall of the word meanings than he had six weeks prior. In addition, I was shocked that his test score for the “Miss Rumphius” vocabulary had actually improved a month-and-a-half after learning the words rather than staying the same or possibly declining, as I had expected. I checked with Pedro’s ESL teacher and SLP, and neither of them had reviewed the vocabulary for either unit in the interim. What could account for these test results? I consulted several experts in the fields of ESL and SLP to interpret the data.

Discussion

In order to interpret the data I gathered and to collect insights into best practice for ESL students with language impairments, I spoke with several experts. I interviewed Marilyn Fairchild, a speech-language pathologist in private practice who also has a master's degree in TESOL, Frank Cirrin PhD, lead Speech/Language pathologist for the Minneapolis Public Schools, and I spoke with Pam Telleen, my advisor, a district-wide Speech/Language pathologist in the Minneapolis Public Schools specializing in services for English language learners. In addition, I also consulted with Pedro's SLP and ESL teacher to ask their thoughts and opinions about the results of the study.

Interpreting the Results

Of course, the most pressing question I faced was why Pedro's performance on the assessments seemed to improve over time. Marilyn Fairchild, the dual background teacher, was unwilling to speculate as to why Pedro performed as he did on the assessments that I gave him, saying simply, "I don't know." Because she did not know Pedro and was not intimate with his exact diagnosis, she felt that any conclusion she might draw would be little more than a guess. I was disappointed by this, but as I, too had often been at a loss to interpret what inspired Pedro to say what he said throughout my observations, I was not entirely surprised.

Pamela Telleen, my advisor, and Pedro's SLP both later explained Marilyn Fairchild's response and Pedro's test results by saying that because language disordered children have non-typically functioning brains it is hard to know how their minds work.

Whether they will do well with the material on any given day is unsure. It is impossible to know why learning is easy one day and difficult the next. Pamela Telleen also said that teachers outside of the special education field often do not understand this, causing frustration and misunderstandings.

Because Marilyn Fairchild did not know Pedro, she suggested that I speak with Pedro's SLP and ask her how she interpreted the results. I did so, and Pedro's SLP stated that while she was not surprised by the results, she also had no answers for them, citing the difficulty in knowing how language impaired children think.

However, as our conversation progressed, I wondered aloud if Pedro's poor performance on the first "Miss Rumphius" post-test and subsequent improvement on other tests could simply have been because the "Miss Rumphius" test of 12/11/06 was the first test that he had ever taken using that specific test format. Perhaps once Pedro was familiar with the test format he performed well and, the more familiar he became, the faster and more confident his responses were.

Pedro's SLP agreed that this was a possible and logical explanation for Pedro's performance. Frank Cirrin, lead SLP for Minneapolis Public Schools, also agreed that this was a plausible explanation for the results I gathered. He also pointed out that even though the SLP and the ESL teacher did not actively review the stories or target vocabulary words between the time that I administered the first and second set of tests, it is impossible to rule out any exposure Pedro may have had to the words or concepts outside of the experiment that may have improved or reinforced his understanding of the words resulting in perfect scores on the two final tests.

In any case, judging from Pedro's high scores on both final tests, it appears that he is learning and retaining vocabulary. The challenge now is to consistently choose target vocabulary words that are unknown to Pedro and to increase the pace at which he learns them.

One way to address these issues is to further improve communication between his SLP and ESL teacher. As I noted earlier, in the first observation in the ESL classroom, Pedro expressed confusion that the target vocabulary words for the ESL class were not the same as those his SLP taught him. If the SLP were to choose a list of words from a story, verify that they are all new words to Pedro, and then communicate that list to his ESL teacher for reinforcement in his classroom, this could perhaps improve the rate at which Pedro acquires new vocabulary.

Currently, Pedro's ESL teacher and SLP are discussing students and curriculum when they can as they meet in the hallway or at other unscheduled times. Pedro's SLP told me that she tries to discuss and agree on target vocabulary for students when she meets with ESL and mainstream teachers. As is noted above, this coordination is not happening on a consistent basis, likely because the unstructured nature of the contact between the teachers inhibits consistent, effective communication.

Pedro's SLP expressed a desire to have "teaming" time with teachers with whom she has students in common to bring about this consistent exchange of ideas. She recalled a program she was involved in at another school in which time was built into the school schedule by the administration for the special education team to meet together on a weekly basis. Such a program across academic disciplines for teachers with students in

common would ensure that teachers communicate regularly about curriculum and programming choices for at-risk students.

Frank Cirrin also noted that education for dual-language children with language impairments could be optimized if ESL teachers and SLPs had regular meeting times together. In addition, he suggested that if teachers were to attend staff development trainings together, they could be addressing teaching challenges from a shared perspective. Such a common understanding of terminology, best practice, and teaching philosophy could do a great deal to improve communication between teachers and thusly, improve the effectiveness of teaching practices for students.

As effective as “teaming” and common staff development trainings might be in improving communication between SLPs and ESL teachers, the decision to fund such initiatives lies almost entirely with administrators. Fortunately, at least one option for improving communication still lies in the hands of the teachers themselves.

Mr. Cirrin, for example, feels strongly that SLPs should be observing in the classrooms of the students they service. This is in order to ensure that their interventions are targeting real-life communication tasks that the students are being called on to do in the classroom. Unfortunately, as he noted, many classroom teachers are territorial or afraid of criticism and are therefore unwilling to allow other teachers into their classrooms.

Pedro’s ESL teacher has the opportunity to circumvent these issues by extending an invitation to Pedro’s SLP to observe in his classroom, rather than waiting for a request to be made. Pedro’s SLP could then clearly see which communicative functions she could target in her therapy sessions, and concerns about territoriality or discomfort would

be neatly sidestepped. As Pamela Telleen notes, it would be similarly beneficial if the ESL teacher could observe the SLP working with the child. The SLP could also help to improve communication and instruction by issuing an invitation for the ESL teacher to observe.

The question remains, however, once optimal communication is established between the ESL teacher and SLP, what teaching strategies are best and in which classrooms should each be used? Frank Cirrin noted that the interventions I implemented in the ESL classroom with the help of the ESL teacher appeared to be effective in improving Pedro's performance on a "matching" test. So, it must be assumed that teaching how to derive meaning from context, onomatopoeic/kinesthetic devices and carrier phrases are all sound strategies effective at targeting Pedro's vocabulary acquisition.

In addition, the approaches that the ESL teacher and SLP were using also had a high degree of effectiveness in helping Pedro learn and retain new vocabulary. After all, he scored one hundred percent on both matching tests administered six weeks after the units had been completed.

As effective as the strategies used to address Pedro's acquisition of English vocabulary, Spanish was not addressed by me, Pedro's ESL teacher or by his SLP. All three experts that I spoke with, Frank Cirrin, Marilyn Fairchild, and Pamela Telleen, said that the implementation of a home program is a good strategy for addressing deficits in L1. If Pedro's SLP does not use Spanish in the Speech/Language room, then the ESL teacher and SLP should collaborate to implement a home program in which Pedro's parents receive basic coaching to attend to Pedro's Spanish language needs at home.

I found it interesting that, in the end, the approaches that I observed being used in the SLP room were all strategies that I have used in my own ESL classroom, and that the interventions Pamela Telleen and I designed for the ESL classroom were borrowed, by and large, from Speech/Language pathology. Is it a problem that we had essentially “swapped” disciplines?

In my conversation with Marilyn Fairchild, who has Master’s degrees in both Speech/Language pathology and ESL, I commented that the onomatopoeic/kinesthetic devices Pamela Telleen suggested reminded me of approaches I have used in my own classroom but have called “TPR,” or total physical response. Ms. Fairchild agreed that the approaches are essentially the same, and pointed out that carrier phrases and cloze exercises, a strategy often used in ESL classrooms, are also basically the same. Although this is anecdotal evidence, it leads me to believe much of what ESL teachers and SLPs do to address language issues are essentially equivalent. Thusly, Pedro’s ESL teacher and SLP can and should freely exchange approaches that are effective in improving Pedro’s vocabulary, as the desired outcome is the same in both contexts and the approaches are unlikely to be out-of-keeping with other procedures already in place.

In addition, such an exchange would broaden the number of strategies being used to target a single issue, much as the study itself did. Because four language professionals were targeting Pedro’s language issues instead of just two, as is usually the case, Pedro’s SLP and ESL teacher now have three additional effective strategies to use with Pedro; a language-in-context Jazz Chant, onomatopoeic-kinesthetic devices, and carrier phrases. If Pedro’s ESL teacher and SLP were to communicate on a regular basis about strategies

they are using, the number of effective approaches being used in either context would be doubled.

Along similar lines, while the written work that Pedro's ESL teacher used to evaluate him and the oral informal approach the SLP used helped gather useful assessment data, the results of this study show that the "matching" test format is one that Pedro does well with. This testing method should be incorporated into the existing assessment approaches being used to ensure data is gathered in multiple ways through multiple modalities testing, as much as possible, both Pedro's receptive and expressive knowledge of words.

In the following chapter I will summarize the findings of this study, and discuss possible implications. In addition I will discuss limitations of the study and recommend future research projects.

CHAPTER FIVE: CONCLUSION

In chapter four, the results of the study were reported and analyzed to answer the research question, “how can an ESL teacher and a Speech/Language clinician collaborate to serve a bilingual child with a language impairment?” In chapter five limitations of this study will be discussed as well as possible further areas of research that the study has brought to light. Also, the findings of this study are summarized and implications for the practice of ESL teachers and speech-language pathologists, or “SLPs,” are reported.

Reflections

In general, I was quite pleased with the results of this study. While I was never able to satisfactorily help Mai Ying, the student who inspired this study, Pedro’s vocabulary acquisition appeared to benefit from the interventions that Pamela Telleen, my advisor, and I developed. I know that my practice has improved as a result of this study and that the next time I have a student in my class who has a language impairment, I will be well equipped to address his or her particular learning needs by drawing upon best practices.

I was also pleased that, at least to a certain extent, I saw evidence that the teaching strategies I used in the ESL classroom were effective in reaching other students as well as Pedro. When I returned to the classroom six weeks after teaching the students, they began spontaneously reciting the “vocabulary in context” chant I taught them as soon as I walked in the room. The very fact that they had the chant in their active memories

implies that they also have the information contained in the chant readily at their disposal.

Other data I gathered on the rest of Pedro's class revealed more ambiguous results. I tested the entire class on their acquisition of the "Celebrating Chinese New Year" vocabulary, which is the unit I taught them. Pedro was one of only three students who earned a perfect score on the test. Two students who were particularly badly behaved during the lessons earned no points on the test. In fact, the test results seemed to break down by the degree to which the students had been actively engaged in the lessons I taught rather than by English language proficiency. One student in particular who is new to the country and usually struggles with vocabulary participated enthusiastically in the lessons and earned a perfect score on the test. These results, while not reflective of what one must do to help bilingual children with SLI specifically, serve as a good reminder that a wide variety of techniques should be used throughout the school year to engage many learners with a wide variety of learning styles.

Limitations and Recommendations for Future Research

My biggest regret in this study is that I was not able to study the way in which Pedro's first language, Spanish, is addressed at school. Prior to my study, Pedro was receiving first language help in a literacy class taught in Spanish to native Spanish speakers. Shortly after I completed my study, a decision was made by Pedro's teachers and parents that he should only attend ESL and not the Spanish class because the Spanish class was proving far too difficult for him. Because I am not a Spanish speaker and did

not have the time or resources, I was not able to observe Pedro's Spanish class for my study.

Because Pedro's Spanish skills were so badly undeveloped, his SLP, although a fluent Spanish speaker, decided not to use a bilingual approach in her therapy sessions with Pedro. Therefore, I was also not able to see how Spanish was addressed in this context, either. Although several researchers (Kiernan & Swisher, 1990; Perozzi, 1985; Perozzi & Chavez-Sanchez, 1992) have found that a bilingual approach can help children learn faster in L1 and L2 than in L2 alone, it is unknown whether this approach would help a child whose first language is in such poor condition that he cannot communicate with his mother in their native tongue. Further research needs to be conducted into at what point, if any, a first language no longer merits "rescuing."

The question remains why Pedro's Spanish is so badly undeveloped in the first place. A number of researchers have argued that the addition of a second language may disrupt or slow the development of the first language in language impaired children, consequently, remediation should occur in L1. (Miller, 1984; Toppelberg, Snow, & Tager-Flusberg, 1999) Would Pedro's total English and Spanish proficiency be better today if he had received Speech/Language pathology in Spanish from the time that his language impairment was identified? It is impossible to know for certain. Further research into the efficacy of L1 remediation in improving a child's total language proficiency needs to be conducted.

Along similar lines, research needs to be done into how many language disordered bilingual children in a given area are actually receiving Speech/Language services in L1 and L2. Although a bilingual approach has been shown to be best practice,

(Gutierrez-Clellan, 1999) factors such as insufficient availability of bilingual SLPs is likely to be limiting the number of children who are receiving bilingual speech-language services. The fact that Pedro, a child whose SLP is actually a fluent speaker of his native language is still not receiving remediation in L1 makes me concerned that the number may be woefully low.

This research was limited for a number of additional reasons. For one, my summative assessment showed that Pedro was able to match target vocabulary words to their definitions, but the test could not show if the words became part of Pedro's active vocabulary. Although designing a valid, reliable summative test to record spontaneous usage of target vocabulary is difficult, if I had the opportunity to do this again, I would design a story retelling activity in which Pedro looked at pictures and retold the stories to see which of the vocabulary words he used spontaneously and correctly.

Another reason that the research was limited was because I did not sufficiently research teacher reasoning when choosing target vocabulary. Pedro's SLP chose vocabulary based on whether they were "crucial to the story or relatively high-frequency words." Pedro's ESL teacher used the target vocabulary listed in the textbook. In both cases, words that Pedro already understood prior to the lesson were kept in the target vocabulary. Is it most expedient to expand Pedro's vocabulary by reviewing known words in this way? Are words from all parts-of-speech included in target vocabulary lists using these approaches? Are there more commonplace words from the story than those chosen for the lists that Pedro still does not know? In the ESL context, is it worthwhile to pre-test all students and eliminate words known by all students from a target vocabulary list? Finally, are either of the methods being used by Pedro's ESL teacher and SLP the

best way to choose words that are most likely to help Pedro function in his classroom and his life?

Several other factors also limited this study. For example, Pedro's language disorder is not severe. His ESL teacher and SLP were already doing an effective job of teaching him the target vocabulary words. It is difficult to show improvement in a situation in which the current conditions are already good. It may be that the methods used by me and Pedro's current teachers would be unsuccessful with a child whose language is more disordered.

For this reason, among others, further research needs to be done under similar conditions. At nearly all the schools I encountered while seeking a research subject, conditions appeared to be much worse for bilingual language disordered children than at Pedro's school. Judging from this, instruction needs to be improved for many children. Additional studies such as I did with new research subjects in new contexts would help to improve that instruction. In addition, as the body of literature on this subject is still quite small, (Genesee, Paradis, and Crago, 2004) more studies of this nature would help fill a significant information gap in best practice in teaching such children.

One reason that conditions appeared to be worse for bilingual language impaired children in the other school sites I contacted was because many of those children were receiving speech-language pathology to the exclusion of ESL, likely because the district in which I did the research does not use an inclusion model. Research needs to be done comparing the educational outcomes of bilingual language impaired children who are receiving only SLP, only ESL, and those that are receiving both.

Finally, a question that I asked in the introduction chapter remains unanswered. Salameh, Hakansson, and Nettelbladt (2004) found that the language-impaired children they studied were delayed in the development of both their first and second languages. Should such children be kept perpetually in ESL? I posed this question to Frank Cirrin and he replied that this question is a research question in itself. He suggested that an empirical study should be conducted comparing the state standardized English proficiency test scores of a group of bilingual children with SLI and a control group of normally-developing bilingual children. This could help determine if state standardized tests should be used as a benchmark for exiting language impaired students from ESL or if other measures should be relied upon exclusively, for example, student and parent opinion, class grades, and teacher reports.

Implications

Reflection upon this study has uncovered some positive steps ESL teachers and SLPs can take to improve instruction for bilingual children with language impairments.

First, at the very least, ESL teachers and SLPs must find out what other specialists and teachers their students see. It is impossible to separate with certainty language difficulties a child may have due to his or her language impairment from those that he or she has because of the second language acquisition process. Neither should the child's ESL and SLP services be conducted in isolation.

Secondly, once it is established that a child in ESL is receiving Speech/Language services, the ESL teacher should ask the SLP to explain all the child's IEP goals and

invite him or her into the ESL classroom to observe. In this way the ESL teacher can begin to incorporate the child's IEP goals into his/her instruction and the SLP can begin to design language interventions around language tasks actually being used in the ESL classroom.

Also, the ESL teacher and SLP should lobby the school administration to build time into the school schedule for them to regularly meet. They should also ask for common staff development trainings to ensure that they are targeting language problems from a common perspective. ESL teachers and SLPs can use whatever meeting time they are able to arrange to coordinate on curriculum choices and make certain that their lessons are reinforcing one another.

Finally, ESL teachers and SLPs should coordinate ways to address the child's first language. If the SLP happens not to be a fluent speaker of a child's L1 the ESL teacher can aid in finding ways to address the child's L1. ESL teachers often work closely with bilingual paraprofessionals or other bilingual staff. Consequently, ESL teachers can introduce such people to the SLP and facilitate communication between them. Also, as ESL teachers often have means in place of effectively communicating with students' parents, he or she could aid the SLP in the establishment of a home program in which the parents are instructed in speech-language techniques to use with their child in their native language. (Guitierrez-Clellan, 1999; Kayser, 1995; Genesee, Paradis & Crago, 2004)

Summary

I recognize that some of the recommendations I make in this capstone are much easier to say than to actually do. Convincing a school's administration to build time into the school schedule for joint ESL/speech pathology meetings, for example, is very challenging. The main point, though, is that ESL teachers and SLPs must communicate with one another in order to best service bilingual students with language impairments. Every effort ESL teachers and SLPs make to foster a collaboration is likely to yield positive results for the students they service.

Providing language remediation in L1 is also a great challenge in many instances. But again, whatever steps that can be made in this direction, however small, are helpful. Classroom activities reflective of a child's culture, for example, can make a positive impact on a child's learning even if utilizing a bilingual or cross-linguistic approach proves too difficult.

Every limited proficient English speaker in our schools is at risk of marginalization if personnel do not advocate for him/her properly. The dual-language children in our classrooms that must contend with a learning disability are even more imperiled. It is incumbent upon ESL teachers to research new ways to ensure that each of these children receives a sound education addressing all of his or her language needs. I can only hope that my small effort on this behalf will help to improve instruction for some of these children.

APPENDIX A

Cloze Worksheet from ESL Observation Three

Name _____

Vocabulary in Context

1) Eating a _____ together on New Year's Day is really important to Ryan's family.

I think the word means:

2) Being together at Chinese New Year helps to show family _____.

I think the word means:

3) Ryan's parents are the _____ of Chinese New Year. They have all their aunts, uncles, and cousins over to their house for the holiday.

I think the word means:

4) All the food for the New Year's _____ takes many days to make.

I think the word means:

5) Ryan's father is a professional _____, so he knows how to cook really well.

I think the word means:

6) Ryan's family has to do a lot of _____ to be ready for Chinese New Year celebration. There is the cooking, the planning, and the decorating!

I think the word means:

7) Ryan's father first does the planning, the food shopping and then the _____!

I think the word means:

8) The New Year's celebration at Ryan's house isn't a simple one. It takes a lot of time and planning, so it is _____!

I think the word means:

APPENDIX B

Sample "Matching" Test

Name _____

Miss Rumphius Vocabulary

Draw a line from the word to the definition.

- | | |
|---------------|--|
| 1) sparkle | excited and happy |
| 2) curious | to throw across |
| 3) catalog | a basket a farmer would measure his crops in |
| 4) patches | a magazine you shop from |
| 5) flung | a flower opened |
| 6) delight | you want to learn or discover more |
| 7) scattered | little pieces of land |
| 8) surrounded | in the middle of something |
| 9) bloomed | shiny stuff like rings, glass and stars |
| 10) bushel | thrown in different directions |

REFERENCES

- Baca, L. M., & Almanza, E. (1991). *Language minority students with disabilities*. Reston, VA: The Council for Exceptional Children.
- Barrera, I. (1993). Effective and appropriate instruction for all children: The challenge of cultural/linguistic diversity and young children with special needs. *Topics in Early Childhood Special Education, 13* (4), 461-487.
- Beck, I., McKeown, M. (2001). Text Talk: Capturing the benefits of read aloud experience for young children. *The Reading Teacher, 55*, 10-20.
- Beck, I. L, McKeown, M. G. & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction*. New York: Guilford Press.
- Bruck, M. (1982). Language impaired children's performance in an additive bilingual education program. *Applied Psycholinguistics, 3*, 45-60.
- Carrow-Woolfolk, E. (1999). *TACL-3: Test for auditory comprehension of language*. San Antonio, TX: Psychological Corp.
- Cheng, L. L. (1989). Intervention strategies: A multicultural approach. *Topics in Language Disorders 9*(3), 84-91.
- Cohen, L. & Manion, L. (1994). *Research methods in education: Fourth edition*. London: Routledge
- Collier, C. (2004). Developing instructional plans and curricula for bilingual special education students. In L.M. Baca & H. T. Cervantes (Eds.) *The bilingual special education interface*. (p. 230-273) Upper Saddle River, NJ: Pearson Education
- Cook, V. (1988). *Chomsky's universal grammar: An introduction*. New York: Houghton Mifflin Co.
- Cooper, J. D & Pikulski J. J. (2004). *Rewards: Anthology Level 3.1*. New York: Houghton Mifflin Co.
- Cruchley, A., Conti-Ramsden, G., & Botting, N. (1997). Bilingual children with SLI and standardized assessments: Preliminary findings from a study of children in language units. *International Journal of Bilingualism, 1*(2) 117-134.
- CTB/McGraw-Hill's product summary – Language Assessment Scales reading/writing (n.d.). Retrieved April 16, 2007 from http://www.ctb.com/products/product_summary.jsp

- Curtiss, S., Katz, W. & Tallal, P. (1992). Delay versus deviance in the language acquisition of language-impaired children. *Journal of speech and hearing research*, 35, 373-383.
- Dulay, H. & Burt, M. (1974). Natural sequences in child language acquisition. *Language Learning*, 24, 37-53.
- Duncan, D.M. (1989) *Working with bilingual language disability*. London: Chapman and Hall.
- Fradd, S. H., McGee, P. L. & Willen, D. K. (1994). *Instructional assessment: an integrative approach to evaluating student performance*. Reading, MA: Addison-Wesley.
- Genesee, F., Paradis, J., & Crago, M. B. (2004). *Dual language development and disorders: a handbook on bilingualism and second language learning*. Baltimore, MD: Paul H. Brookes Publishing Co.
- Gutierrez-Clellan, V. F. (1999). Language choice in intervention with bilingual children. *American Journal of Speech-Language Pathology*, 8, 291-302.
- Juarez, M. (1983). Assessment and treatment of minority language-handicapped children: The role of the monolingual speech-language pathologist. *Topics in Language Disorders*, 3, 57-65.
- Kayser, H. (1995). Intervention with children from linguistically and culturally diverse backgrounds. In M. E. Fey, J. Windsor, & S. F. Warren (Eds.) *Language intervention: Preschool through the elementary years*. (p 323-329). Baltimore, MD: Paul H. Brookes Publishing Co.
- Kiernan, B. & Swisher, L. (1990). The initial learning of novel English words: Two single-subject experiments with minority-language children. *Journal of Speech and Hearing Research*, 33, 707-716.
- Kohnert, K. & Derr, A. (2004). Language intervention with bilingual children. In B.A. Goldstein (Ed.) *Bilingual language development and disorders in Spanish-English speakers*. (p 311-339). Baltimore, MD: Paul H. Brookes Publishing Co.
- Kohnert K. & Windsor. (2004) The search for common ground: Part II. Nonlinguistic performance by linguistically diverse learners. *Journal of Speech, Language, and Hearing Research*. 47. 891-903.
- Krashen, S. (1982). *Principles and practice in second language*. New York: Pergamon.

- Kvale, S. (1996). *Interviews: an introduction to qualitative research interviewing*. Thousand Oaks, Calif.: Sage Publications.
- Lahey, M. (1990). Who shall be called language disordered? Some reflections and one perspective. *Journal of Speech and Hearing Disorders*, 55, 612-620.
- Laing, S. P., & Kamhi, A. (2003). Alternative assessment of language and literacy in culturally and linguistically diverse populations. *Language, Speech, and Hearing Services in Schools*, 34, 44-55.
- Leonard, L. (1998). *Children with specific language impairment*. Cambridge, MA: Bradford/MIT Press.
- Lightbown, P. M. & Spada, N. (1999). *How languages are learned: Revised edition*. Oxford, U.K.: Oxford University Press.
- Miller, N. (Ed.) (1984). *Bilingualism and language disability: Assessment and remediation*. San Diego, CA: College-Hill Press.
- Minnesota Department of Education Website (n.d.) More information on the MN-SOLOM. Retrieved April 16, 2007 from <http://education.state.mn.us/mdeprod/groups/Assessment/documents/FAQ/000421.pdf>
- Minnesota Rules, 3525.1343, subpart 3A (2005).
- Miriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass Inc.
- Ortiz, A. A. (1984). Choosing the language of instruction for exceptional bilingual children. *Teaching Exceptional Children*, 16, 208-212.
- Paradis, J., & Crago, M. (2000) Tense and temporality: a comparison between children learning a second language and children with SLI. *Journal of Speech, Language, and Hearing Research*, 43 (4), 834-847.
- Paradis, J., Crago, M., Genesee, F. & Rice, M. (2003) French-English bilingual children with SLI: How do they compare with their monolingual peers? *Journal of Speech, Language, and Hearing Research*, 46, 113-127.
- Perozzi, J. A. (1985). A pilot study of language facilitation for bilingual, language-handicapped children: Theoretical and intervention implications. *Journal of Speech and Hearing Disorders*, 50, 403-406.
- Perozzi, J. & Chavez-Sanchez M. L. (1992). The effect of instruction in L1 on receptive acquisition of L2 for bilingual children with language delay. *Language, Speech, and Hearing Services in Schools*, 23, 348-352.

- Raphael, T. E., Highfield, K. & Au, K. H. (2006). *QAR now: Question answer relationships*. New York: Scholastic.
- Rice, M. L., Sell, M. A., & Hadley, P. A. (1991). Social interactions of speech- and language-impaired children. *Journal of Speech and Hearing Research*, 34, 1299-1307.
- Rice, M. L., & Wexler, K. (1996). Toward tense as a clinical marker of specific language impairment in English-speaking children. *Journal of Speech and Hearing Research*, 39, 1239-1257.
- Salameh, E. K., Hakansson, G., & Nettelbladt, U. (2004) Developmental perspectives on bilingual Swedish-Arabic children with and without language impairment: a longitudinal study. *International Journal of Language and Communication Disorders*, 39 (1), 65-90.
- Stow, C. & Dodd, B. (2003). Providing an equitable service to bilingual children in the UK: a review. *International Journal of Language and Communication Disorders*, 38 (4), 351-377.
- Thomas, W. P. & Collier, V. (1997). *School effectiveness for language minority students*. Washington, D.C.: National Clearinghouse for Bilingual Education.
- Toppelberg, C. O., Snow, C. & Tager-Flusberg, H. (1999). Severe developmental disorders and bilingualism. *Journal of the American Academy of Child and Adolescent Psychiatry*, 38(9) 1197-1199.
- Westernoff, F. (1991). The assessment of communication disorders in second language learners. *Journal of Speech-Language Pathology and Audiology*. 15 (4). 73-79.
- Wilhelm, J. (2001). *Improving comprehension with think-aloud strategies: Modeling what good readers do*. New York: Scholastic, Inc.
- Windsor, J., Scott, C. M., & Street, C. K. (2000) Verb and noun morphology in the spoken and written language of children with language learning disabilities. *Journal of Speech, Language, and Hearing Research*, 43, 1322-1336.
- Winzer, M. A., & Mazurek, K. (1998). *Special education in multicultural contexts*. Upper Saddle River, NJ: Prentice-Hall, Inc.
- Zimmerman, I., Steiner, V. & Pond, R. (2002). *Preschool language scale: Examiner's manual*. San Antonio, TX: Psychological Corp.