Language in the Classroom: Comparisons of Four Bilingual Environments

Alejandro Brice and Roanne Brice

Department of Communicative Disorders University of Central Florida, USA

ABSTRACT

Enrolment of students from varying cultural and linguistic backgrounds has increased significantly over the last few years in the United States. One can therefore assume that the changing demographics also indicates the diverse home language and culture of students entering U.S. schools today. These students exhibit various levels of functioning within the context of the U.S. school culture; specifically, they are acculturating to the school culture and also learning English. Language proficiency and academic success are dependent upon the degree to which the teachers and speech-language pathologists are capable of meeting the learning needs of students in the classroom. Teachers and speech-language pathologists may be unaware of their teaching and therapy practices, particularly their use of language. The purpose of this article is to review three studies across four environments investigating teacher and therapist language involving bilingual students.

KEY WORDS: Bilingualism, pragmatics, code switching, bilingual students.

INTRODUCTION

Enrolment of students in the United States, from varying cultural and linguistic backgrounds has increased significantly over the last few years (Bauman, 1996; Campbell, P.R., 1996; U.S. Department of Commerce, 1990). These students exhibit various levels of functioning within the context of the school culture; they are acculturating to the United States school system and they are also learning English.

Speech-language pathologists (SLPs) in schools face the challenge of how best to provide services for students who are English language learning (ELL). The issue is compounded when monolingual SLPs must provide services to students from bilingual homes. Fifty-seven per cent of certified U.S. speech-language pathologists work and serve their client caseload in a public school setting particularly in classroom environments (American Speech-Language-Hearing Association, 1999). This article will mostly address issues related to classroom instruction that speech-language pathologists (SLPs) need to be aware of in providing therapy in school environments.

Many SLPs may have had limited experience and training in evaluating and treating students who are bilingual and English language learning (ELL) (Brice & Montgomery, 1996; Cheng, 1996; Crago, Eriks-Brophy, Pesco, & McAlpine, 1997; Gutierrez-Clellen, 1996; Kayser, 1996; Kayser, 1995; Langdon & Saenz, 1996; Quinn, 1995; Roseberry-McKibbin, 1997; Roseberry-McKibbin & Eicholtz, 1994 Westby, 1997). SLPs serving school-age children face the challenge of how best to provide therapeutic services in classroom environments for those who are bilingual.

Available information about evaluating ELL students is frequently presented in the form of general principles or recommendations (e.g., using a team approach, making

naturalistic observations), but typically specific, concrete, practical, and immediately applicable suggestions are not given. Scant information is given toward treating ELL students with speech and language problems. Unfortunately, information on appropriate intervention for bilingual students lags behind assessment information (Brice & Montgomery, 1996; Cheng, 1996; Gutierrez-Clellen, 1996; Hamayan & Damico, 1991; Langdon & Saenz, 1996; Peña. Quinn, & Iglesias, 1992; Roseberry-McKibbin, 1995). Thus, school-based SLPs may use less than ideal practices when evaluating and treating ELL students who are bilingual and English language learning (Battle, 1998; Campbell, L. R., 1996; Crago, Eriks-Brophy, Pesco, & McAlpine, 1997; Hamayan & Damico, 1991; Kayser, 1996; Kayser, 1995; F., Lewis, Personal Communication, February 13, 2001; Lidz & Peña, 1996; Roseberry-McKibbin, 1995; Simon, 1991). Roseberry-McKibbin (in press) stated that many speechlanguage pathologists do not possess a foundational knowledge of normal second language acquisition and bilingualism. According to her, this knowledge is critical in effective therapeutic service delivery for bilingual students.

Bilingualism is defined in this paper as the ability to use two languages with varying degrees of proficiency and in different contexts (e.g., listening, speaking, reading, and writing) (Cummins, 1984; Skutnabb-Kangas, 1981). When students from bilingual backgrounds enter the public schools, they enter a system designed to meet the needs of an English speaking and mainstream cultural student population (i.e., white middle class), but the system may not meet their diverse language and learning needs (Brice-Heath, 1986; MacArthur, 1993). The aim of this paper is to address issues related to the provision of services for SLPs in school environments. Thus, the explicit purpose of this article is to contrast language use by school professionals

in three separate studies across four environments: (1) the English as a second language classroom, (2) the bilingual classroom, (3) the general education classroom and, (4) the bilingual speech-language therapy room. The point is to gain a better understanding of how language is used in the classroom (i.e., through the study of pragmatics and syntax), and how code-switching and code-mixing are used and may impact upon the bilingual student's learning. Sixteen strategies are provided that may be easily implemented in classroom therapeutic situations by the SLP or teacher that should facilitate language learning for bilingual students.

CODE-SWITCHING

Cheng and Butler (1989) have pointed out that, "Professionals in speech-language pathology have viewed the use(s) of... code-switching... as a symptom of language deficiency" (p. 293). Code switching, in and of itself, is not indicative of a language disorder (Aguirre, 1988; Brice, Mastin & Perkins, 1997b). SLPs need a better understanding of second language acquisition issues such as the interrelationship of two languages used by English language

learning (ELL) bilingual students. Thus, it is important to have a better understanding of communication with bilingual students to provide better assessment and mediation (Brice & Montgomery, 1996; Cheng & Butler, 1989, Reyes, 1995; Simon, 1985).

Language alternation across sentence boundaries is known as intersentential code-switching (CS). For example the teacher may say, "Ya, se acabó (It is over). Siéntate (Sit down). The time is up." Thus, the transition from the command of 'sit down to the informative sentence of "the time is up" constitutes code-switching. Embedded words, phrases, and sentences from two languages can also be found within a sentence forming an intrasentential language alternation, or code-mixing (CM). In the following teacher example she utilizes English, Spanish and French to illustrate her point,

"What language is mille lacs (one thousand lakes)? Do you know what that means? What does mille (thousand) mean? 'Mille' (French word for one thousand) means mil (Spanish word for one thousand). Lacs (French word for lakes) means lagos (Spanish word for lakes)."

TABLE 1. Code categories (macro, umbrella categories) in the ESL Classroom.

Code Category	Number of Functions Per Category	Percentage of Total Coded Utterances		
1. Questioning	11	28.17%		
2. Commands	6	16.99%		
3. Informative	55	14.33%		
4. Feedback (reinforcement)	7	13.90%		
5. Answering/responding	4	9.50%		
6. Starting a Lesson	3	4.30%		
7. Ending a Lesson	3	3.63%		
8. Seeking clarification	3	3.02%		
9. Speaking out loud	2	1.75%		
10. Other code moves	6	4.41%		

TABLE 2. Top ten code functions (specific, micro functions) in the ESL classroom (of 51).

Code Function	Code Category	Percentage of Total Coded Utterances	
1. Answers in Response to Other's Question	Questioning	7.88%	
2. Direct Task Request	Commands	7.82%	
3. Factual Question	Questioning	6.92%	
4. Vocabulary Question	Questioning	5.91%	
5. Reiteration	Feedback (reinforcement)	5.65%	
6. Declaration	Informative	4.96%	
7. Informative (content/task related)	Informative	4.57%	
8. Comprehension Question	Questions	4.45%	
9. Correction	Feedback (reinforcement)	/ 3.62%	
10. Indirect task request	Commands	3.62%	

Language in the Classroom: Comparisons

Borrowing, the third bilingual language phenomena, entails integration of the word or phrase from one language into the other. The borrowed word or phrase therefore becomes a part of the other language and is assimilated into the second language. Borrowed words and phrases take on their own phonological, and morphological characteristics (Gumperz, 1982; Kamwangamalu, 1992).

METHOD

STUDY ONE: ESL CLASSROOM (ENGLISH WITH SOME SPANISH)

Brice, Mastin, and Perkins (1997a) investigated how language by teachers was used in an English as a second language (ESL) classroom. Their first ethnographic study reported the various pragmatic uses of language that the ESL teacher and teacher aide used in teaching normally developing bilingual ELL students (without any language disorders). A comparison to the English as a Foreign Language (EFL) classroom is not possible since in the U.S. only ESL classes

TABLE 3. Directionality of code switching and code mixing.

Direction	Code-Switching Code-Mi	
To English	25/95 (26.32%)	29/48 (60.42%)
To Spanish	70/95 (73.68%)	19/48 (39.58%)

exist in the primary or elementary grades. EFL classes, in the U.S., exist only at the university level. The language functions observed and recorded were the direct result of the environment (i.e., the teacher, the students, and the curriculum). Thus, how the functions were determined by presence of only the bilingual students could not be drawn from this study. However, the study by Brice and Perkins (1997) did determine that the majority of the language functions did not change according to presence or absence of the bilingual students. More of this is discussed in the next section. Results from the Brice, Mastin, and Perkins (1997a) study revealed that the teachers used language according to 51 different language functions (or pragmatics).

Specifically, their study indicated that the elementary school observed was 30% Hispanic/Latino (Amato, 1996). All of the students enrolled in the ESL classroom spoke Spanish as their first language. The students were transitioned into an all English inclusive classroom after two-three years of ESL instruction (Brice & Montgomery, 1996). Their English skills were a major focus of content instruction. An overall total of 38 hours and 10 minutes was observed. A total of 1,654 codings for 1573 utterances were obtained and analyzed for pragmatic functions. Eighty-one utterances were coded for more than one function. The students were observed mostly in small group instruction. Classroom lessons varied from reading, writing, mathematics, social studies, and history.

Fifty-one final classroom language functions were generated from this study. The functions are categorized under more general umbrella headings, i.e., code categories. Refer to Table 1 for a breakdown of the general macro

TABLE 4. Rank ordering and percentage of occurrence of syntactic functions of code-mixing.

Syntactic function	Rank	Frequency of Occurrence
Object/Subject Noun Example: "M., si tienes ocho balloons y uno se revienta, cuantos vas a tener? [If you have eight balloons and one bursts, how many will you have?]	1	62.2%
Verb Phrase Example: "Harmful, como a dañar algo." [like to damage something]		2 8.89%
Verb Example: "Invierno, remember, invierno?" [Winter, remember, winter?]	3	6.67%
Prepositional Phrase Example: "Do you have one of these en su casa?" [In your house?]		6.67%
Adjective Example: "Te acuerdas lo qué quieres decir less?" [Do you remember what less means?]	4	4.44%
Adverb Example: "Did you read it, si?" [yes?]		4.44%
Interjection Example: "You're done, adios." [goodbye]	5	2.22%

(i.e., umbrella) code categories observed in the ESL classroom. Table 2 lists the top ten specific, micro code functions (of the 51 generated) particular to the ESL classroom. The micro functions are categorized under the general macro categories. Table 3 provides information on the directionality of code switching and code mixing (e.g., Spanish to English and English to Spanish). Table 4 rank orders the percentage of occurrence of syntactic code-mixed functions.

RESULTS

The following results can be drawn from the ESL classroom observations (Brice, Mastin, & Perkins, 1997b): (a) Questioning occurred with the highest frequency (28.17%), while the use of commands followed (16.99%), (b) giving information (14.33), (c) giving feedback (13.90%), and (d) answering and responding (9.50%) rounded out the top five ESL classroom pragmatic functions. Hence, most of the language that occurred in the ESL classroom was seen in the more general pragmatic functions of questioning, commands, feedback, informing, and answering. The other language pragmatic functions occurred with less frequency. From the pragmatic analyses, it was noted that the function providing feedback to the students frequently occurred. Students need to know where they stand in terms of understanding the content, i.e., moving beyond the level of understanding what was spoken and why it was said in relation to the classroom content. This appears logical since providing feedback is an important teacher function and the use of the other language (i.e., Spanish) would ensure that the message was understood. The students and teachers frequently utilized English academic terms in their Spanish (diglossia). Seeking clarification, asking vocabulary questions, providing informative content and dispensing direct task requests were also noted. These functions seemed to have served either typical classroom demands (e.g., seeking clarification) or served bilingual needs (e.g., vocabulary questions). In summary, language alternation seems to have allowed the bilingual speakers opportunities to combine their two distinct language systems to serve their classroom needs.

The directionality of the code-switched utterances was typically to Spanish. This seemed to occur because English was the base language of instruction. Hence, it naturally followed that a switch will most likely occur to the less frequently used language (i.e., Spanish). Code-mixing to English (with a Spanish base) was observed in this study. This occurrence was probably affected by the proficiency levels of the speakers (i.e., the teacher aide and the students demonstrated higher proficiency levels in Spanish). It appeared that the proficient Spanish speakers would be most prone to embed elements of English into their dominant language (i.e., Spanish).

The syntactic data from this study and other studies (Pfaff, 1977; Poplack, 1980; Zentella, 1997) revealed that nouns are the most frequently embedded item in a code-mixed utterance. The majority of CM elements occurred as a noun in the subject or object position. Only one instance of code-mixing at the morpheme level (i.e., "push-arla") was obtained. This example did indicate trialling of a new language form. One word coinage (i.e., "copy-cheater" for "copy-cat") was obtained from a student from the sample also indicating trialling of new language forms. Hence, code-mixing can be seen as attempts at trying out new language forms. It should be noted that language proficiency did not seem to affect

what type of syntactical element was embedded as the teacher, aide and students all displayed the same types of code-mixing behaviors. Specifically, the following are concluded:

- CS and CM occurs with high frequency even in environments where English is preferred;
- CS is more evident than CM. This is most likely due to the fact that switching languages is linguistically simpler than embedding aspects of two languages;
- The majority of CM elements occurred as a noun in the subject or object position. One instance of CM at the morphological level (i.e., push-arla) and one word coinage (i.e., copy-cheater) were noted;
- The pragmatic analyses indicated that the ESL classroom teachers predominantly used language for classroom management (asked questions and gave commands).
 Content instruction was seen through giving feedback to student responses. Students primarily answered the teacher's questions; and
- The students frequently used English academic terms in their Spanish (diglossia, from Grosjean, 1982). The students' language seemed to serve typical classroom demands (e.g., seeking clarification) or serve bilingual needs (e.g., vocabulary questions).

STUDY TWO: GENERAL EDUCATION CLASSROOM (ALL ENGLISH)

Brice and Perkins (1997) investigated the teacher use of language, i.e., pragmatics, in the second grade general education classroom. The purpose of their study was to determine what aspects of language were crucial for bilingual students to function in the mainstream classroom. Ethnographic methodology was utilized. Brice and Perkins asked the questions: What language skills must the bilingual student possess to in order to succeed in the general education classroom and what skills should the SLP be aware of in assessing bilingual students?

The subjects for this study consisted of the following: the general classroom teacher, the students in the classroom, and a case study observation of one student in particular, i.e., Miguel (not his real name). Miguel spoke Spanish as his first language. Spanish was the language of the home. He received the rest of his instruction in the general classroom where he had an assigned aide for mathematics help. Miguel did not present with any language disorders.

The general classroom was observed for nine visits (six hours and 20 minutes total). Five hundred seventy-eight codings were analyzed. The categories used for this study were generated from previous field observations reported by Brice, Mastin, and Perkins (1997a). Inter-rater reliability agreement of 91.12% for the coding of the pragmatic behaviors was obtained for two observers. Table 5 provides the top 10 code functions (micro-pragmatic) of the general education classroom.

RESULTS

Brice and Perkins (1997) found that bilingual students in the general classroom needed to shift and adapt their language uses to meet the demands of the classroom. The general classroom proceeded at a fast pace of instruction, which necessitated fast mental processing abilities, high auditory processing skills and more independent student

follow-through. Learning was dependent upon precise understanding of lengthy teacher utterances. Many teacher utterances were spoken within a short time period with few opportunities for clarification or seeking of help.

Brice and Perkins (1997) determined that the student in the ESL classroom who is also enrolled in the general classroom is using three language systems: listening and speaking Spanish, English, and a mixed series of Spanish and English code-switched and code-mixed language. Codeswitching and code-mixing (by itself) was seen to serve as a bridge between Spanish and English and was not determined to be an indicator of a language disorder or language confusion. It was typically used by the teachers, aides, and students. The findings of this study suggest that language evaluations should incorporate ethnographic observations to obtain a "truer" picture of what occurred, where it occurred, how it occurred, why it occurred, and how often it occurred. Specifically, Brice and Perkins (1997) found that:

- Language skills from this study included: explaining (multiple bits of content information are given in sequence), indirect task requests (more subtle requests), declarations, one-line cueing to finish statements, and typically one-line statements of shifting topics;
- The general classroom seemed to focus on maintaining the students' attention, and maintaining on-task behaviors. Note that starters/fillers comprised 77.21% of all lead statements in the general classroom. In addition, the use of starters/fillers was the number one function used in terms frequency of occurrence (12.12%) in the general classroom. The general education classroom also employed a high percentage of direct task requests (9.94%) (meant to keep students proceeding on the task), directing to lesson requests (9.74%), and calling upon a student (meant to keep the students engaged and on-task) (9.14%). The following example includes a starter, an indirect task request, an informative and a direct task request:

General classroom teacher: "Okay, second grade (Starter). Page 116 (Indirect task request). Now

that's the back side of the page (Informative). Page 116. Put your name on page 116 (Direct task request)", and

 The general education classroom for Miguel seemed to demand higher level language processing skills, higher auditory processing skills and more independent student follow-through. This finding was supported by the teacher in the final exit interview. Note the typical auditory language processing demands placed upon Miguel and how he needed to decipher the important key pieces of information.

Teacher: "Okay, if you have a book please put it away. And then take out your English book and turn to page 30. Page 30. Remember your English book is the one with the castle on it, the one with the castle on it that looks like this (she demonstrates the book cover). And you do need a pencil out but you're not going to need it right away."

Such exchanges seemed to be typical within the general education classroom which proceeded at a fast pace of instruction, which also necessitated fast processing abilities. It should be noted that unless Miguel was observed over an extended period of time his true language functioning may not have been revealed. Discrete testing (as typically seen in many evaluations) might have revealed a different and less reliable estimate of his true language abilities.

STUDY THREE: BILINGUAL FIRST GRADE CLASS-ROOM (SPANISH WITH SOME ENGLISH) AND THE BILINGUAL SPEECH-LANGUAGE THERAPY ROOM (SPANISH WITH SOME ENGLISH)

Brice (2000a) observed a bilingual first grade classroom and a bilingual first grade language therapy room in a large metropolitan city elementary school in the U.S. The school was located in a central Florida location in the U.S.. The elementary school was 50% Hispanic (confirmed through

TABLE 5. Top ten code functions in the general education classroom.

Code Function	Code Category	Percentage of Total Coded Utterances		
1. Starter/filler	Starting a Lesson	12.12%		
2. Direct task Request	Command	9.94%		
3. Directing to Lesson	Command	9.74%		
4. Informative (task/content)	Informative	9.34%		
5. Calling Upon a Student	Commands	9.14%		
6. Reiteration	Feedback (reinforcement)	8.15%		
7. Explaining	Informative	4.97%		
8. Comprehension Question	Questioning	4.77%		
9. Content Question	Questioning	4.57%		
10. Enticement/Prompting	Feedback (reinforcement)	3.37%		

interview with the school Principal and the District Exceptional Special Education Director) at the time of the data collection.

The general education classroom consisted of a Spanish maintenance programme with the majority of instruction in Spanish. Spanish was also the language of instruction for therapy purposes for the language disordered students. All of the students enrolled in the bilingual first grade classroom and the bilingual language therapy room spoke Spanish as their first language.

The students in the both rooms spoke English as their second language with varying degrees of proficiency. This was verified by the teacher and therapist during the on-going informal interviews. Lessons observed consisted of reading or "circle" time. The teacher or therapist read stories to the students and asked questions pertinent to the readings.

This study focused on the language (pragmatics, code switching behaviours, syntax, and semantics) of the two school professionals, i.e., the bilingual first grade teacher and the bilingual language therapist. Therefore, they were the participants in this investigation.

Qualitative, micro-ethnographic, field based observations were performed. Data were gathered from video taped observations. The data were gathered over a period of three months. A total of six separate visits were conducted. An overall total of 720 minutes (12 hours) was observed. A total of 800 utterances were obtained and analysed. The data were analysed for five general teacher/therapist pragmatic macro categories (Brice, Mastin, & Perkins, 1997a). These categories consisted of: (a) Questioning, (b) Commands, (c) Feedback, (d) Informative, (e) Answering responding, and (f) Starting a lesson. The data were analysed for syntactic categories of main sentence clauses and subordinate sentence clauses. This measure is an estimate of syntactic complexity (Hedge, 1996; Miller, 1981; Shewan & Donner, 1988). Continued analysis of the syntactic data included a measure of sentence length (a mean length of response; measured in the number of words per sentence) (Hedge, 1996; Miller, 1981). A measure of semantics was obtained through calculating diversity of vocabulary through a type token ratio (TTR).

RESULTS

The majority of teacher/therapist uses of language are equal across teaching environments (3/5=60%). The teacher and therapist differed greatest in the use of questions and commands. Refer to Table 6 for uses of language across teacher and therapist environments.

The teacher switched or mixed only once during the 200 sentence sample (0.5 %), while the therapist switched and mixed a total of 20/200 (10%). The therapist's use of codeswitching and mixing was found predominantly in sentences involving Informatives (11/20=55%), followed by Feedback

(5/20=25%), Commands (2/20=10%), Questions (1/20=0.5%) and Starting a Lesson (1/21=0.5%). From these observations it can be stated that code-switching and mixing is not evenly distributed across environments.

The teacher displayed an average of 109 main clauses and 73 subordinate clauses in her language sample. This was compared to the therapist who displayed an average of 129 main clauses and 59 subordinate clauses. While there appear to be differences in their complexity of sentences, these differences did not reach significance on an independent sample two tailed t-test for either main clauses (t=0.583) or subordinate clauses (t=0.294).

Sentence length was measured with the mean length of response (MLR). Six hundred utterances were examined (300 each for the teacher and therapist). Results indicated that the teacher on average spoke in sentences of 11.4 words long, while the therapist spoke in sentences of only 5.5 words long. While these results were statistically non-significant on the two tailed t-test (t= 0.155), a qualitative difference can be seen.

Vocabulary diversity was measured by obtaining a type token ratio (TTR). The teacher displayed an average TTR of 0.344, while the therapist displayed an average TTR of 0.343. The teacher and therapist displayed similar vocabulary amounts, however, both showed a lower than average vocabulary diversity (Hedge, 1996; Miller, 1981).

Language differed on some measures of pragmatics (Questions and Commands), use of code switching and mixing (10% versus 0.5%) for the teacher and therapist. The therapist primarily used code-switching and mixing to serve the purposes of Informatives and Feedback. The teacher and therapist differed on use of main clauses and subordinate clauses with the teacher's language being more complex. They also differed on the teacher's sentences being longer. However, there was no difference in the number of different words (i.e., vocabulary diversity as measured by the TTR) they used in their lessons.

CONCLUSIONS

In adapting to the bilingual learner, SLPs should raise the bilingual child to the level of the general education classroom. Hence, 16 best practice strategies are recommended from these studies in order to accomplish this task. The literature has shown that these strategies may be applied flexibly with all second language learners along the entire continuum of language proficiency in a variety of settings (Brice & Roseberry-McKibbin, 1999; Goldstein, 2000; Langdon & Cheng, 1992; Peregoy & Boyle, 1997; Roseberry-McKibbin, 1995).

 Provide written copies of directions and assignments to compliment oral instruction (to assist the pragmatic behaviors of actively listening and following directions).

TABLE 6. Teacher and therapist language uses.

Teacher	Informative	Questions	Commands	Feedback	Starting a lesson	Other
Bilingual	46/106	35/106	13/106	10/106	1/106	1/106
First Grade	(43.40%)	(33.01%)	(12.27%)	(9.44%)	(0.94%)	(0.94%)
Bilingual	63/111	14/111	23/111	8/111	3/111	0
Language Therapist	(56.76%)	(12.61%)	(20.72%)	(7.21%)	(2.70%)	

- Build lessons on understanding background knowledge for textbook readings (to assist following directions and actively listening).
- Keep ELL students involved by asking prediction questions, such as "What do you think...?" (to encourage expressing self-skills).
- Teach self-study skills such as note taking, selfquestioning, organising, and test-taking (to encourage expressing self skills).
- Teachers and SLPs should ask open-ended clarification questions (i.e., questions that allow for expansion and elaboration to encourage heuristic language). For example, when the teacher is seeking more input from the students she may ask, "What if I want to put your names in alphabetical order?". Open ended questions from the teacher or SLP should stimulate students to comment and ask further questions.
- The SLP should encourage students to ask questions. Students should seek clarification and ask for repetitions; the SLP should reinforce these behaviours. Higher level questions should be encouraged. Students should ask questions of application, analysis, synthesis, and evaluation (Bloom, 1956).
- Corrections followed by a model should be limited. An
 example is when the student says, "You no me" and the
 SLP then corrects and provides the model of, "No, you
 not me." Hence, ELL students in initial learning stages
 should be allowed to make mistakes. SLPs should also
 employ more pauses and wait time for responses to allow
 for the students to process oral language (to encourage
 actively listening).
- ELL students need to have increased student-to-teacher or SLP interactions to encourage the development of regulatory (commands), heuristic (questions), informational (providing information), and instrumental (language used to satisfy one's needs) language.
- ELL students need opportunities to share information with other students to gain practice in expressions, initiations, and maintenance of conversations.
- ELL students need opportunities to practice an activity to prepare themselves to talk about the topic later.
- SLPs should use grammar drills and direct instruction (i.e., teaching specific skills such as note taking) with bilingual language disordered students. Although Krashen (1983) proposes a naturalistic approach, others have documented that direct instruction approach does work with language disordered children (Nye, Foster, & Seaman, 1987). Hence, a naturalistic approach can be used to reinforce skills already learned through a direct instruction approach.
- ELL students can benefit from peer grouping with other students of similar ability levels to practice spontaneous and less structured classroom discourse skills.
- ELL students should have more practice at formalised, structured speaking situations to encourage classroom discourse skills.
- Teachers and SLPs should engage in code-switching and code-mixing behaviours. Aguirre (1988) noted that code-switching is a natural phenomenon among bilingual speakers and that its use is inevitable. Brice, Mastin and Perkins (1997) noted that ESL teachers frequently engaged in code-switching to reinforce vocabulary concepts from L1 to L2. Code switching is a bridge between languages (Aguirre, 1988; Brice, Mastin, & Perkins, 1997).

- The SLPs should engage in using longer and more complex sentences to teach and reinforce language, specifically memory for sentences and the cognitive skill of increased attention span (Johnson, 1996; Larson & McKinley, 1995; Lund & Duchan, 1993; Owens, 1996; Owens, 1995; Reed, 1994; Simon, 1985; Wiig & Semel, 1984).
- Teachers and SLPs should expand their vocabulary use. It has been noted that bilingual and monolingual students with language disorders need instruction in vocabulary (Johnson, 1996; Larson & McKinley, 1995; Lund & Duchan, 1993; Owens, 1996; Owens, 1995; Reed, 1994; Roseberry-McKibbin, 1995; Simon, 1985; Wiig & Semel, 1984). In addition, vocabulary instruction for the bilingual, normal elementary or primary school students can only assist their learning.

In summary, code-switching is a commonly occurring event in the presence of bilingual speakers (i.e., teachers and students) (Aguirre, 1988). General education classrooms demand a higher level of auditory processing and short term memory skills than do therapy rooms or the ESL classroom. Classroom teachers typically use longer and more complex sentences than do speech-language therapists. Vocabulary tends to be limited in bilingual classroom environments due to the repetitive nature of learning a second language. This aspect of language needs to be enhanced, particularly as classroom vocabulary becomes more content specific and complex in the upper elementary grades (primary school levels) (Brice, Mastin & Perkins, 1997b; Brice & Perkins, 1997). It can be stated that differences in teacher (general classroom, ESL and bilingual) versus therapist use of language are evident in bilingual school environments. Thus, speech-language pathologists must be knowledgeable of second language acquisition features, how language is used in classrooms, and the different language demands that are placed upon students as they transition into different environments, for example, moving from a language specific environment (the bilingual language therapy room) to a language diverse environment such as the general classroom. As Aguirre (1988) has indicated, where there are bilingual children, there will be instances of bilingual communication. It is anticipated that all speech-language pathologists will rise to the opportunities that bilingual schools present.

ACKNOWLEDGEMENTS

We would like to acknowledge the schools, teachers, and therapists (in the states of Minnesota and Florida in the U.S.) who graciously allowed us to observe their classrooms and therapy rooms. Without their assistance these studies would not have been carried out and yielded information on learning for their students.

REFERENCES

Aguirre, A. (1988). Code switching, intuitive knowledge, and the bilingual classroom. In H. Garcia, & R. Chavez (Eds.), Ethnolinguistic issues in education (pp. 28-38). Lubbock, TX: Texas Tech University.

Amato, J., A. (1996). To call it home. The new immigrants of southwestern Minnesota. Marshall, MN: Crossing Press.

American Speech-Language-Hearing Association (1999).

1999 Omnibus survey. Caseload report: SLP. Rockville, MD:
Author.

- D. E. Battle, (Ed.). (1998). Communication disorders in multicultural populations (2nded.). Stoneham, MA: Butterworth-Heinemann.
- Bauman, G. (1996). Contesting culture: Discourses of identity in multiethnic London. Cambridge, England: Cambridge University Press.
- Brice, A. (2000). Code switching and code mixing in the ESL classroom: A study of pragmatic and syntactic features. Advances in Speech Language Pathology. Journal of the Speech Pathology Association of Australia, 20(1),19-28.
- Brice, A., & Montgomery, J. (1996). Adolescent pragmatic skills: A comparison of Latino students in ESL and speech and language programs. Language, Speech, and Hearing Services in Schools, 27, 68-81.
- Brice, A., Mastin, M., & Perkins, C. (1997a). Bilingual class-room discourse skills: An ethnographic study. Florida Journal of Communication Disorders, 17, 11-19.
- Brice, A., Mastin, M., & Perkins, C. (1997b). English, Spanish, and code switching use in the ESL classroom: An ethnographic study. Journal of Children's Communication Development, 19(2), 11-20.
- Brice, A., & Perkins, C. (1997). What is required for transition from the ESL classroom to the general education classroom? A case study of two classrooms. *Journal of children's Communication Development*, 19(1),13-22.
- Brice, A., & Roseberry-McKibbin, C. (1999). Turning frustration into success for English language learners. *Educational Leadership*, 56 (7), 53-55.
- Brice-Heath, S. (1986). Sociocultural contexts of language development. In D. Holt (Ed.), Beyond language: Social and cultural factors in schooling language minority students (pp. 142-186). Los Angeles: Evaluation, Dissemination, and Assessment Center.
- Campbell, L.R. (1996). Issues in service delivery to African American children. In AG. Kahmi, K. E. Pollock & J. L. Harris (Eds.), Communication development and disorders in African American children: Research and intervention (pp. 73-94). Baltimore, MD: Paul H. Brookes.
- Campbell, P. R. (1996). Population projections for states by age, sex, race and Hispanic origin: 1995 to 2025. Washington, D.C.: U.S. Bureau of the Census, Population Division, PPL-47.
- Cheng, L. (1996). Enhancing communication: Toward optimal language learning for the limited English proficient students. Language, Speech, and Hearing Services in Schools, 27(4), 347-354.
- Cheng, L., R., & Butler, K. (1989). Code switching: A natural phenomenon versus language deficiency. World Englishes, 8, 293-309.
- Crago, M., Eriks-Brophy, A., Pesco, D., & McAlpine, L. (1997).
 Culturally based miscommunication in the classroom. Language,
 Speech, and Hearing Services in Schools, 28(3), 245-254.
- Cummins, J. (1984). Bilingualism and special education: Issues in assessment and pedagogy. San Diego, CA: College Hill Press.
- Goldstein, B. (2000). Cultural and linguistic diversity. A resource guide. San Diego, CA: Singular.
- Grosjean, F. (1982). Life with two languages. An introduction to bilingualism. Cambridge, MA: Harvard University Press.
- Gumperz, J. (1982). Discourse strategies. New York, NY: Cambridge University Press.
- Gutierrez-Clellen, V. (1996). Language diversity: Implications for assessment. In K. Cole, P. Dale, & D. Thal (Eds.), Advances in assessment of communication and language (pp. 29-56). Baltimore, MD: Brookes Publishing.
- E. Hamayan, & J., Damico, (Ed.s). (1991). Limiting bias in the assessment of bilingual students. Austin, TX: Pro-Ed.
- Hedge, M., N. (1996). Pocket guide to assessment in speechlanguage pathology. San Diego, CA: Singular.
- Johnson, B.A. (1996). Language disorders in children: An introductory clinical perspective. Albany, NY: Del Mar
- Kamwangamalu, N. M. (1992). Mixers and mixing. English across cultures. World Englishes, 11(2/3), 173-181.
- Kayser, H., (1996). Cultural/linguistic variation in the United States and its implications for assessment and intervention in speech-language pathology: An epilogue. Language, Speech, and Hearing Services in Schools, 27(4), 385-386.
- H. Kayser (Ed.). (1995). Bilingual speech-language pathology. An Hispanic focus. San Diego, CA: Singular.
- H. Langdon, & L. Cheng, (Ed.s). (1992). Hispanic children and adults with communication disorders: Assessment and intervention. Gaithersburg, MD: Aspen Publishing.

- H. Langdon, & T. Saenz, (Eds.). (1996). Language assessment and intervention with multicultural students. Oceanside, CA: Academic Communication Associates.
- Larson, V., & McKinley, N. (1995). Language disorders in older students: Preadolescents and adolescents. Eau Claire, WI: Thinking Publications.
- Lidz, C. S., & Peña, E. D. (1996). Dynamic assessment: The model, its relevance as a nonbiased approach, and its application to Latino American preschool children. Language, Speech, and Hearing Services in Schools, 4(27), 367-372.
- Lund, N., & Duchan, J. (1993). Assessing children's language in naturalistic contexts (3rd ed.). Englewood Cliffs, NJ: Prentice Hall.
- MacArthur, E.K. (1993). Language characteristics and schooling in the United States, a changing picture: 1979 and 1989. Washington, D.C.: National Center for Education Statistics.
- Miller, J., F. (1981). Assessing language production in children: Experimental procedures. Baltimore, MD: University Park Press.
- Peña, E. D., Quinn, R., & Iglesias, A. (1992). The application of dynamic methods to language assessment: A nonbiased procedure. The Journal of Special Education, 26(3), 269-280.
- Peregoy, S. F., & Boyle, O. S. (1997). Reading, writing, and learning in ESL: A resource book for K-12 (2nd ed.). New York, NY: Longman.
- Pfaff, C. W. (1979). Constraints on language mixing: Intrasentential code switching and borrowing in Spanish/English. Language, 55, 291-318.
- Poplack, S. (1980). Sometimes I'll start a sentence in Spanish y termino en español: Toward a typology of code-switching. *Linguistics*, 18, 581-618.
- Owens, R., J. (1996). Language development (4th ed.). Needhand Heights, MA: Simon and Schuster.
- Owens, R., E. (1995). Language disorders: A functional approach to assessment and intervention (2nd ed.). Boston, MA: Allyn and Bacon.
- Quinn, R. (1995). Early intervention? Qué quiere decir éso... What does that mean? In H. Kayser (Ed.), Bilingual speechlanguage pathology. An Hispanic focus (pp. 75-96). San Diego, CA: Singular.
- Reed, V. (1994). An introduction to language disorders (2nd ed.). New York, NY: Merrill.
- Reyes, B. A. (1995). Considerations in the assessment and treatment of neurogenic disorders in bilingual adults. In H. Kayser (Ed.), Bilingual speech language pathology. An Hispanic Focus (pp. 153-182). San Diego, CA: Singular Publishing, Inc.
- Roseberry-McKibbin, C. (in press). Principles and strategies in intervention. In A. Brice, (Ed.) Speech, language, learning and the Hispanic child. Boston, MA: Allyn and Bacon.
- Roseberry-McKibbin, C. (1997). Understanding Filipino families: A foundation for effective service delivery. American journal of Speech-Language Pathology, 6(3), 5-14.
- Roseberry-McKibbin, C. (1995). Multicultural students with special language needs. Oceanside, CA: Academic Communication Associates.
- Roseberry-McKibbin, C., & Eicholtz, G., E. (1994). Serving limited English proficient children in schools: A national survey. Language, Speech, and Hearing Services in Schools, 25(2), 156-164.
- Shewan, C. M., & Donner, A. P. (1988). A comparison of three methods to evaluate change in the spontaneous language of aphasic individuals. *Journal of Communication Disorders*, 21, 171-176.
- Skutnabb-Kangas, T. (1981). Bilingualism or not. The education of minorities. Clevedon, England: Multilingual Matters.
- Simon, C. (1991). Communication skills and classroom success. Assessment and therapy methodologies for language and learning disabled students. Eau Claire, WI: Thinking Publications
- Simon, C. (1985). Communication skills and classroom success: Therapy methodologies for language-learning disabled students. San Diego, CA: College Hill Press.
- U. S. Department of Commerce (1990). Current population. Washington, DC: Bureau of the Census.
- Westby, C. (1997). There's more to passing than knowing the answers. Language, Speech, and Hearing Services in Schools, 28(3), 274-287.
- Zentella, A. C. (1997). Growing up bilingual. New York: Blackwell.