
Student Spanish Use and Investment in a Dual Immersion Classroom: Implications for Second Language Acquisition and Heritage Language Maintenance

KIM POTOWSKI

The University of Illinois at Chicago
1727 University Hall, 601 S. Morgan St.
Chicago, IL 60607
Email: kimpotow@uic.edu

In dual immersion classrooms, students from different language backgrounds are immersed in the minority language for large portions of the school day with the expectation that they will become equally proficient in their first language (L1) and in their second language (L2). Research on dual immersion indicates that students reach above-average levels of academic achievement and linguistic proficiency, but, to date, very few quantifications have been made of how much of the minority language is used in these environments. Given that actually speaking a language is crucial for L2 acquisition as well as for heritage language maintenance, this study explored how much Spanish was used and for what purposes by 4 students (2 Spanish L1 and 2 two Spanish L2) in a Spanish/English dual immersion classroom.

Over 2,000 turns of natural classroom speech were recorded during a 5-month period. Overall, the students used Spanish 56% of the time, with 4 major trends: (a) The girls used more Spanish than the boys, regardless of L1; (b) the students averaged 82% Spanish when talking with the teacher, but only 32% when talking to peers; (c) Spanish was used primarily for on-task topics; (d) the students' English when speaking with peers covered a wider range of functions than did their Spanish. These findings lend support to proposals that a kind of diglossia exists in immersion classrooms (Tarone & Swain, 1995).

Additional ethnographic data gathered through extensive participant-observations and interviews were interpreted using the concept of investment (Norton, 2000). Explanations of the students' language use are offered according to their sometimes competing identity investments.

DUAL IMMERSION OR TWO-WAY BILINGUAL immersion programs combine language minority and language majority students in the same classrooms and provide content instruction in both the minority and the majority language. In this way, students from both groups can learn each other's language. The rationale for these programs comes in part from research on language acquisition in "one-way"¹ immersion contexts,

first developed in Canada in the 1960s and later established in the United States, which indicated that languages are best learned as a medium of content rather than as the focus of instruction. The main goals of dual immersion are for all students to reach high levels of academic proficiency, bilingualism, and self-esteem, as well as to develop positive cross-cultural attitudes (Christian, 1996). Research indicates that these goals are being achieved at many dual immersion schools (Christian, Montone, Lindholm, & Carranza, 1997; Lindholm-Leary, 2001; Thomas & Collier, 1997). Dual immersion programs can dif-

fer on several program variables, including the minority language taught, the proportion of speakers of each language, the amount of time spent learning in each language, and whether languages are separated by subject area, by day, or by some other means (see Christian, 1996, and Lindholm-Leary, 2001, for discussions of dual immersion program variables). As of September 2001, there were at least 260 dual immersion programs in 10 different languages in U.S. elementary schools, which were slightly more numerous than the 242 one-way immersion programs listed in the same year (Center for Applied Linguistics, 2001). Of these, 244 programs were operating in Spanish, the minority language discussed in this article.

Dual immersion is designed to benefit both language minority and language majority students. Language minority students (also called heritage language speakers) continue to develop their Spanish proficiency, particularly a formal academic variety that many students do not acquire at home. This practice may contribute to the students' long-term Spanish maintenance and is markedly different from typical U.S. bilingual education programs that seek to transition language minority students to all-English classrooms as quickly as possible. Spanish-speaking students' English acquisition is also thought to benefit from dual immersion, because these students are integrated with native English speakers throughout the school day instead of being separated from them during English as a Second Language (ESL) pullout classes commonly used in bilingual education programs. Likewise, native English-speaking students learning Spanish are thought to benefit from dual immersion because they have native-speaking peers in the classroom instead of relying on the teacher as the sole source of input as in one-way immersion (Genesee, 1987).

However, combining students from different language backgrounds does not ensure that they will interact (Genesee, 1985), nor does it insure that they will do so in Spanish when it is the official language of an instructional period. Genesee (1991) noted that there has been "little systematic documentation of how language is used in immersion classrooms by either students or teachers," leaving us with "an insufficient empirical basis on which to draw firm conclusions about the discourse characteristics of immersion classrooms and, therefore, about the impact of classroom interaction styles on language learning" (p. 190). Despite the encouraging findings of students' high standardized test scores,² we

know very little about actual language use in one-way or dual immersion classrooms. Tarone and Swain (1995) called this lack of classroom immersion research striking, given the "ample evidence that social context can cause the speech of second-language learners to vary substantially in its grammatical and phonological structure" (p. 176).

In addition, the role of interaction has been central to second language acquisition (SLA) studies since the early 1980s (Gass, Mackey, & Pica, 1998). Most interaction studies have been empirical in nature, involving participants who were selected from predetermined categories of speakers and asked to perform structured tasks. According to Nunan (1992), language acquisition research that collects naturalistic data within genuine classrooms is relatively rare, even though identifying classroom factors and their significance for language learning is crucial for understanding classroom language acquisition.

Several recent studies have reported general impressions of language use in one-way immersion (Blanco-Iglesias, Broner, & Tarone, 1995) and in dual immersion classrooms (Christian et al., 1997; Freeman, 1998; McCollum, 1994), noting that students tend to prefer English, particularly in the upper grade levels. Broner (2000), Carrigo (2000), and Fortune (2001) have quantified immersion students' language use and confirmed that less Spanish was used than educators might expect. Broner's (2000) case study of 3 children in a one-way immersion classroom found that the students used Spanish 63% of the time overall during Spanish lessons. Fortune (2001)³ found just 33% Spanish use overall during Spanish time. Carrigo (2000) found that the students initiated comments to the teacher in Spanish 26% of the time and responded to teachers' Spanish comments in Spanish 72% of the time. The author did not investigate the students' language use with each other. Aside from these three studies, no substantial, systematic classroom recordings have been made of immersion classroom language use.⁴

Based on their observations that one-way immersion students prefer to use English with each other and reserve the second language (L2) almost exclusively for academic purposes, Tarone and Swain (1995) offered the sociolinguistic explanation that immersion classrooms exhibit signs of diglossia. Recent research quantifying immersion classroom use has supported this claim (Broner, 2000). But what about dual immersion classrooms, which are sociolinguistically more complex than one-way immersion due to

the presence of native Spanish-speaking children? How much Spanish do students use, with whom, and for what purposes? One might assume that the presence of first language (L1) Spanish speakers results in more or different Spanish use, or both, than what has been found in one-way immersion classrooms. Because most theories of SLA (particularly Long, 1981, and Swain, 1985) recognize the need to produce the L2, and because it is reasonable to assume the same requirement holds for heritage language maintenance, it is crucial to examine both L1 and L2 students' Spanish output in dual immersion classrooms.

Any type of classroom language research becomes more complex when we acknowledge that opportunities to speak come about in different ways. These opportunities can be granted by teachers or by peers, created by the students themselves, and even resisted. Research in SLA has utilized the concept of *motivation* to explain learner desire to practice the L2, usually considering it a fixed, unitary quantity (Gardner, 1985; Gardner & Lambert, 1972) and coming to different conclusions about whether *instrumental* or *integrative* motivation leads to higher levels of L2 proficiency. However, recent qualitative work in the field of ESL has shown that *investment* may be a more useful construct than motivation in explaining language use (McKay & Wong, 1996; Norton, 2000; Willett, 1995) because it takes into account the factors influencing a learner's decisions to speak—or to remain silent—and in which language. According to Norton (2000), "A learner's motivation to speak is mediated by other investments that may conflict with the desire to speak—investments that are intimately connected to the ongoing production of the learners' identities and their desires for the future" (p. 120). Norton posited that learners "invest" in a language when they feel they will acquire a wider range of symbolic and material resources (such as friendship, education, and money) and access to things that were previously unavailable to them. Furthermore, they must see the return on their investment as worth the effort expended. Individuals' investment in using a given language can seem at times contradictory, depending on the relationship they have with a given interlocutor and the facets of their identity that they wish to portray at a particular moment.

Norton (2000) and McKay and Wong (1996) argued that SLA theory needs to develop a conception of L2 learners (and, I would add, of heritage Spanish speakers) as having complex social

identities—defined by Norton as "how a person understands his or her relationship to the world, how that relationship is constructed across time and space, and how the person understands possibilities for the future" (p. 5)—that must be understood along with inequitable power relations and gender politics. Stating this idea more strongly, McKay and Wong (1996) argued that learners' negotiations of identity are "not simply distractions from the proper task of language learning. . . . Rather, they must be regarded as constituting the very fabric of students' lives and as determining their investment in learning the target language" (p. 603).

Several long-term ethnographic studies of dual immersion schools have illustrated the complex sociocultural nature of these environments (Carranza, 1995; Freeman, 1998; McCollum, 1994), but to date, students' investments have not been explored in one-way or dual immersion research. This framework posits that each student brings to the classroom different historical, social, and linguistic relationships to Spanish, and that each student is therefore likely to be treated by and react differently to the classroom environment.

PURPOSE OF THIS STUDY

This study combined a quantification of dual immersion students' classroom language production with an ethnographic investigation of their identity investments that may have promoted or hindered their Spanish use. There were two main goals:

1. To quantify the amount of Spanish used by 4 students in a fifth-grade dual immersion classroom and to describe several classroom variables that appeared related to Spanish use;
2. To explain the reasons behind the students' language use through the use of ethnographic methods and the concept of investment (Norton 2000).

Drawing on work by Hymes (1974), SLA researcher Watson-Gegeo (1998) defined ethnography as "the study of people's behavior in naturally occurring, ongoing settings, with a focus on the cultural interpretation of behavior" (p. 576). Ethnographers usually investigate a small number of cases and solicit the participants' own interpretations of their actions (Atkinson & Hammersley, 2000), so generalization of the results to a large number of cases is neither possible nor a primary goal. Ethnography has been used widely in educational research (Erickson, 1981, 1982; Mehan,

1979, and many others) and can offer much-needed insight on classroom language acquisition processes. Van Lier (1988) urged classroom researchers to “identify, describe and relate . . . actions and contributions of participants in the L2 classroom, in such a way that their significance for language learning can be understood” (p. 47). Only systematic observations of dual immersion classrooms and interviews with their participants can allow a researcher to describe, analyze, and interpret the behaviors of the students and the teacher, as well as to describe the school as part of a cultural environment with multiple participants, all of which are factors that undoubtedly contribute to language use and learning outcomes.

SETTING

This study took place at the Inter-American Magnet School (IAMS)⁵ in Chicago, Illinois. According to the 2000 Census, Chicago’s Latino population of 26% makes it the third largest Latino city in the United States, and as of late 1998, Chicago’s public schools offered 18 dual immersion programs.⁶ IAMS, founded by local parents in 1975, is one of the oldest dual immersion programs in the United States. The school is located in an affluent neighborhood on the north side of Chicago, but due to its magnet charter, it serves children from all corners of Chicago and reflects the city’s diversity. During the year of this study, 65% of the children were Hispanic; 19% were European American; 14% were African American; and 60% of the students received free or reduced-price lunch. Student achievement on standardized tests regularly exceeds state, city, and district norms, and the school has had five Golden Apple teaching award winners, one Illinois Teacher of the Year, and has been the subject of more than two dozen newspaper and magazine articles.

According to official school documents, in pre-school through third grade, the curriculum is taught 80% in Spanish and 20% in English. In fourth through sixth grades, Spanish is used for 60% of the curriculum, and in seventh and eighth grades for 50% of the curriculum. The two languages are divided by subject. For example, in the fifth grade, Spanish language arts, math, and half of the social studies curriculum are taught in Spanish, while English language arts, science, and the other half of the social studies curriculum are taught in English.

One of the three dual immersion schools pro-

filed in Christian et al. (1997) was IAMS. The researchers noted:

As at the other two sites, English was clearly the preferred language for social purposes for those students who had achieved a certain level of fluency in it. At IAMS there appeared to be an even greater use of English by students when speaking among themselves. (pp. 85–86)

Christian et al. (1997) also noted that the level of English proficiency of the native Spanish-speakers at IAMS was higher than that of the Spanish-speakers at the other two schools. Only 35% of IAMS students were judged to be Limited English Proficient, compared to 40% and 54% at the other two sites. Roughly 45% of the Hispanic students entered IAMS already bilingual (no definition of the term *bilingual* was provided) and “some” of them knew only English or only Spanish.

In their conclusions, Christian et al. (1997) wrote that at IAMS:

Getting the Spanish proficiency of both language groups to meet [their] English proficiency levels has been a challenge. While some English-dominant students excelled in Spanish, many did not see the need to learn Spanish (at least in the earlier grades) and were *not motivated to learn it* [italics added]. The Spanish-dominant students, too, were so drawn by the dominance of English in society that they were *not motivated* [italics added] to improve their Spanish language skills beyond oral proficiency. (p. 86)

To repeat the qualitative orientation of this study, I sought to understand the students’ motivations for speaking Spanish and English through the concept of investment. After describing the Spanish use expectations in the school and in the classroom, I will present the quantitative language use findings and then offer interpretations of the students’ language use based on their various and sometimes competing identity investments.

Spanish Use in the School

In many ways the school was marked as a Spanish-speaking space. The hallways on all three floors exhibited students’ work on current topics of study almost entirely in Spanish. I routinely observed school staff directing or disciplining children in the hallways in Spanish. Even more notably, public announcements during the school day were often done in Spanish without an English repetition, including summonses for students to report to the main office or requests that visitors move their vehicles from the parking lot. I saw several teachers display a tenacious

dedication to Spanish during Open House nights. When one third-grade parent requested that all homework be sent home with an English translation so that she could help her child, the teachers replied that such a practice would undermine the need for the children to force themselves to comprehend the Spanish instructions. Teachers also described ways in which parents could foster their children's Spanish development. It was evident that many students—both Spanish L1 and L2—were developing remarkably high levels of oral and written Spanish proficiency. I watched third graders write out answers to math problems and heard sixth graders debate the death penalty entirely in Spanish. The homegrown "Curriculum of the Americas" used throughout the school was an impressive cultural model. Students focused on one culture per year through interdisciplinary units, including the Taínos in second grade, the Incas in third grade, the Mayas in fourth grade and the Aztecs in fifth grade.

Despite the school's official goals to value Spanish and English equally, many practices revealed that English was the dominant language. I routinely observed teachers using English during lessons that, according to the official classroom schedule, were supposed to be in Spanish (the same was found in the dual immersion school studied by Carrigo, 2000). These teachers explained that the corresponding books were in English, or that it was more important for students to know the material in English for standardized tests. McCollum (1994) also cited the influence of standardized tests in dual immersion school language use. IAMS administers Spanish standardized tests to all students (most recently the *Logramos* tests of reading comprehension, vocabulary, and math), but these tests do not affect student promotion and did not produce the same flurry of concern as the English tests. The non-academic classes of music, gym, and computers were taught in English, which, several teachers complained, eroded the percentage of Spanish instruction that students were supposed to receive each day. The only school-wide competitions, such as the science fair, history fair, and story writing competition, whose winners would proceed to a citywide competition, were completed in English only. Pullout ESL classes were taught by a knowledgeable language acquisition professional who regularly presented at national conferences; the teacher of pullout Spanish as a Second Language (or SSL, for L2 students struggling with Spanish) had no SLA training, claiming that she needed none, and on the days that I

observed her class the students colored items on vocabulary sheets and produced little or no Spanish.⁷ There were Spanish L2 students in their eighth year of the program whose oral Spanish production was extremely weak, at levels far below the English of their Spanish L1 classmates. Despite the school's goals of equality of Spanish and English proficiency, there was clearly "leakage" (Freeman, 1998) from the outside English-dominant world, a point to which I will return later.

Spanish in Ms. Torres's Classroom

I focused on a fifth-grade classroom based on findings that language use in one-way immersion classrooms begins to shift to English around fourth and fifth grade (Blanco-Iglesias, Broner, & Tarone, 1995; Met & Lorenz, 1997; Tarone & Swain, 1995) and on findings that by the fifth grade, Spanish language learners in dual immersion scored as fully proficient in Spanish (Christian, 1996). In addition, unlike younger children, 11-year-old students seemed more likely to be able to talk about their social identities and their investments in the Spanish language. Ms. Torres had immigrated to Chicago from Mexico when she was 14 years old, and she is now a very fluent Spanish-English bilingual. Morning classes were taught in Spanish and afternoon classes were taught in English, and Ms. Torres taught students the entire day.

The students needed a high level of Spanish comprehension in order to be successful in Ms. Torres's classroom. She spoke at a native pace, similar to what I have observed in Mexican elementary schools, and did not appear to "water down" her vocabulary (cf. Valdés, 1997; a more formal analysis of Ms. Torres's teacher talk is currently being conducted). In fact, she commented that, at the beginning of the school year, even L1 Spanish students complained that she spoke Spanish very fast. The social studies textbook and almost all math materials were in Spanish, and the students read three novels in Spanish during the year, had animated discussions about them, and wrote written responses that included new vocabulary items. Even students who could not produce much oral Spanish seemed to understand most of what they heard and read in their language arts, math, and social studies classes taught in Spanish.

However, as in the school in general, Spanish was the minority language in this classroom. Fifth grade was supposed to be 60% in Spanish and 40% in English, but according to my observa-

tions, Spanish was the official class language during only 40% of the week. The importance of standardized tests was evident as well (cf. Carranza, 1995; Carrigo, 2000). Near the time of the Iowa Test of Basic Skills and the Illinois State Achievement Test exams, Ms. Torres (and many other teachers) had their students complete reading and math journals in English even though math was supposed to be taught in Spanish. When students spoke to her in English during Spanish lessons, she sometimes required them to repeat themselves in Spanish, but she often allowed English use to go uncommented. Anyone who has observed an immersion classroom knows how challenging it can be to juggle the tasks of running a classroom and keeping students using the target language for several hours, and the constant deliberation of whether to focus on what the student said to advance the lesson or to focus on the way in which it was said. Many teachers I interviewed struggled with this issue, and I experienced it myself on several occasions when asked to take over a class for a short period. Even foreign language teachers in traditional classrooms can have difficulty keeping adult students using the L2 for a 50-minute class period.

Following Willett (1995) and Norton (2000), who examined the value that English holds for ESL learners, I sought to understand the importance these students ascribed to acquiring Spanish proficiency. Ms. Torres stated that she believed the students did not value Spanish enough for high or low proficiency levels to influence their status in the classroom. The students' comments about each other's classroom Spanish seemed to corroborate that it was not a large factor in their popularity. However, Spanish did appear to bestow two specific classroom benefits during teacher-fronted lessons: Using Spanish seemed linked to an identity as academically successful,⁸ and proficiency in spoken Spanish seemed to grant more success at getting the floor during teacher-fronted lessons, a point which will be examined later.

DATA COLLECTION

Between January and October 1999, I made 20 day-long classroom observations, visiting a total of 15 different classrooms ranging from preschool to eighth grade. In October 1999, I began conducting participant observations in Ms. Torres's classroom several mornings a week during classes taught in Spanish. I took fieldnotes about language use and about behaviors that seemed to reflect the students' attitudes toward Spanish, to-

ward the teacher, and toward each other. The students sat in clusters of four to five desks, which were rearranged approximately every month. I sat with a different cluster of desks every two or three visits. I also observed students in gym, lunch, recess, computers, music, and academic classes taught in English.

By December, I had selected 4 focal students: 2 girls and 2 boys, 1 of each L1. It is critical to note that the 2 Spanish L1 students had arrived to preschool Spanish-dominant, but by the time of this study they were English-dominant. Studies that focus on Spanish-dominant students will likely produce results different than the results presented here. All 4 students had at least average levels of oral Spanish proficiency (3.3 or higher out of a possible 5 as rated by researchers from the Center for Applied Linguistics [CAL]⁹ using a modified Student Oral Proficiency Assessment) and academic achievement as measured by the Illinois Goal Assessment Program (IGAP), *La Prueba Riverside* Spanish achievement test, and teacher assessments on report cards. Ms. Torres and I rated all 4 students medium to high on their amount of classroom participation during Spanish lessons. A brief description of each student follows.

Carolina (Spanish L1) was a petite, brown-skinned girl whose parents were from Ecuador and Honduras. She was one of the most fluent Spanish speakers in Ms. Torres's class, receiving a rating of 4.9 out of 5 by researchers at CAL. She spoke Spanish at home with her parents and her maternal grandparents and had no trouble expressing herself orally in class in either language, although she occasionally used English lexical items in her Spanish (e.g., "*Está wrestling con un cocodrilo*"). She was one of the most active participants in the classroom in all subject areas, volunteering answers to the teacher's questions and helping other students with vocabulary. Her classmates treated her as a competent peer, and she was especially good at soccer.

Maggie (Spanish L2) was a tall, light-skinned European-American girl. She spoke only English at home with her parents. Her oral Spanish proficiency, rated at 4.6 by CAL, allowed her to communicate her general ideas, but she often struggled to find words in Spanish. Although she did not often volunteer answers during teacher-fronted lessons, I noticed her early in my observations because, unlike the majority of her classmates, she used a lot of Spanish during unsupervised peer talk. This Spanish use was occasionally at the expense of socializing and shar-

ing materials with other students, who used English.

Matt (Spanish L1) was an olive-skinned, dark-haired boy whose mother immigrated from El Salvador as an adult. Matt's mom said that he regularly responded in English when she spoke to him in Spanish. Matt did speak Spanish at home with his maternal grandparents and with his maternal great-grandmother, but his stepfather was European American and did not know Spanish. Matt's oral Spanish was very native-like (rated at 4.9 by CAL), although he used English words and shifted entirely into English more often than Carolina did. He seemed ahead of his peers in his knowledge of school-related subjects and in his analytical skills, which was corroborated by his grades and standardized test scores, and he participated frequently in class, but he was beginning to exhibit resistance to homework and to school in general.

Otto (Spanish L2) was a talkative, African-American boy whose parents had immigrated from Africa before he was born. He spoke Standard English at home, and CAL rated his oral Spanish proficiency at 3.3, lower than the 4.1 average of all the English L1 students in his grade at the school. He struggled to express himself in Spanish and several of his erroneous verbal forms seemed fossilized throughout the year (*yo estás, nosotros vas*). Although he was not as fluent or as accurate in Spanish as Maggie, he was in fact more fluent than two other classmates and he participated more than most of them during Spanish lessons. Neither he nor Maggie had ever been recommended for SSL pullout classes at IAMS. Otto was bright and competitive, sometimes appearing aggressive toward teachers and other students, several of whom said they did not want to sit at his table for groupwork.

In order to quantify the amount of Spanish and English being used during Spanish lessons, I placed a stereo cassette recorder on the desk¹⁰ of 1 of the 4 focal students, supplemented by a video camera on a tripod in a corner of the room that was focused on the group that was being audio recorded. Unlike Broner (2000), I did not request that the focal students be placed together for the recordings, preferring instead to work with the natural procedures of the classroom. A resulting advantage was that because the students changed table arrangements once a month, the recordings gathered a wide variety of student interlocutors. A total of 53 hours over 22 lessons were recorded between December 1999 and May 2000. I also taped all 4 students during two English language arts lessons and two English social

studies lessons to confirm my observations that they never used Spanish during English lessons. For the corpus, I selected a total of 12 hours and 35 minutes recorded during 16 lessons (11 in Spanish language arts and 5 in Spanish social studies) over a 5-month period, resulting in 6½ to 8½ hours of recorded classroom data per student. On the recordings, students routinely went off task, spoke English during Spanish time, and sometimes used swear words, lending confidence to my belief that they did not see me as an authority figure for whom they had to behave properly. The corpus was selected based on criteria that sought to represent a balance between teacher-fronted (7 hours, 38 minutes) and groupwork lessons (4 hours, 58 minutes) and fairly equal amounts of data for each student. Fieldnotes taken during those sessions supplemented the audio/video recordings, allowing further analysis of the interactions.

In addition to quantifying Spanish and English use, I wanted to explore students' reasons for their language use. According to Tarone and Swain (1995), "the sort of evidence we need . . . is best provided qualitatively, either by ethnographic discourse analyses of individual children in the classroom, by verbal reports from these learners, or both" (p. 170). I employed an ethnographic case study approach in order to understand individual students' language use as a product of their investments in the identities they wanted to present. In order to understand these students' investment in Spanish, I gave them a written questionnaire to explore their attitudes toward Spanish, including their perceptions of the importance of Spanish in their personal lives, in Chicago, and in the school. I also read several pieces of students' journal writing about their Spanish use.

Interviews with students, their parents, and the teacher were also recorded. They were semistructured in that I used a set of questions as a guide, but the participants were allowed to respond freely. I interviewed the students in English because I wanted them to be able to express themselves well, and English was the dominant language for all 4 students. The interview was not intended to rate the students' Spanish proficiency, but to probe issues of investment in learning and speaking Spanish. Had I interviewed them in Spanish, I am certain that the responses would not have been as natural and rich. I also recorded one parent interview with each child's mother; because one child did not have a father living in his home, talking with mothers provided more uniformity across the four interviews. I used

English with the two mothers of the Spanish L2 students. With the two Spanish L1 mothers, I used the language that the mothers had used with me when I met them during a class field trip, Spanish with one and English with the other. Parent interviews were used to provide information on the child's language background as well as on the parents' language attitudes, given that children's language attitudes have been shown to reflect those of their parents (cf. Feenstra, 1969). The mothers also provided important insights on how they perceived their children's investments in Spanish.

In addition to our frequent informal conversations, I conducted two recorded interviews with Ms. Torres about issues that interested me during ongoing data analysis. I attempted to understand her decisions as she sought to promote the students' Spanish use; her ratings of the students' Spanish proficiency, participation, and attitudes; and her attitudes towards the focal students themselves. A teacher's attitudes towards learners can influence the question frequency and feedback patterns directed to them (Jackson & Costa, 1974). Tucker and Lambert (1973) considered teacher attitudes more important than even parental or community attitudes in influencing students' classroom L2 acquisition.

The use of various qualitative methods (such as observations, interviews, journals, and questionnaires) translates into different lenses through which to examine the issue being studied. I triangulated¹¹ my analysis in an attempt to present the most reliable interpretation of the setting by comparing student, parent, and teacher interview data, my observations, and students' comments within the corpus. I also had the parents, teacher, students, and school administrators read my written reports, which were approved with minor revisions.

DATA ANALYSIS

The main unit of language use analysis was the *turn*, defined as when an interlocutor stops talking or is interrupted by another interlocutor's turn (Ellis, 1994; Levinson, 1983). The 12½ hours of data from Spanish language arts and Spanish social studies lessons contained 2,203 student turns. I coded each turn according to nine sociolinguistic variables. This article focuses on six of them: speaker's L1, speaker's gender, language of the turn, interlocutor, topic, and what I have called *selectedness*.¹² Percentages of Spanish and English use were calculated for each variable.

Definitions and procedures for coding the turns are presented in Appendix A.

QUANTITATIVE FINDINGS

There were a total of 2,203 turns in this corpus. Removing the 5% of turns that were code-switched beyond the single lexeme level (see Appendix A) left 2,050 turns for analysis. Table 1 presents the overall language use of the 4 students.

The students used Spanish 56% of the time, far less than the 100% officially expected during these Spanish lessons. It was surprising that Spanish was used slightly less often in this classroom that continued native Spanish-speaking students than was found in a one-way immersion classroom with no that contained speakers (Broner, 2000, found 63% Spanish use overall) because even though both Carolina and Matt were English-dominant, they were highly proficient in Spanish. There may have been significant differences in language rule enforcement and expectations for Spanish use by the teachers in the two studies, but this aspect has not been formally examined. In addition, Broner sat the 3 focal students together for all data collection, which limited their peer interlocutors and may have affected their Spanish use patterns. However, the 56% Spanish use in my study was considerably greater than the 33% overall Spanish use found by Fortune (2001) in which 2 focal students spoke Spanish at home.

Table 2 shows the language of all turns made by each student, and Table 3 presents these findings by gender.

Table 2 demonstrates that the students' L1 was not related to their overall Spanish use. Maggie (Spanish L2) used Spanish 17% more often than Matt (Spanish L1). This lack of relationship was also found by Fortune (2001), who noticed that one L1 student tended to reserve Spanish for peers who were fully proficient in it. It may also be the case that some bilingual Latino students, in an attempt to conform to mainstream society's language expectations and to their classmates' language use, assert their English competence by using it as often as possible. Some teachers at

TABLE 1
Overall Language Use (Number of Turns)

Spanish	English	Total
56% (1,141)	44% (909)	100% (2,050)

TABLE 2
Overall Language Use (Number of Turns) by Student

	Spanish L1		Spanish L2		Total
	Carolina N = 590	Matt N = 527	Maggie N = 340	Otto N = 593	N = 2,050
Spanish	67% (393)	47% (248)	64% (219)	47% (281)	100% (1,141)
English	33% (197)	53% (279)	36% (121)	53% (312)	100% (909)
Total	100% (590)	100% (527)	100% (340)	100% (593)	100% (2,050)

IAMS commented that even recent arrivals from Latin America with low English proficiency preferred to speak whatever English they knew and were often the most difficult students to get to use Spanish in class. However, because Carolina and Matt (both Spanish L1) exhibited very different language use patterns, as did Maggie and Otto (both Spanish L2), further explanations must be sought.

Table 3 shows a gender-based pattern in these results.¹³ The girls averaged 18.5% more Spanish use than the boys, regardless of their L1. It may be that the girls were more willing to conform to the teacher’s expectations, as has been found in other elementary school classroom research (Toohey, 2000; Willett, 1995). Carolina showed interest in being perceived as a good student and in relating well to the teacher, which speaking Spanish could help her achieve. Maggie’s L1 was English, but both Maggie and her mother reported that she received consistent encouragement and praise for her Spanish from her teachers, her parents, and from a Mexican uncle. This encouragement combined with her serious academic focus may have been why she chose to speak Spanish so often in the classroom. The classroom Spanish use of these 2 girls, therefore, seemed related to their investments in identities

as well-behaved students, which will be explored in greater detail later.

As for the 2 boys, Matt was one of the top academic achievers in the class, but in conversations with friends he consistently expressed resistance to scholastic activities. I will argue later that this resistance to academic activities included a reluctance to use Spanish. Otto was bright and greatly enjoyed school. Given that he was very invested in having the right answers, his Spanish proficiency, lower than that of the other 3 students, may have made him less willing to use it publicly and risk being perceived as less competent. Ms. Torres did not consider either Otto or Matt to have serious behavioral problems, but they were among the boys most often disciplined in class. They were less interested in cultivating identities as well-behaved language-rule followers, which I believe was reflected in their language use. However, it is important to note that there were six girls in the classroom (two L1 and four L2) who resisted using Spanish, and there were three boys (two L1 and one L2) who seemed to enjoy using Spanish and rarely used English publicly during Spanish time. Therefore, gender explanations of language choice must be tempered by an examination of individual students’ classroom behavior.

Table 4 shows how the students’ language choices correlated with whether the interlocutor¹⁴ was the teacher or a peer.

TABLE 3
Language Use (Number of Turns) by Gender

	Girls	Boys
	N = 930	N = 1,120
Spanish	66% (612)	47% (529)
English	34% (318)	53% (591)
Total	100% (930)	100% (1,120)

Spanish Use with the Teacher

When talking to the teacher, these 4 students used Spanish 82% of the time. Another way to look at this finding is that of the total 1,141 Spanish turns in the corpus, 70% of them (794) were directed to the teacher, and of the total 909 English turns in the corpus, only 19% of them (171) were directed to the teacher. These percentages

TABLE 4
Student Language Use (Number of Turns) by Interlocutor

	Spanish	English	Total
Speaking to Teacher (47% of corpus)	82% (794)	18% (171)	100% (965)
Speaking to Peers (53% of corpus)	32% (347)	68% (738)	100% (1,085)
Total (100% of corpus)	1,141	909	2,050

indicate a good deal of effort on the students' part to conform to the teacher's language expectations when addressing her. Broner (2000) found 98% Spanish use with adults, but only 15% of the total corpus included an adult as an interlocutor. My focal students directed almost half of their total turns (47%) to the teacher, so the 82% Spanish use actually represents a larger quantity of Spanish use. However, greater expectations for IAMS students to use Spanish with their teachers would assist them in better meeting the Spanish language goals of the program.

Turns to the teacher were sometimes public (shouted out loud) and sometimes private (when she approached the students' desks during groupwork activities). I compared language use directed to the teacher under these two conditions (Table 5), predicting that students would feel more pressure to use Spanish when speaking publicly and would use more English with her privately.

The students used slightly more English when speaking privately with the teacher (24%) than they did when speaking to her publicly (16%). Because using English during Spanish time could result in a reprimand, the students may have tried to avoid a public reprimand by adhering to the language rule more strictly when speaking publicly, relaxing slightly when speaking to the teacher privately. This difference was not large, but it may be an interesting area for future research.

TABLE 5
Public and Private Turns (Number of Turns)
Directed to the Teacher

Total Turns to Teacher (N = 965)	Spanish	English
Public (N = 818)	84% (687)	16% (131)
Private (N = 147)	76% (111)	24% (36)

Spanish Use with Peers

Table 4 shows that of the 1,085 turns directed to peers, 68% were in English and only 32% were in Spanish, a considerable drop from their 82% Spanish use with the teacher. Due to the presence of native Spanish-speaking students in dual immersion classrooms, I expected to find greater use of Spanish with peers than had been found in one-way immersion contexts. This was not the case. Although Broner (2000) also found considerably less Spanish use with peers (58%) than with adults (98%), the 32% peer Spanish use produced in my study was less than that in Broner's. As mentioned previously, the limited seating arrangement used in Broner's study may have affected the students' language production. Fortune (2001) found that 2 of her 4 focal students, one L1 and one L2, used English with each other over 50% of the time.

My findings corroborate those of Carrigo (2000), Fortune (2001), and Carranza (1995) that the presence of students for whom Spanish was a L1 does not guarantee overall higher quantities of student Spanish use than what has been found in one-way immersion classrooms. Many of the Spanish L1 students at IAMS were highly proficient in English and used more English than Spanish in their daily lives. Indeed, in my observations over 7 months in all grade level classrooms, on the playground, and in the cafeteria, English was the students' preferred language. Under these circumstances, it may be just as difficult to get Spanish L1 students to use Spanish as it is to get Spanish L2 students to do so. Carranza (1995) suggested that students experienced a "feeling of 'pretense' when two people communicate in one language, knowing that both can be more effective in another" (p. 174). Given Carolina and Matt's high levels of English proficiency, speaking in Spanish with their peers might have felt just as strange as it would have to Maggie or Otto.

On a positive note, as noted by Fortune (2001),

despite the high levels of English use with peers, students in many of today’s immersion classrooms do produce a lot of language. Immersion studies done in Canada in the 1980s and 1990s indicated that those classrooms were largely teacher-centered with limited opportunities for students to use French (Allen, Swain, Harley, & Cummins, 1990). In contrast, this classroom was very student-centered and offered ample opportunities for students to use language. The problem is getting them to use Spanish, a point to which I return in the conclusion.

Table 6 presents language use according to interlocutor for each student, again revealing gender differences.

The students’ language use with the teacher was fairly homogenous. All the students except Otto used Spanish between 83% and 91% of the time when speaking with the teacher, and even Otto’s language use with the teacher was almost three quarters in Spanish. The students’ language use with peers showed more variation, particularly related to gender—again, the girls used more Spanish than the boys—but there are some differences that merit description and which the concept of investment may help to explain.

Compared to Maggie, Carolina used slightly more Spanish with the teacher but slightly less with her peers. Carolina’s high oral Spanish proficiency would have allowed her to use Spanish with her peers more often than she did, but her interview and journal comments, which included worries over being chosen for soccer teams during recess, indicated that she was unwilling to risk social exclusion. Her classmates requested her as a tablemate more often than all the other girls in the classroom except one, indicating that she was very popular. Maggie, however, experienced a degree of social exclusion and mild teasing due to her intense academic focus and to her insistence

on using Spanish. She often answered her peers’ English in Spanish, which no other students in the corpus did, and even occasionally admonished them to use Spanish. It appeared that Carolina satisfied her investment in an identity as a proficient Spanish speaker through her use of Spanish at home and during teacher-fronted lessons; she did not need to insist on using Spanish during groupwork. Because Maggie did not speak Spanish at home, and she did not participate very much during teacher-fronted lessons, she insisted on using Spanish during groupwork in part to satisfy her considerable investment in an identity as a Spanish-speaker, which was more important to her than being popular.

Matt’s Spanish use with the teacher was only slightly lower than that of the girls, but with his peers he used the least Spanish of all 4 students. He demonstrated competing identity investments as school-oriented and as rebellious. During teacher-fronted lessons his frequent volunteered answers, offers to help the teacher, and Spanish use reflected his investment in a public identity as a conscientious student. He also wanted to avoid getting in trouble at school, which his mother and Ms. Torres said had serious repercussions at home, so he toed the line and spoke the minimal amount of Spanish required to stay on good terms with the teacher (unlike Otto, who was reprimanded more often). However, when talking with his peers out of the teacher’s earshot, his comments very clearly sought to identify him as resistant to authority and to the academic demands placed on him. He bragged that he did “buswork, not homework” and often complained about how much he hated school. As will be seen when examining the role of topic, such comments would logically take place in English, the adolescent vernacular of the classroom. He was a popular leader and occasionally attempted to

TABLE 6
Individual Students’ Language Use (Number of Turns) by Interlocutor

	Speaking to Teacher			Speaking to Peers		
	Spanish N = 794	English N = 171	Total N = 965	Spanish N = 347	English N = 738	Total N = 1,085
Carolina	91% (270)	9% (26)	100% (296)	42% (123)	58% (171)	100% (294)
Matt	83% (195)	17% (41)	100% (236)	18% (53)	82% (238)	100% (291)
Maggie	88% (112)	9% (15)	100% (127)	50% (107)	50% (106)	100% (213)
Otto	71% (216)	29% (89)	100% (305)	23% (65)	77% (223)	100% (288)

subordinate his peers through teasing, which also took place in English. Even Otto, who also often teased his peers, used slightly more Spanish with peers than Matt did, but I will show later that Otto's English use with the teacher had important negative repercussions.

Table 7 shows the amount of Spanish and English used for each topic. The terms *on task*, *management*, and *off task* are defined in Appendix A.

Most of the students' on-task turns (68%) were made in Spanish. Not shown in Table 7 is the fact that these 935 on-task Spanish turns accounted for fully 88% of the entire Spanish corpus, meaning that the great majority of the students' Spanish turns were on-task. Management turns were in English 57% of the time, suggesting the discursive similarity between management and off-task turns and justifying the separation of management from on-task turns (cf. Broner, 2000). Students greatly preferred English for off-task topics (83%).

Noting this trend, I examined the specific topics and functions of the students' off-task English and compared them to those of their off-task Spanish (cf. Broner, 2000). This was not a thorough discourse analysis, but it was apparent that the students used English to talk about movies, TV shows, and popular culture, and to carry out functions such as fighting, teasing, and indicating resistance to school (see Appendix B for examples of all 15 topics and functions). The students' off-task peer Spanish, however, was much more limited. For example, one student was recorded singing to himself absentmindedly the Spanish song they had learned in chorus; Matt produced several off-task Spanish turns on a day that the teacher was consistently within earshot of his table and was reprimanding students' English use.

Significantly, there were no references to TV, music, or movies, nor any fighting, teasing, or slang in Spanish, and, in fact, most instances of peer Spanish appeared not to carry out an authentic communicative function.

That most social talk in this dual immersion classroom was conducted in English and most Spanish was used with the teacher and for academic topics echoes Tarone and Swain's (1995) suggestion that a type of diglossia exists in one-way immersion classrooms.¹⁵ In my study, both L1 and L2 students used English for the majority of social functions, although Maggie presented a special case because the identity she sought to promote was precisely that of a Spanish speaker, which, combined with her intense academic focus, outweighed any need to perform social functions such as playing or talking about adolescent themes (Maggie made only 42 off-task comments, compared to an average of 90 for the other 3 students). However, Tarone and Swain also claimed that immersion students use their L1 because they lack the vocabulary to carry out social functions in their L2. They argued that if immersion students knew how to use the L2 for social functions, they would do so.

This study suggests an alternate interpretation. Even if the students had been able to carry out these social functions in Spanish, doing so would have prevented them from establishing themselves within their English-preferring peer group. In other words, it would not be enough for the Spanish-L1 portion of the student body to be able to carry out social functions in Spanish because English was clearly the dominant language for the majority of students and therefore for peer interaction. In fact, my speech samples suggest that Carolina and Matt were indeed proficient

TABLE 7
Overall Language Use (Number of Turns) by Topic

	Spanish	English	Total
On Task (67% of corpus)	68% (935)	32% (436)	100% (1,371)
Management (16% of corpus)	43% (144)	57% (193)	100% (337)
Off Task (15% of corpus)	17% (54)	83% (258)	100% (312)
Unknown	30%	70%	100%
The preceding turn was not entirely audible, making the topic impossible to determine (1% of corpus)	(9)	(21)	(30)

Note. *N* = 2,050.

enough to have carried out many of these social functions in Spanish except for the slang (given the nature of adolescent slang, children who grow up in the United States are unlikely to know very much Spanish slang) although stronger verification such as a translation exercise would be necessary to prove that they could have performed those activities in Spanish.

The final variable to be discussed in this article is selectedness (defined in Appendix A), which has not previously been examined in classroom immersion research. During teacher-fronted lessons, 87% of the students' turns were shouted out without the student having been selected by the teacher, but 13% took place after a student had been selected. When shouting out, students used Spanish 81% of the time, but when they had been selected, their Spanish use rose to 96%. I propose that this increase in Spanish use resulted because, after taking the trouble to bid for the floor and winning it over other students' bids, the students felt more pressure to use Spanish than if they had just shouted out their answers. Although selected turns constituted only 13% of the students' turns to the teacher, the fact that 96% of those turns were made in Spanish prompted me to examine the students' bidding strategies and how often they were successful, because the students who were granted the floor more often were theoretically more likely to produce Spanish in this classroom. Table 8 shows how often the students bid and were selected.

Maggie only made four verbal bids, so her selectedness is not considered here. The Spanish L1 students had a higher percentage of their verbal bids selected by the teacher than Otto did. This disparity may be due to a strategy that Carolina and Matt employed: When the teacher posed a question, Carolina and Matt often began forming a sentence in Spanish, such as "*Oh, es como . . .*" or "*Los que, los que . . .*" which seemed to attract the teacher's attention over competing bids of "*Ooh!*" or "*¡Yo sé!*" This strategy may be

more a function of their personalities rather than their language background or Spanish proficiency, but no L2 students in the corpus used this strategy.

Given that language production is a central component of language development (Swain, 1985), Spanish L1 students may possibly have reaped more linguistic benefits than their Spanish L2 counterparts in this classroom because they were more successful at creating opportunities to speak it. That Spanish L2 students were less successful at verbally gaining the floor suggests that this teacher expected and rewarded native-like participation during teacher-fronted lessons. This finding somewhat contradicts the suggestion of Valdés (1997) that dual immersion serves the needs of Spanish L2 students more than the needs of Latinos. Further systematic study of teachers' selection of students' bids in dual immersion classrooms would be useful because, as suggested by Carranza (1995), access to the floor in a dual immersion classroom is an important resource that not only affects the learning of content, but also constitutes opportunities to use, practice, and learn Spanish.

From my observations and interviews with the teacher, I concluded that Otto's low percentage of selected turns was primarily due to how he was positioned by the teacher. Ms. Torres felt that Otto had problematic classroom participation, stating that he talked too much, routinely went off task, had an aggressive interaction style, and used too much English. Indeed, Table 6 shows that Otto used more English with the teacher than did the other 3 students. I argue that this behavior led to a circular problem when Otto would bid for the floor: The teacher, convinced that Otto would use English or concerned that he would take the lesson off task, or both, called on him less often than the other students, which denied him the opportunity to practice and improve his Spanish and thus acquire enough Spanish to be able to participate successfully. Otto was

TABLE 8
Verbal Bids and Selected Turns

	Carolina L1 Spanish	Matt L1 Spanish	Maggie L2 Spanish	Otto L2 Spanish
Verbal Bids	28	24	4	18
<i>N</i> = 74	(38% of corpus)	(32% of corpus)	(5% of corpus)	(25% of corpus)
% of Verbal Bids	46%	61%	75%	22%
Selected	(13/28)	(14/24)	(3/4)	(4/18)

Note. Nonverbal bids (raising hands in order to be selected to speak) were too difficult to count accurately, so no attempt was made to determine how often students' nonverbal bids were granted the floor.

also used as a scapegoat on several occasions. When many students were talking at once, the teacher called his name in order to get the class' attention. It should be noted that Otto was indeed a very talkative student who often interrupted lessons and frequently challenged his teachers and his peers.

However, it is interesting to note that Otto actually used less English overall and was off task less often than Matt, but the perceptions of the teacher were ultimately more important than Otto's compliant language use in determining his classroom experience (cf. Jackson & Costa, 1974; Tucker & Lambert, 1973). A researcher working with the concept of motivation might mistakenly conclude that Otto used less Spanish than the other students only because he was less motivated to learn it, unaware of the fact that he was sometimes silenced by the teacher. Furthermore, Otto's investments in an identity as generally knowledgeable and socially accepted by his peers were more important to him than developing his oral Spanish proficiency. For example, when Maggie did not know a word in Spanish, she preferred to circumlocute and struggle to express herself in Spanish, which at times caused her to lose the floor to a classmate. Otto, by contrast, would shout out in English whenever he thought he knew an answer. Other aspects of Otto's investment in Spanish will be explored in the next section.

QUALITATIVE FINDINGS

Why did students use Spanish and English the way they did?

There is more than one way to explain why students use language the way they do in an immersion classroom. Tarone and Swain (1995) suggested the use of ethnographic discourse analyses of individual children in the classroom and verbal reports from the learners themselves. A very useful design was implemented by Fortune (2001), who showed students short video segments of themselves in the classroom and asked why they used Spanish or English in given exchanges. The author found that the students' language use was affected by clear classroom routines and teacher communication about expectations for language use, the proximity of the teacher, whether print materials were present, effective activity planning, and the language currently in classroom use. The factors that triggered English use included needs to "connect" with classmates, to express feelings and maintain comfort levels, and to communicate quickly and eas-

ily, whereas the factors that triggered Spanish included the need to prepare structured, product-oriented groupwork such as student-led oral presentations, creative writing tasks intended for a specific audience, and math projects.

Another way to examine the reasons behind students' language use is through the concept of investment, which emphasizes that the overriding purpose of social interactions is for people to construct and present an image of who they are (Norton, 2000). Similarly, Tarone and Swain (1995) noted that peer interactions serve the primarily social function of locating children in a hierarchy. Their language choices in the classroom must therefore be seen as part of their identity performances. There were four dimensions that emerged as relevant to students' investments: (a) home language use and support for Spanish, as discussed in parent and student interviews; (b) student attitudes toward the dual immersion school and toward Spanish, which I explored in student interviews and a written questionnaire; (c) the teacher's positioning of the student, which I analyzed through my observations and the teacher interviews; and (d) the student's position within her or his peer group, which I constructed through my observations and student interviews. In the following section, I will present a short summary of each student according to these categories.

Carolina

Carolina used a lot of Spanish at home, where she spoke mostly English but some Spanish with her mother (who had immigrated from Ecuador at the age of 5) and Spanish with her father (who had immigrated from Honduras after high school). All members of the household used Spanish with Carolina's grandparents. Carolina said that she used only English with her older sister and both Spanish and English with her 3-year-old sister. Both Carolina and her mother indicated that the family watched television and listened to the radio predominantly in Spanish. On more than one occasion I observed Carolina happily chatting with Ms. Torres about the latest plot in a *telenovela* (soap opera). Mrs. Padilla commented that she wanted her daughters to be bilingual, "really bilingual. Not just in speaking, but in writing and so forth," citing her own success in entering the job market as proof of the importance of these skills. Mrs. Padilla exhibited a positive attitude towards Spanish and felt secure in her daughters' appreciation of their family's Hispanic heritage. When asked if she thought that

Carolina would speak Spanish to her own children in the future, she responded, "She knows it's important for me that they learned Spanish. She has enough cousins that haven't, and when they go to South America, it's a shame, their Spanish is atrocious. And she knows that's not good."

Despite the positive attitudes her family held about Spanish, Mrs. Padilla showed considerably more concern about her daughters' English development. She took Carolina and her older sister to be tested for English grammar and signed them up for English tutoring, and admitted that although Carolina's English regularly contained new vocabulary that she learned in school, her Spanish did not. Carolina mentioned that because her older sister had been labeled "limited English" when she entered kindergarten, her parents used more English with Carolina in order to avoid the same classification. It seems accurate to say that for Mrs. Padilla, Spanish development was important as long as her children's English did not suffer, a very reasonable response to educational demands in the United States. Carolina's classroom language use may have reflected these competing demands.

Carolina enjoyed IAMS, indicating that she would not be happy in a school that taught only English because she "might forget Spanish," although she would have preferred that science be taught in English. According to Mrs. Padilla, she and her husband once considered sending their youngest daughter to a school that was more academically rigorous than IAMS, but "Carolina said no, it's a family tradition, you can't send her to another school." On the written questionnaire, she indicated "true" for all statements about enjoying hearing the two languages, the importance of knowing them in Chicago, and a desire for her hypothetical future children to know both languages. The only answers lowered to "kind of true" were about enjoying the way the languages were taught in school, wanting to marry someone who speaks Spanish, and the need to know Spanish to get a good job.

Although Carolina earned good grades, Ms. Torres confirmed Mrs. Padilla's assessment that Carolina did not like to write in either language. She postponed writing assignments as long as she could and did not put much effort into them. Her mother indicated that she resisted using the Spanish dictionaries her parents bought her, which amounted to several per year because she regularly "lost" them. It may be that Carolina used as much Spanish as she did with the teacher in order to maintain an identity as a good student, particularly if she felt her writing would not

do it for her. Her Spanish proficiency combined with her high level of classroom participation positioned her as a successful student during Spanish language arts and social studies classes; Ms. Torres and all of the other 3 focal students named Carolina when asked which students spoke Spanish well.

Carolina was well liked by her classmates. Ms. Torres allowed each student to write the names of three classmates with whom they would like to sit, and six students chose to sit with Carolina; by this measure, she was the second most popular girl in the class. With her peers, Carolina used English 58% of the time, including the functions of presenting her knowledge of popular music, radio stations, and television shows, as well as occasionally engaging in antischool discourse (e.g., complaining that she did not want to return to class after a field trip). She recognized that she used English during Spanish time, indicating that it was because she forgot or due to the fact that outside of class, "I talk English most of the time. I don't really, like, use Spanish that much." When asked how students reacted to Ms. Torres's discipline of their English use, she responded, "Sometimes we just don't talk because we are afraid that we might start speaking English." My observations confirmed that the students sometimes preferred to remain silent rather than speak Spanish with each other.

These observations suggest that Carolina's identity as a good Spanish speaker was displayed enough during teacher-fronted lessons (where she used Spanish with the teacher 91% of the time) that she did not feel the need to insist on using Spanish during groupwork. In addition, her journal entries indicated that she did not want to risk exclusion from social talk with her peers, which took place in English. Also noteworthy is Carolina's reluctance to accept a position as a superior Spanish speaker by virtue of coming from a Spanish-speaking family. She commented, "People keep on like judging me that I should really know a lot of Spanish since I come from a Spanish family. But sometimes it's not true, because sometimes you keep talking all this English and you start forgetting your Spanish." In the next section I will suggest that Maggie did just the opposite: She enjoyed receiving praise for her Spanish precisely because it was not expected of her as a nonnative speaker.

Matt

Matt's mother, Mrs. Castillo, came to the United States from El Salvador when she was 18

years old. Her husband, Matt's stepfather, was European American. Mrs. Castillo told me that when she spoke to Matt in Spanish, he almost always answered her in English or indicated that he did not understand what she said, so she repeated herself in English. She noticed that his Spanish vocabulary and syntax had declined over the past year. She said that Matt spoke only English with her husband (who did not know Spanish) and with his younger sister. Matt used Spanish every day before and after school with his grandparents and great grandparents living downstairs. The only other people with whom Matt said he used Spanish outside of school were two friends at church. Both Matt and his mother said that the television programs he watched and music he listened to were all in English (she said that Matt left the room whenever she put on Spanish television programs) but that he did watch an occasional soccer news program in Spanish. Although half of the library books that Mrs. Castillo regularly brought home for Matt were in Spanish, she said that he read more in English. Despite Matt's preference for English, when his parents mentioned moving to the suburbs and told him that he would only find English-speaking children there, he said, "I'm not going to speak Spanish or what?" and that "He was pensive, like he didn't like the idea very much." His mother also said that Matt paid attention to Latino entertainment figures and could identify their origins.

Matt's mother chose IAMS based on a recommendation from a family friend. She commented that the bilingual programs in other schools did not teach Spanish well, whereas at IAMS "*el primero es español*" (Spanish is first). She said this was important in her decision because:

Sometimes it's very difficult for someone who works to teach them . . . one can teach them to speak, but to write it well and read it well, it's quite difficult. They don't learn that in these schools around here. English, they're always going to learn. But the second language, which is the one of the family and where one comes from, it's very difficult because we're in an environment where more English is spoken.

Mrs. Castillo recognized that her son and his friends identified more with English than with Spanish, but she wanted Matt to know Spanish because it was "his background, his culture." Despite her positive feelings about IAMS, Mrs. Castillo expressed some of the same concerns as Carolina's mother about her son's English development. These parents may have nothing to worry about, because Matt and Carolina had no

noticeable accent in English and did very well in school and on standardized tests. Yet their fears about their children's English development may have been part of the reason why they did not push their children to use Spanish with them.

Matt was successful and well adjusted at school. According to his mother, "He feels like he's in a family, he identifies with everyone." His enjoyment of learning was reflected in his comment that he liked that the teachers at IAMS were strict because students could get work done. Matt exhibited positive attitudes toward Spanish, writing that it was important to know Spanish "because it's the language of your culture, and there are things in Spanish that we have to read." On the questionnaire, he indicated that Spanish was important on various levels (for a good job, for his future spouse and children, and in Chicago) but that he liked speaking Spanish slightly less than speaking English. When asked in the interview what was important to succeed at the school, Matt was the only focal student who mentioned "knowing Spanish and English."

Despite these positive attitudes, in his interview he said that there was "too much Spanish" at the school, particularly because the standardized math tests were in English: "Sometimes [having math class in Spanish] is bad, because in the Iowa tests, there's these words in English that they never told us, and like at the last minute they give us these sheets with the words in English." He also said he would prefer that science be taught in English because it would be easier. He then commented that learning Spanish was important at school only for Spanish class, nothing more, and that Spanish class was so boring that he "almost fell asleep once." When asked why he used English during Spanish class, Matt, like Carolina, replied that he was "used to talking in English." Maggie made the observation that "Matt knows lots of words in Spanish but he doesn't use them that much. When I was at his table, he goofed around a lot, so lots of times when he probably did know the words I was asking him about, he didn't say them." We saw in Table 7 that "goofing around" took place almost entirely in English, so Matt's inclination to do so would naturally lead to English use.

When I asked Ms. Torres to name students with high Spanish proficiency, the first student she mentioned was Matt, saying that he was "fabulous." However, later in the year she complained about his underutilized Spanish skills, commenting that he used too much English and often falsely told her that he did not understand or know how to say things. She said that he wrote

surprisingly well in Spanish (“even better than Carolina” in regards to spelling and other conventions) although the content was limited to “the basics.” His mother confirmed that he did not like to write in either language, preferring to finish quickly rather than plan and revise his work.

Although Matt was once the first student Ms. Torres mentioned for high Spanish proficiency, she did not consider his attitudes towards Spanish very positive. It was while discussing Carolina’s attitudes that Ms. Torres first revealed her opinion about Matt’s attitudes:

I think that Carolina likes Spanish. And she feels proud to be able to speak it. But Matt is different. [Laughter] He refuses it more. But it’s because of their age right now, I think he’s more rebellious.

Matt was one of the five students Ms. Torres mentioned from whom she most frequently took away *canicas*¹⁶ for speaking English. When asked how students felt when a *canica* was taken away, she replied:

They don’t like it. “Oh, but I wasn’t talking.” “No, but he asked me in English.” They deny it. Ay, especially Matt. He’s always fighting. You can see the anger on their faces. I see it very clearly, especially in Otto. And of course Matt, I don’t have to see it. He tells me. He’s very defensive. He’s always defending himself.

There are several examples of Matt resisting the loss of a *canica* in the corpus. Although he seemed to dislike being publicly reprimanded for speaking English, Ms. Torres said that when he was caught he did not make an effort to speak Spanish (which was also evident in the corpus). However, Matt did use Spanish 83% of the time with the teacher, indicating a general willingness to conform to the public language rules. This willingness may have been motivated by the fact that his mother kept in touch with Ms. Torres about her son’s behavior and academic performance and imposed negative consequences if either one was unsatisfactory. Being a good student involved staying on task and following the language rules, both of which he seemed to do enough to avoid getting into any serious trouble.

In addition, Ms. Torres said she was happy with Matt’s level of participation in both Spanish and English lessons. Perhaps for this reason, she selected his bids as often as she did. As was shown in Table 8, Matt made more verbal bids and had a higher percentage of them accepted than the other 3 students. Like Carolina’s strategies, Matt’s bidding strategies may have been partially responsible for his success in gaining the floor,

which, in addition to providing him opportunities to use Spanish, represented a positioning by the teacher as a competent classroom participant.

Matt indeed wanted to be perceived publicly as a conscientious and helpful student, which was evident in his frequent participation during class and his consistent volunteering to assist the teacher with tasks such as moving the overhead projector or collecting lunch money. Matt was also very intelligent and often provided his classmates with instructions and correct answers. However, once he had completed the assigned academic task, he clearly sought to position himself among his peers as popular and as resistant to school activities. Ms. Torres noted that he was a classroom leader and that he was aware of his increasing popularity with the girls. There are multiple examples in the corpus in which Matt attempted to subordinate his peers through playful teasing, made jokes, and indicated that he hated school and homework. Matt used the least amount of Spanish with peers of all 4 focal students, for which there are two possible explanations: Teasing and making jokes are off-task activities, which in this classroom took place in English, and resistance to school would naturally include an avoidance of using Spanish, which was arguably the language for on-task activity only.

Maggie

Maggie Butler’s home was English-speaking. Her parents were of Irish and German descent and her mother did not know Spanish beyond a rudimentary level. Her husband had developed a “fluent” level of Spanish by taking courses in college and speaking it daily at work. They decided to send Maggie to IAMS primarily for her to learn Spanish, which they considered “the second language of the world,” and for her to learn diversity and cultural sensitivity. In addition, Mrs. Butler’s sister was married to a man from Mexico, which they felt provided an important family connection to the Spanish language and Mexican culture.

Mrs. Butler described Maggie’s first 4 months in kindergarten at IAMS as horrible because she could not understand Spanish: “She was in tears. That’s probably why she learned Spanish as quickly as she did, because she couldn’t stand to sit there and have a story be read and not understand it.” Mrs. Butler recalled how Maggie excitedly announced to her parents that she would be learning to read in Spanish before English. Her parents placed labels on items around the house with their names in both languages. The family’s

home library had picture dictionaries and children's music in Spanish.

Although English was the language spoken in the Butler household, Spanish played a positive role in the family as a source of pride, entertainment, and connection to the community. Mr. Butler would occasionally organize "Spanish-speaking night" in the house and play Spanish word games with his children. Mrs. Butler indicated that in the past, Maggie and her younger brother Mark would spontaneously declare "Spanish only" time on Sunday afternoons, although Maggie said that now she only used Spanish with Mark when helping him with homework. Mrs. Butler also said that Maggie would sometimes unknowingly slip into Spanish while talking with her. She also spoke Spanish with a Latino neighbor and with parents at her brother's baseball games. Mrs. Butler commented that because her daughter looked up every word she did not understand, they bought her an expensive electronic translator. Her children also received periodic visits from a family friend from Spain who gave the children Spanish books, read to them in Spanish, and talked with them about Mexico. When Mrs. Butler required Maggie to open her bank account in Spanish with a Spanish-speaking teller:

At first she was very mad at me. And walking home from the bank, she goes, "Mom, I get it! If somebody in the bank only knows English, and a person in the bank who wanted to do their banking only knew Spanish, I could help them understand each other." And I was almost in tears, because that's exactly it. And from that point on, she noticed all the places that she could use Spanish outside of the school. We'd be in restaurants, and those people don't think that we're a bilingual family sitting here. And [our kids] have befriended every chef and every waiter in every restaurant on the North side. They all know our kids, and they love it when they come, they totally speak in Spanish in every restaurant that we go into. And that's a wonderful connection for them.

Mrs. Butler appeared to take pride in the fact that her family could connect to people in their community through the Spanish skills of her children. She also seemed to enjoy the challenge that her children's Spanish presented to people's perceptions about the family based on their physical appearance, which was echoed by Maggie in her interview.

Perhaps the strongest indication of the role of Spanish in Maggie's life came from her mother's claim that she had "adopted" a Hispanic identity through her uncle from Mexico. Her Uncle Paco lived in a Chicago suburb but returned monthly to his hometown in Michoacán, Mexico. When

the Butlers visited him there, the governor took them for a 4-day tour of the state, which Maggie loved so much that she detailed how she would pay for the entire school to visit Mexico as her classroom project on how she would spend a million dollars. According to Mrs. Butler, Uncle Paco was very proud of Maggie's Spanish, particularly because his two sons did not know the language. It is significant that Maggie called Paco's mother *abuela* (grandma), who according to Mrs. Butler was happy "finally" to have grandkids like Maggie and her brother who appreciated Spanish. Mrs. Butler commented that this "grandmother" was also encouraging Maggie to have a *quinceañera* (15th birthday) party in Mexico, which contributed significantly to Maggie's self-identity:

She will now tell you that she is also Hispanic, because of her uncle, by marriage. She has added that to who she is. The fact that she's going to go down there and celebrate turning 15. It's like this was her legit way to take it on. I think she has always wanted to fit in in that way, at the Inter-American.

I do not know how many Latina students at IAMS talked about having *quinceañera* parties, but clearly this was important to Maggie. Overall, Mrs. Butler commented that Maggie felt like a group member at the school. When the Butlers considered transferring her to another school because of concerns that the sixth- through eighth-grade program at IAMS was not academically rigorous, Mrs. Butler recalls that "Maggie totally freaked out. She goes, 'You rip that [application] up right now, Mom. I am not going to another school, [the Inter-American] is the best school in the world.'" When asked why she liked IAMS, the first thing Maggie mentioned was that she was able to learn Spanish. She wrote that it was important to know Spanish to help other people and when in countries where Spanish is spoken. Ms. Torres noted that Maggie had "enormous respect for the language and the culture" and was aware that her parents were proud that she and her brother could speak Spanish, although Maggie's questionnaire results were not as consistent as might have been expected. She said it was only "kind of true" that she wants to marry someone who spoke Spanish and "false" that it was important for her children to know Spanish and that it was important to know Spanish to get a good job.

Of the 4 focal students, Maggie used the greatest amount of Spanish with her peers (50%). According to Mrs. Butler, Maggie told her that other kids used English because they were lazy, and that Maggie did so because she got tired of drawing attention to herself for her Spanish. Maggie also

said, just like Carolina and Matt, “I’m just not used to really speaking Spanish in conversations very much.” She added that she often felt frustrated learning math and science in Spanish and was glad that science was taught half in English. She added that when the teacher reprimanded the class for using English, “I feel like I should have been speaking Spanish, I feel kinda guilty.”

Ms. Torres noted that Maggie was extremely focused on her academic performance. Mrs. Butler corroborated that her daughter was a perfectionist with her schoolwork and felt she was letting the teacher down if she did not complete it perfectly. In addition, Ms. Torres felt that Maggie’s desire for her Spanish to be as strong as her English was so powerful that it caused her stress. When the class was reading the Cuban-American novel *Kike*, Ms. Torres said that Maggie cried because she didn’t understand everything:

When I talked to her I made her see that she was good [in Spanish], because she wants to be as good as she is in English. But I tell her, you can’t, because Spanish isn’t spoken in your home. You’ll do it one day, but it takes time. Maybe if at some point you want to live in Mexico or in Spain, or any other country, where the language is constant in your life.

Maggie’s insistence on speaking Spanish with her peers may have been motivated by this investment in getting her Spanish to be as strong as her English.

Maggie had a somewhat negative reputation among her peers that was fostered by her intense academic focus, her reluctance to share answers and materials with classmates, and her enthusiasm for Spanish. Both Ms. Torres and Mrs. Butler commented that Maggie generally enjoyed groupwork but would feel stressed when her classmates did not do an equal share of the work, which I observed on several occasions as she quieted her tablemates or expressed concern over the proper way to carry out a task. Several times I heard her respond to a peer’s question with “You should know that” and saw her refuse to lend art supplies. Maggie was just as popular a tablemate as the other 3 focal students, having been selected by four students, but she did experience a degree of marginalization. Several classmates made comments about her being “crabby,” teased her for her interest in music class, and expressed pleasure when she made mistakes. However, at other times she shared materials and engaged in friendly exchanges with her classmates. Both Matt and Otto recognized that Maggie used “mostly Spanish” during Spanish lessons. She was the only focal student in the corpus that re-

quested that her tablemates use Spanish and, more notably, she often responded to their English comments in Spanish.

It was unclear to me whether Maggie knew that her classroom language use was different from that of her classmates. She commented that the “whole point” of being at IAMS was to learn Spanish, and she was clearly willing to swim against the tide of peer English use. In addition to her investment in an identity as a Spanish speaker, she was an extremely meticulous student who promptly completed all assignments well and who was very concerned with following rules, including those of classroom language use. Also, insisting on Spanish during groupwork reduced the chances that her peers would direct social talk to her, allowing her to remain on task. However, her Spanish use and intense academic focus, her most important investments, resulted in a degree of marginalization by her peers.

Otto

Otto lived with his mother and two siblings. Mrs. Solomon immigrated to the United States from Liberia and spoke English fairly well. Otto regularly saw his father, who was from Guinea and spoke English fluently. Otto and his family spoke Standard English and both he and his mother commented that they watched English television programs and listened to English religious radio programming. Otto said that he used Spanish outside school only when “in a store and someone doesn’t speak English.” Otto’s mother felt that her son’s Spanish was “good, for somebody who, it’s not spoken at home, like other kids who already know it.” He received weekly after-school help with his homework from college student volunteers at a local Baptist Church. When I asked if these tutors also helped with his Spanish homework, his mother replied, “No, but he knows how to do his homework in Spanish, because he can speak it.” Mrs. Solomon spoke little and seemed less knowledgeable about U.S. school culture compared to the other three mothers I interviewed, but she was satisfied with her son’s academic development and with his Spanish skills.

Mrs. Solomon learned about IAMS through a brochure about Chicago’s nontraditional public schools and said that she liked the family environment, that the teachers were nice to the students, and that it was not as crowded as other schools. She said that Otto loved the school, describing how he woke up early every morning and waited for the bus before it was due to arrive. His mother

and father had each considered switching Otto to another school, and on both occasions he said he did not want to leave IAMS. His attitudes toward Spanish seemed positive. He said that he liked the school "because you learn a different language and if I go to a place and they only speak Spanish I'll know what they're saying." On the questionnaire, he indicated that it is important to know Spanish and that he will use it when he grows up. However, he indicated that he liked speaking Spanish less than speaking English and that he would have preferred to have math classes in English.

When asked about Otto's attitude toward Spanish, Ms. Torres sighed: "He likes it. He knows that it's good for him, but he doesn't have the support at home. He's trying, but he's not as fluent as he should be." Although she noted that Otto's Spanish had improved since the beginning of the year, his was the first name she mentioned when describing students who "constantly" used English in class. Ms. Torres considered Otto academically strong and very enthusiastic, but complained that he shouted out answers without thinking first, talked too much in class, and was often aggressive:

Otto is a good kid, but he's something else [*tremendo*]. [*Laughter*] His mouth doesn't stop all day long. They say he was the same way last year. The good thing is that he knows when he did something wrong, and he immediately apologizes. But he continues the same way afterwards. Sometimes in his spontaneity, he disrespects people and hurts them, his classmates and even his teachers. He can overwhelm even very strong students.

During groupwork, Otto often looked at his tablemates' written answers and compared them with his own (sometimes annoying them by copying directly) and asked them questions if he did not understand. When he thought he was right and a classmate was wrong, he said so, and when his competence was called into question, he often tried to blame his tablemates for misdirecting him. He also frequently teased them. Despite Otto's competitive, sometimes aggressive behavior, four students chose to work with him. He was also popular on the playground, where I observed classmates vying for his participation on their football and soccer teams.

Although Otto struggled to produce complete sentences in Spanish, he tried to appear competent by offering to help to other students when they had lost their place during a Spanish read-aloud or when they mispronounced a word. If he knew the answer to a vocabulary question, he

would call it out, and he provided English translations of Spanish words that he understood. When the teacher called attention to the class's English use one morning, he quickly stated, "*Yo estaba hablando español con José*" (I was speaking Spanish with José). On another morning, after Ms. Torres read a story in English, he announced, "*Colorín, colorado, este cuento se ha acabado*" (a common phrase signaling that a story has ended).

Despite his overall good intentions, Otto used considerably more English with the teacher than did the other focal students. In addition to volunteering frequently to plug in the overhead projector, carry books, or distribute rulers and calculators, Otto sought to display his knowledge of content whenever possible by frequently calling out answers to the teacher's questions. His lower oral Spanish proficiency was undoubtedly partially responsible for the fact that he rendered almost a third of these turns in English. Otto said that, overall, during Spanish classes he spoke half Spanish and half English, "Because I keep forgetting to speak Spanish, and I'm not getting it that much." But perhaps equally important were his strong needs to give the correct answer accurately and quickly, and to joke, tease, and argue with his peers, which, like Matt, he did on many occasions in the corpus. I suggested earlier that Otto's English use with the teacher contributed to his being called on less often than his classmates. His investments in an identity as knowledgeable and accepted by his peers, which he could do in English, appeared more important to him than developing his oral Spanish proficiency.

According to Norton (2000), learners invest in a language when they feel they will acquire a wider range of symbolic and material resources and expect the "return" to be worth the investment. I have sought to present a convincing analysis that, by using Spanish with the teacher, Carolina received favor beyond what her academic production alone might have earned, Maggie fortified her identity as a Spanish-speaker and an academically-focused student, and Matt was able to stay out of trouble, but Otto experienced a conflict with his investment in presenting himself as knowledgeable and aggressive. No one besides Maggie felt enough return on his or her investment to use Spanish with classroom peers.

CONCLUSIONS

The focus of the present study was the quantity and patterns of dual immersion students' output, which is important in SLA because it represents opportunities for students to exercise and receive

feedback on their developing systems (Swain, 1985) and because it serves as L2 input to their classmates during peer interactions and negotiations of meaning (Long, 1981). Although the field of applied linguistics has not yet articulated formal theories of heritage language development, it is reasonable to assume that heritage speakers must also produce output and negotiate meaning in order for their Spanish to continue developing. We found that the students' L1 was not related to the language of their output, so we cannot assume that the presence of Spanish L1 speakers in dual immersion classrooms (particularly English-dominant ones) will result in greater opportunities for students to receive Spanish input or to produce Spanish output. Although SLA theories such as Schumann's acculturation model (1978) recognize the importance of regular contact between language learners and native speakers of the target language, this study, as did Norton's (2000), showed that mere contact with native-speakers did not result in greater Spanish use by L2 learners.

An interesting area for future study in dual immersion is whether the language proficiency of peer interlocutors influences a student's language use. Fortune (2001) found evidence that interaction with native Spanish-speakers increased students' Spanish use. On several occasions, I noticed Carolina using more Spanish than usual when seated with highly Spanish-proficient Latino classmates, but the students in my study changed tablemates so often that quantification of this variable was not possible.

This study also suggests that we cannot assume that giving students a Spanish language task will result in Spanish use. Swain and Carroll (1987) also found that simply providing opportunities to speak French was not sufficient—"students need to be motivated to use language accurately, appropriately, and coherently" (p. 77). Fortune (2001) also noted, "Teaching students how to interact and support one another's academic and linguistic development is essential for [immersion] program success" (p. 326) and offered several recommendations. Similarly, my study suggests that teachers must explore effective ways to group students and monitor their language use. For example, they could explicitly teach students how to carry out management turns in Spanish. Students' Spanish use with teachers must also be encouraged and monitored more consistently. In addition, careful attention should be paid to the messages and support that dual immersion teachers receive for using Spanish, given that they often feel pressure from administration and par-

ents to improve standardized test scores (Carrigo, 2000). This pressure will likely increase with the high-stakes testing associated with the No Child Left Behind Act.

Relevant to these students' language use patterns were their investments (Norton, 2000) in being perceived as well-behaved good students or as popular and funny (which may be related to gender), in receiving praise at home and at school for their Spanish proficiency, and whether they thought Spanish was important. This framework of investment emphasizes that language learning "is not simply a skill that is acquired with hard work and dedication, but a complex social practice that engages the identities of language learners in ways that have received little attention in the field of SLA" (Norton, 2000, p. 132). Investment can make an important contribution to the study of L2 acquisition as well as heritage language development and maintenance because this approach seeks to understand the reasons why students decide to communicate in their L1, in their L2, or in codeswitched language. No matter how well-run a language program is, if students' identity investments compete with their investments in developing the target language, or if the classroom environment denies them opportunities to participate in ways that are acceptable to them, their target language growth will not be as great as educators might hope. Fishman (1966) noted that with true, lasting L2 acquisition, a person often adopts some of the values associated with that language; it might also be true that if an individual does not have a critical composite of investments in learning or maintaining a minority language, he or she simply will not do so. Overall, the finding that individual students displayed such wide variation in language use highlights the usefulness of case studies in illuminating classroom language data.

Despite the high levels of English use found in this study, in the long term, heritage Spanish speakers most likely develop higher levels of Spanish proficiency in a well-run dual immersion program than in most transitional bilingual programs, and L2 students almost certainly learn more Spanish than they would in a 4-hour-per-week FLES program. A follow-up study of these students during their eighth grade year will include an analysis of their verbal systems and their sociolinguistic competence, writing, and global oral proficiency (cf. Harley, Cummins, Swain, & Allen, 1990). Preliminary results indicate that many IAMS students graduate with very respectable levels of Spanish proficiency, so Valdés's

(1997) claim that Anglophone children do not acquire lasting competence in dual immersion programs may be unwarranted.¹⁷ In addition, Spanish L2 students at IAMS appear to develop higher Spanish proficiency than those in the one-way immersion classroom that we visited, although it is impossible to make generalizations about the efficacy of different program types due to the array of variables that influence language development. For example, a well-run one-way immersion program may produce higher levels of Spanish proficiency than a poorly run dual immersion program.

Despite these encouraging language proficiency results, this study has shown that there was "leakage" (Freeman, 1998) into the classroom of the dominant language patterns in the wider community. One of the school's goals was to develop Spanish and English equally, but practices of English dominance outside the building found their way into the school. This dominance was apparent not only in the focal students' language choices in this classroom and in the fact that their English proficiency was higher than their Spanish proficiency, but also in the teachers' use of English lessons during times scheduled for Spanish lessons and in the importance given to English-language standardized tests. The sociolinguistic characteristics of the classroom and of the school in general suggested that although Spanish was used often for academic topics and for discipline, English was the unmarked language for social interactions among peers.

As Tarone and Swain (1995) have suggested, perhaps educators should not be overly concerned that students are not using the minority language to socialize; after all, a teacher's primary role is to encourage academically oriented development. However, as noted by Schiffman (1996), language policies that ignore the way language is truly used are doomed to fail. Freeman (1998) asserted that dual immersion is an attempt at language planning, and according to Fasold (1984), a successful language planning policy includes measures to influence people's self-identification so that the identity of the target language population becomes desirable. If heritage speakers in dual immersion are to maintain their Spanish language skills to a sufficient degree for them to transmit the language to their own future children, this study suggests that they need to be encouraged to cultivate strong investments in identities as Spanish speakers. This investment would probably prove useful for L2 learners as well, because true L2 acquisition un-

doubtedly involves some degree of second identity acquisition. Future research on language use in one-way and dual immersion classrooms, as well as in traditional foreign language classrooms, might find that investment is a useful tool for understanding students' language choices.

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NOTES

¹ By "one-way" immersion, I refer to classrooms in which few or none of the students are native speakers of the minority language, so no instructional practices are provided for students learning English as a second language. For an interesting discussion of the origins of Canadian one-way immersion, see Cleghorn and Genesee (1984). A summary of research findings in one-way immersion classrooms can be found in Genesee (1987, 1991).

² Most research in one-way and in dual immersion has examined standardized assessments of students' academic proficiency (Cohen, 1975; Lambert, 1984; and Swain & Lapkin, 1982, in one-way immersion, and Christian et al., 1997; and Thomas & Collier, 1997, in dual immersion). This focus has likely been necessary to maintain parental and administrative support of immersion programs.

³ Although 35% of the student body and 2 of the 4 focal students were heritage Spanish speakers, making this perhaps a de facto dual immersion classroom, the author states that the school implements a one-way immersion model (Fortune, 2001).

⁴ Parker, Heitzman, Ejerstad, Babbs, and Cohen (1995) did make recordings of students' output in one-way immersion, but these included only 52 instances of speech. McCollum (1994) made recordings in a dual immersion classroom, but the quantity and frequency of recordings were not reported, nor was the amount of Spanish use quantified.

⁵ The name of the school is used with permission; all other names in this article are pseudonyms.

⁶ Not all schools using the label "dual immersion" fulfill the descriptions provided in the introduction to this article. For example, one school had a 98% Latino population, which does not represent a balance between L1 and L2 speakers unless at least half of the students were in fact English-dominant.

⁷ Over half of the students receiving pullout SSL services were African American, many of whom were labeled Learning Disabled. An area for future research is whether such students experience greater challenges learning the minority language in dual immersion contexts (as found by Carrigo, 2000).

⁸ However, in this classroom the students most fluent in oral Spanish were not always the most academically successful.

⁹ I would like to thank Liz Howard at CAL for her assistance. This portion of the work reported herein was supported under the Educational Research and Development Centers Program, PR/Award No. R306A60001 for the Center for Research on Education, Diversity & Excellence, as administered by the Institute for Education Sciences, U.S. Department of Education. However, the contents do not necessarily represent the positions or policies of the National Institute on the Education of At-Risk Students, the Institute for Education Sciences, or the U.S. Department of Education, and the reader should not assume endorsement by the federal government.

¹⁰ A lapel microphone would have produced clearer data; some turns were inaudible and had to be eliminated from the corpus.

¹¹ *Triangulation* generally refers to “a process of using multiple perceptions to clarify meaning, verifying the repeatability of an observation or an interpretation” (Stake, 1998, p. 97) in order to lend credibility to a qualitative researcher’s findings and interpretations.

¹² *Selectedness* refers to how students gained the floor during teacher-fronted lessons. *Selected* meant that the student had bid to speak and was selected by the teacher to take the floor. *Unselected* meant that the student shouted out without bidding or being selected by the teacher. Further explanation is provided in Appendix A.

¹³ Broner (2000), Carrigo (2000), and Fortune (2001) did not examine students’ gender as a factor in classroom language use.

¹⁴ *Participant structures* have often been examined in immersion classroom research (Broner, 2000; Fortune, 2001; Parker et al., 1995). I examined language use during two different participant structures, *teacher-fronted* and *groupwork* activities, which resulted in 67% and 42% Spanish use respectively. As expected, most of the turns during teacher-fronted lessons were directed to the teacher and most of the turns during groupwork were directed to peers. However, 29% of turns produced during teacher-fronted lessons were actually directed to peers and 16% of turns produced during groupwork were directed to the teacher. Researchers should therefore consider interlocutor and participant structure separately.

¹⁵ However, this classroom did not appear to be entirely diglossic because academic topics were carried out in English 32% of the time during these Spanish lessons, and 17% of off-task turns were in Spanish. Given that Ms. Torres taught English lessons to these students in the afternoons, they were accustomed to speaking English with her for academic lessons. Spanish, therefore, was not the only “on-task” language of this classroom.

¹⁶ Students could earn marbles or *canicas* for finishing their work on time, for using Spanish during groupwork, and for other behaviors the teacher wanted to reinforce. Students lost *canicas* primarily for using English during Spanish time.

¹⁷ See also Snow, Padilla, and Campbell (1988), who

found that K–6 Spanish immersion program graduates who were not studying Spanish in high school scored 58% on speaking and 65% on listening measures, indicating some degree of lasting competence in Spanish. The linguistic proficiency and cultural investment of immersion program graduates is an important area for future research.

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APPENDIX A

Procedures for Coding Students' Turns

Turn

A turn was defined as when an interlocutor stopped talking or was interrupted by another interlocutor's turn (Ellis, 1994; Levinson, 1983). In Example 1, each numbered line represents a separate turn. Matt was assigned a total of four turns in this exchange: lines 2, 4, 6, and 8–9 (which formed one turn that extended to two written lines). The symbol "/" shows where one speaker interrupted another.

Example 1

- 1 Ms. Torres: *¿De qué otros lados vienen las historias y los cuentos?* (Where else do stories and tales come from?)
 2 Matt: *Oooh!*
 3 Ms. Torres: Matt.
 4 Matt: *De . . . cosas que existen y/* (From . . . things that exist and/)
 5 Ms. Torres: *De cosas que existen pero ¿dónde?* (From things that exist, but where?)
 6 Matt: *. . . y que no existen. Como/* (. . . and that don't exist. Like/)
 7 Ms. Torres: *De cosas que existen/* (From things that exist/)
 8 Matt: *Uh . . . como . . . um . . . como . . . son como . . . como una leyenda, dice de, del sol,* and how it
 9 was made and, *y cosas así.* (Uh, like . . . um . . . like . . . they're like . . . like a legend, it says, about the sun, and how it was made, and things like that.)

Gender and L1

There were 2 girls, 1 Spanish L1 and 1 Spanish L2, and 2 boys, 1 Spanish L1 and 1 Spanish L2. However, as mentioned previously, the Spanish L1 students were English dominant, which was likely a significant factor in their language use.

Language

Turns were coded by language as either Spanish or English. A turn with a single lexeme mixed in from the other language, what Myers-Scotton (1993) calls an ML + EL lexeme, was coded according to the matrix language. Therefore, the turn "No tenían muchos weapons" was coded as Spanish and the turn "I don't get the mensaje" was coded as English. Turns with larger mixed constituents, called ML + EL islands (Myers-Scotton, 1993) such as "Como una leyenda, dice de, del sol, and how it was made and, y cosas así" and turns with intersentential codeswitches (both of which formed only 5% of the corpus) were eliminated for this analysis. A small number of turns were coded null, including bids to get the floor such as "Oh!" (but "¡Oh, yo sé!" was coded as Spanish) as well as turns that consisted of only a name like "José" or "Ellen."

Broner (2000) and Fortune (2001) coded for language using different criteria, making our findings not entirely comparable.

Interlocutor

Turns were coded *to teacher* when students answered questions aloud during teacher-fronted lessons or directed turns to her during groupwork, and *to peer* when students directed turns to their classmates but not to the teacher. It was usually obvious who the intended interlocutor was, but sometimes it was not entirely clear whether a turn was intended for the teacher to hear. I used the turn's volume as a criterion: If the speech was picked up by the videocamera in the corner of the room, it was labeled to teacher because it was loud enough for one to assume that

the teacher was an intended interlocutor (although the turn was obviously intended for classmates to hear as well). If a turn was picked up only by the tape recorder on the desk, it was not loud enough for the teacher to be a likely intended interlocutor, so the turn was labeled to peers. If the student was actually talking to the teacher while she was near his or her group, close enough to be picked up by the tape recorder, the turn was coded to teacher. This criterion relied on some degree of subjective interpretation.

Topic

I used the term *on task* when the content of the turn was directly related to the official activity assigned by the teacher and *off task* when the students were talking about something completely unrelated to the official lesson. I utilized a third term, *management*, for turns that regulated academically oriented activity. While carrying out on-task activities, the students said things like “You go first,” “Let me see that,” and “Give me the red marker,” which are not comments related to the academic content itself but served to manage the completion of the task. Tarone and Swain (1995) and Blanco-Iglesias et al. (1995) used the dichotomy “academic topics” versus “socializing.” It may seem appropriate to equate on task with academic talk and off task with social talk, but, in fact, much of the language students use to regulate academically oriented activity (which I have termed *management*) appears more similar to social talk than to academic talk. Broner (2000) and others have recognized how difficult it is to decide if a student is on task or off task. The main criterion I used was whether the teacher would likely have approved of the utterance in the context in which it occurred. However, Fortune (2001) noted that describing tasks over many hours of observation in an elementary school, judging whether the students’ utterances are on or off task, and comparing tasks in one classroom to those in another is impossible to do in an entirely reliable manner.

Selectedness

I began to notice patterns in how students gained the floor during teacher-fronted lessons. Given that no immersion studies to date had examined this phenomenon, I created the term *selectedness*. *Selected* meant that the student had bid to speak and was selected by the teacher to take the floor. Bidding refers to the ways in which students gain permission to speak during a teacher-fronted lesson. Students usually bid for the floor by raising their hands, by shouting something like “Ooh!” or “I know!” or by doing both at the same time. *Unselected* meant that the student shouted out without bidding or being selected by the teacher. I excluded entirely choral answers (shouted out by more than one student) because they were usually only one word long, such as *sí* or *no*, and represented one of very few possible responses, so I did not feel they contributed much to a discussion about the students’ language use.

APPENDIX B Functions and Topics of Students’ English

Topics

Movies

During academic classes: Bulldog, Chuckie, Chuckie’s Bride.
When suggesting movies for the class trip bus ride, students used English.

TV Shows

“Who wants to be a millionaire,” “Reese’s”

Popular Culture

Pokemon, Power Rangers, Calvin and Hobbes cartoon book, Sony Playstation

Music/Radio Stations

Britney Spears, Savage Garden, B96, Santana, The Beat, OJ.

Addresses and Phone Numbers

“You live by Albany Street?”
“Hey, Matt, what’s your phone number?”

Activities Outside of School

“I like going to bed at nine o’clock.”
“I watch the news.”

Great America ("I've been on every ride like three times.")

"Have you been to St. Louis?" "Of course. Everybody's white. I like the arch."

"What did she give you? She left the price on it!"

Laser tag

Other classes

"I hope we have gym outside."

"Time for lunch"

Computers

"You could print it autoshtutdown. Once it's done printing, it will shut down."

Anti-School

"That's what I like about music class, I don't even watch the movies."

"I don't need no schoolwork. Buswork, that's all I know."

"I would say, oh, my tummy hurts."

"Oh, my head hurts. I don't care. Four, five more weeks and school's over."

Sports

"Tennessee goes for it! Tennessee wins!"

Wrestlers: The Rock, Vince McMahon

Other

"Ms. Solis had a baby."

"Your tag is sticking out."

"You got something in your hair."

"Oh my god."

Functions

Fighting/Arguing

"You keep kicking me."

"Stop doing that!"

"Be like that." "Fine, I will."

"Be quiet!"

Teasing/Sarcasm

"I dare you."

"Delia, you sat at the last seat on the ride. There was a hole in your seat. And it went faster. [Laughter]"

"I know that, I just found out." "Wow, finally."

"Boogers, where? You probably put it on there. Just kidding."

"You like her." "No I don't." "Yeah you do."

Playing

"José, I'm stuck to the chair."

"Don't do it, don't do it."

Slang/Informal Speech

Crabby, gimme, gonna, I don't wanna, cool, that's dumb, dude, boogers, whatever

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