Analizing linguistic outcomes of L2 learners: Hybrid vs. traditional course contexts

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Chapter 9
Analyzing Linguistic Outcomes of Second Language Learners: Hybrid Versus Traditional Course Contexts

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Hybrid models of teaching and learning continue to emerge in a number of foreign language (FL) programs at several universities and colleges across the United States (Allen & Seaman, 2010; Goertler & Winke, 2008; National Center for Education Statistics, 2011). A hybrid approach is one in which a traditional FL course, such as one that meets four days each week in a regular, face-to-face (F2F) format, is redesigned so that students meet only two days each week in a regular classroom, and the other two days are carried out via online work. As such, students do not come to class as frequently and instead rely on technological tools and tasks built into the course syllabus that allow them to do part of their coursework outside of the physical classroom (for additional definitions of hybrid and other models of learning with technology, see Allen & Seaman, 2010; Goertler, 2011; Goertler & Winke, 2008).

Given the growing number of FL programs that are incorporating more hybrid and fully online options in their course offerings (Parry, 2011; Thoms, 2011), much more work is needed to understand the positive and negative effects of the hybrid format on learners’ linguistic abilities in the FL. Although a small number of studies have attempted to demonstrate differences in linguistic gains between students enrolled in traditional FL courses versus hybrid FL courses (Adair-Hauck, Willingham-McClain, & Youngs, 2000; Blake, Wilson, Cetto, & Pardo-Ballester, 2008; Chenoweth, Ushida, & Murday, 2006; Echávez-Solano, 2003; Sagara & Zapata, 2008; Sanders, 2006; Scida & Saury, 2006; Young, 2008), much more work is needed.

This chapter reports on a small-scale empirical study that analyzes the speaking and writing gains of students enrolled in a Spanish language course taught in a traditional, F2F context versus students studying the same content in a hybrid course format. The chapter begins with a review of the literature that (a) highlights reasons as to why the number of hybrid FL courses are increasing in universities in the United States, (b) reviews past empirical work that has looked at linguistic outcomes of students in both contexts, and (c) describes some technological tools and applications that are becoming more commonly used in both hybrid and traditional FL courses. The chapter then describes the methodology of the study and reports on its results. The overarching research question investigated in this project is the following: what are the differences in speaking and writing gains of students enrolled in a hybrid Spanish language course compared with a traditional F2F Spanish
language course? The chapter concludes with a summary of the implications of the project and suggestions for future avenues of research in this area.

**Reasons for Increasing the Number of Hybrid Courses**

A confluence of factors has resulted in the increased demand for hybrid models of teaching and learning in the United States (Goertler, 2011). One important factor is the economy. The recent economic decline has significantly impacted the budgets of many universities. University budget cuts and spending freezes have adversely affected FL programs across the country and, as a result, individual FL programs have suffered. Some examples of these effects include the termination of several fixed-term lecturers and the elimination of Russian, Portuguese, Swahili, and Japanese, as well as the elimination of German and Latin majors in the Department of Foreign Languages and Literatures at Louisiana State University in January 2011 (Poderaro, 2010); proposed elimination of French, Italian, Russian, and Classics at the State University of New York at Albany (Jaschik, 2011); proposed elimination of course offerings in several “priority” FLs (e.g., Pashto, Turkish, Arabic); and reductions in funding for other FLs such as Arabic, Chinese, and Russian at many universities across the United States (Nelson, 2011). Current economic conditions have therefore made it more difficult for academic administrators such as deans and department chairs to justify supporting FL programs that typically have low enrollment numbers (e.g., Classics in many institutions), while at the same time having to deal with the insatiable demand for more widely studied FLs (e.g., Spanish).

Although the aforementioned examples might be considered extreme negative effects of the economic downturn, other consequences of a sluggish economy have also been felt by FL programs. That is, many programs have had to do more with less. Instead of terminating entire programs, some FL departments have increased class sizes or increased the teaching loads of graduate student teaching assistants (TAs) and lecturers to deal with the economic shortfall. In the case of Spanish, where many institutions find it hard to meet student demand, many programs have implemented hybrid or online courses (Thoms, 2011).

Another reason why the number of hybrid and online course offerings has risen in recent years is because of an increase in the overall number of students who are enrolling in higher education. According to the National Center for Education Statistics (2011), the total enrollment of students in degree-granting institutions in the United States (i.e., public and private postsecondary institutions that offer an associate’s, baccalaureate, or higher degree) will increase 13 percent between 2009 and 2020. Although a number of factors between now and 2020 may affect the accuracy of this projection, it is still worrisome for many regarding how institutions will be able to meet the demand, particularly in the case of FL programs. Some have suggested that unless the way in which courses are structured and delivered significantly changes over the next decade, it will be hard to accommodate student demand at the postsecondary level (Blake, 2008).

Recent figures indicate that more than a quarter of university students enroll in at least one online course during their four years at their institution (Allen & Seaman, 2010). Despite some anxiety and hesitancy by practitioners and students alike, the particular trend of more hybrid and online courses will become a permanent part of undergraduate students’ experience in U.S. institutions in the future.

Because of the increasing number of hybrid and online courses along with the overall projected increase in student population at the postsecondary level, publishers have begun to craft FL textbooks in such a way that the content can be easily delivered in a number of different formats. Specifically, many FL textbook packages now come with a much more fully developed online component that allows teachers the ability to assign more of the content online via electronic workbooks and other ancillary materials such as podcasts, interactive online games, virtual vocabulary flashcards, and so on. Furthermore, many publishers now routinely offer students both paper and electronic copies (i.e., an e-text version) of the FL textbook. In addition, more interactive applications accompany many current FL textbooks. Tools such as Wimba Pronto, Elluminate, blogs, and wikis allow for more teacher–student and student–student interactions to take place outside of the physical classroom. Thus, creating syllabi for and assigning work to be carried out in hybrid and online courses via the numerous tools and activities that are included in many contemporary FL textbooks can also be considered an indirect factor that has helped to facilitate the development and proliferation of hybrid and online FL courses in the United States. However, although the number of hybrid and online FL course offerings continues to increase, many researchers and practitioners remain skeptical about the effects of these learning contexts on learners’ second language (L2) linguistic competence. Some initial research efforts have shed light on the effects of hybrid learning contexts on learners’ linguistic development. We now review some of the comparison studies that have been carried out to date.

**Effect(s) of Hybrid Model on Linguistic Outcomes: Empirical Evidence**

Recent empirical work related to the effects of hybrid FL courses on students’ L2 learning has focused on a variety of linguistic aspects across different languages. Chenoweth and Murdy (2003) carried out a small-scale research project that looked at differences and similarities in linguistic gains between learners of French enrolled in an online course and those in a traditional course. The traditional course met four times per week, and each class meeting lasted 50 minutes. Twelve students were enrolled in the traditional course. Eight students were enrolled in the online version of the course and met in class once each week for 50 minutes. However, the online group participated in an hour-long online chat session each week and also interacted with classmates via email and a class discussion board. The researchers compared the two groups via a number of measures and found that there were no statistically significant differences between the two groups with respect to listening, reading, and speaking abilities. However,
the online group did achieve higher median scores on writing compared with the traditional group.

Chenoweth et al. (2006) carried out a large-scale study that analyzed the linguistic outcomes of students enrolled in traditional and hybrid French and Spanish courses. The study was carried out over five semesters and involved both P2F and hybrid elementary (i.e., first and second semester) and intermediate (i.e., third semester) French language courses and elementary (i.e., first and second semester) Spanish language courses. A total of 354 students participated in the study; 13 of the courses across the two languages were offered in a hybrid format, and 21 of the sections made up the traditional, P2F group. The elementary F2F courses for both languages met for four days per week, and the traditional French Intermediate course met three days per week; each in-class meeting lasted for 50 minutes. The hybrid sections across both languages had a one-hour class meeting each week. In addition, students in the hybrid sections had to meet P2F with their instructor or a TA 20 minutes each week on a rotating basis and had to carry out an online chat with classmates, which, on average, lasted 20 minutes. The hybrid sections also carried out a number of tasks each week via their online course management system (WebCT).

The researchers assessed differences between the two groups of learners (i.e., those enrolled in the hybrid vs. traditional sections) via a combination of speaking and writing assessments throughout each semester along with performance data from the final exams in each course. In all, they measured speaking, listening, reading, and writing abilities and assessed for grammatical accuracy and lexical richness in the various measures. Findings indicated that there were no significant differences between the two groups of learners among the majority of the components of the final exams and the speaking and writing assessments. Among all of the sections, two of the hybrid sections did not perform as well as their traditional counterparts. Nonetheless, the researchers concluded that overall, there were few significant differences between the two formats across the various courses in both languages.

Scida and Saury (2006) report on a pilot study originally carried out in 2003 at the University of Virginia that analyzed differences in student achievement between a traditional and a hybrid Spanish elementary (i.e., second semester) language course. The traditional course met five days per week and was composed of 22 students. In contrast, the hybrid course met three days per week in a regular P2F format. However, students also carried out several online activities (i.e., approximately two hours of work outside of class each week) via a course learning system originally created at the University of Illinois at Urbana-Champaign called Mallard. The program is essentially an early version of current learning management systems (e.g., Blackboard, Moodle), which allowed teachers to create a variety of language-learning tasks that were completed online. The researchers compared the final grades of the two groups of learners and discovered that 84 percent of the learners in the hybrid course earned a B or above compared with 73 percent of learners in the traditional course. Although the researchers admit that their study lacked more rigorous assessment measures, they conclude by indicating that it appeared that the hybrid model was as effective (or more effective) for the learners who participated in their project.

To provide a more thorough understanding of the effects of a hybrid format on students' linguistic outcomes, Young (2008) carried out an in-depth study at the University of Tennessee. The study involved 10 sections of an intensive elementary Spanish course. The course covered two semesters of beginning Spanish in one semester and was designed for students who had taken some Spanish in high school but needed a review of the basics of the language before enrolling in upper-level Spanish language courses. In all, 209 students participated, and approximately half of them took the hybrid version of the course, which met two days per week, and carried out various workbook activities online. The other half took the traditional version of the course and therefore met three days per week and carried out their workbook activities via a hard copy of the workbook. All students were subjected to a variety of assessment measures both at the beginning and at the end of the semester (i.e., all students took a version of the placement exam both at the beginning and at the end of the semester, and all students took a battery of proficiency tests to assess for speaking, reading, listening, and writing competencies as well as a SOPI, a tape-mediated oral proficiency exam). The results of the study indicated that there were no statistically significant differences between the two groups of learners across the aforementioned variables or measures (i.e., no significant difference in speaking, reading, writing, or listening ability). The researcher concludes her study by indicating that a possible factor regarding the insignificant differences between the two groups may be partly attributable to the fact that more experienced instructors and TAs were assigned to the hybrid sections.

When implementing a hybrid course in a FL program, many instructors and coordinators often worry about the effect of the hybrid format on students' developing speaking ability in the L2. Blake et al. (2008) focused their efforts on determining the differences in oral proficiency gains between students enrolled in traditional, hybrid, and fully online (termed distance learning in the study) Spanish language courses at the University of California—Davis. In all, 233 students enrolled in a traditional Spanish language course, 64 students took the hybrid version, and 21 enrolled in the fully online Spanish language course. The traditional sections met five days per week and were expected to invest an additional five hours per week outside of class to their studies (bringing their total number of hours to 10). The hybrid sections met three hours per week in a P2F format with their instructor and were also required to dedicate seven hours of additional work online (for a total of 10 hours per week dedicated to their coursework). Finally, the students taking the same course as a fully online course were expected to put in 10 hours of work each week. The researchers administered an automated oral proficiency exam (called Versant for Spanish) in all three course formats at the end of the semester. The results of the study indicated that there were no statistically significant differences regarding oral proficiency ability across all three formats. Although the findings confirmed what the researchers hypothesized about the differences and similarities of oral ability of learners across all three contexts (i.e.,
that there would be few differences), the authors conclude stating that more work is needed in this area.

In sum, the handful of studies that have been carried out to date indicate that there is little to no difference in the linguistic outcomes of learners who enroll in a F2F L2 course compared with those enrolled in a hybrid or online course. Some have indicated that because of the variety of ways in which hybrid courses are configured, coupled with the distinct data collection and analysis procedures across the various studies, caution is necessary when understanding the results of the comparative studies (Blake, 2011). However, it is clear that there is little empirical evidence to date that indicates that students in a hybrid L2 course will perform worse than students in a similar, F2F course. Nevertheless, more work is needed, especially as the nature of the technological tools used in all L2 courses continues to evolve. It is now necessary to briefly review some of the more interactive tools and applications that are available to both teachers and students in traditional and hybrid L2 learning contexts.

Computer-Assisted Language Learning and Web 2.0 Tools

The field of computer-assisted language learning in the past few years has turned its attention to a number of technologies that are finding their way into the social and academic lives of students and teachers alike (Arnold & Ducate, 2011). Specifically, many new technologies—termed Web 2.0 tools—allow teachers to be more creative and flexible when planning courses and determining what can be taught in and outside of the classroom. The omnipresence of Web 2.0 tools in the lives of many students has influenced how teachers, publishers, and so on create and deliver content in the L2 classroom. Web 2.0 tools include applications such as micro-blogging (e.g., Twitter), video-based online chats (e.g., Skype), wikis (i.e., web pages where one or more learners can edit the content on the page), text-based chats, among various other applications. These applications allow users to create and interact more with content and other users (e.g., classmates) in an online environment. In other words, Web 2.0 tools allow learners to move from being consumers of information in online environments to producers of content in those contexts.

In addition to the interactive characteristics of Web 2.0 tools, others have suggested that the term Web 2.0 involves an attitude about technology and specifically about one's relationship with respect to others. “This Web 2.0 attitude revolves not so much around the individual as it does around the individual as an integral part of the collective whole” (Lomicka & Lord, 2009, p. 4). Whether one views the advent of Web 2.0 tools as a kind of attitudinal change on behalf of students or sees it as applications that allow for students to interact more freely outside of the physical classroom, the L2 classroom—both traditional and hybrid courses—will include the use of these tools for the foreseeable future. As such, this study hopes to add to the hybrid—traditional L2 course discussion while also reporting on the inclusion of Web 2.0 tools in both contexts.

Some researchers have looked at the use of specific technological tools in both traditional and hybrid L2 courses. Sanders (2006) analyzed two separate text-based chats of students in a traditional and in a hybrid Spanish language course. The traditional section met for just over three hours each week, and the hybrid section met for just over two hours each week. Both groups had similar online activities that accompanied their in-class coursework. However, the hybrid course had one additional online listening comprehension activity and quiz as well as one additional vocabulary exercise and quiz each week compared with the traditional course. Students in the traditional Spanish language course carried out the two online chats analyzed in the study in groups of three students (on average); students in the hybrid section carried out the two online chats on their own outside of class and averaged three students per chat. The hybrid group was simply told to form and organize a time outside of class to carry out the two chats. It is important to note here that the two chats in both the traditional and hybrid sections were used in order for students to exchange information with each other that would later be used in a written composition that described another person in class. Therefore, collaboration was encouraged for both groups of learners in order to complete the written task after the chats were completed.

The researcher analyzed the chat logs for every learner in the traditional and hybrid groups and measured aspects such as time on task, total number of turns, number of Spanish words used, spelling accuracy, and social and off-task comments; he did not look at grammatical accuracy. Sanders found that both groups of students were attentive to the goals of the task and generally stayed on topic. However, the hybrid group spent more time on the task and overall produced more language during the chats compared with the traditional group. The researcher concludes that the hybrid group “engaged electronically in more social communication” (p. 67) and therefore maintained more student–student interaction outside of class versus the traditional group.

Although there are limitations related to Sanders’s (2006) study, it does represent an initial attempt to understand how a specific type of Web 2.0 tool (i.e., text-based chats) can be used in hybrid L2 courses. Although this current study does not follow in the same vein as the study by Sanders (2006), it does report on differences in language production (i.e., speaking and writing) of students enrolled in a traditional and hybrid Spanish language class. Web 2.0 tools were incorporated in the study given the interactive nature of the tools themselves and because few hybrid-based studies to date include tasks that are carried out by learners via Web 2.0 tools.

Methodological Challenges of Comparative Research

Before moving on to the details of the current study, it is necessary to note here that there are inherent methodological challenges that are shared by many of the comparative studies described above. Specifically, the main caveat is that many of the studies that attempt to compare the effects of traditional versus hybrid FL courses on student learning do not control for potential differences in the amount
of instruction or learning between the two conditions. Controlling this variable is necessary when carrying out this kind of research to ensure the validity of the study’s results.

Research Questions

The following research questions were investigated:

1. What are the differences in speaking gains of students enrolled in a hybrid course compared with a traditional F2F course?

2. What are the differences in writing gains of students enrolled in a hybrid course compared with a traditional F2F course?

Methodology

Participants, Setting, and Course Information

This project was carried out in two sections of an Elementary (i.e., second semester) Spanish II language course at a large research institution in the southern United States during the spring 2011 semester. One section of the course was defined as a traditional Spanish language course in that it met four days each week in a F2F format. The other section was defined as hybrid. Instead of meeting four days each week F2F in a classroom, students met three days each week and in lieu of the fourth day, carried out work outside of class via a variety of online activities. It is worth mentioning here that both classes were assigned the same amount of work. Each class took the same amount of reading, grammar, and vocabulary quizzes; carried out the same number of speaking and writing activities; took the same exams; and so on. In addition, both courses were taught by the same instructor to eliminate any possible teacher effects. The instructor was unaware of the main goal of the research project. The researcher intentionally did not inform the instructor about the specifics of data analysis. This was done so as to avoid any potential research bias on behalf of the instructor when she went about teaching the two different sections.

In all, 24 students were enrolled in the traditional section of the course, and 26 were enrolled in the hybrid course. Fourteen of the students in the traditional course were female, and 10 of them were male. Eighteen of the students in the hybrid course were female, and eight of them were male. Students’ ages in both sections ranged from 18 to 22 years old. It is important to note that students who took the Elementary Spanish II course at the university where this project was carried out did not directly place into the course via a placement exam. For this particular course, all students had first completed Elementary Spanish I before being allowed to enroll in Elementary Spanish II. As such, all students were familiar with the textbook and its online tools because the first part of the book is covered in Elementary Spanish I and the latter half of the book is covered in Elementary Spanish II. The textbook used in both courses was a custom edition of Temas (Cubillos & Lamboy, 2008).

It should be noted here that students had the opportunity to choose whether or not they wanted to take Elementary Spanish II in a traditional or hybrid format. Specifically, a description of the hybrid course was posted on the registrar’s website during the course enrollment period during the fall 2010 semester. Therefore, students knew that the hybrid met only three days each week and included a heavy technology component.

The instructor for both sections of the course was 47 years old and had more than 10 years of experience teaching college-level Spanish language courses at the university where this project took place. She was familiar with teaching hybrid Spanish language courses at the university, and the course that she taught from which data was collected represented the third time that she had taught a hybrid section of the course. She was also very familiar with the technologies used in the course and with the online components that accompanied the Spanish language textbook.

The semester in which data collection took place was the last semester in a three-year Spanish language hybrid course pilot program that was initiated by an academic dean. The program provided some initial funding in the form of course releases for two instructors to redesign course syllabi in three lower-level Spanish language courses in order to convert them to hybrid courses. Other than the course releases, no other funding was provided to the instructors or the researcher to collect data for the project. The pilot program was implemented by the dean to see whether or not costs related to course offerings in Spanish could be reduced via a hybrid model and to understand any potential negative or positive effects of a hybrid course on students’ ongoing linguistic development in Spanish (see Discussion and Conclusion for more on this aspect of the project).

As previously stated, the same number of graded assignments, quizzes, and exams were offered in both the traditional and the hybrid sections of the course. However, to make up for the fewer in-class days each week, students in the hybrid sections were often assigned two or three additional online workbook activities and grammar tutorials each week that were made available to them by the textbook’s publisher. Students in the hybrid section also carried out four 30-minute audio or video-based chats with their classmates via Wimba during the course of the semester. The chats allowed them to interact with fellow classmates outside of the classroom to practice their speaking ability in Spanish. Finally, the hybrid students also maintained biweekly journals (for a total of eight entries) via personal blogs in addition to the regularly assigned written homework and in-class writing activities that were also done by the students in the traditional course. In sum, this study made use of the following Web 2.0 tools: blogs and audio- and video-based web chats.

Data Collection

To understand the differences in speaking and writing gains among students in the two course formats, speaking and writing measures were collected from
students in both classes during weeks 2 and 15 of the spring 2011 semester. Each of the speaking diagnostics was composed of five questions (see Appendix 9-A for both diagnostics). Students were not given any preliminary information about the nature of the speaking exams. They were advised to go to a computer lab on a specific day during weeks 2 and 15 to do speaking activities and practice. On the day of the speaking diagnostics, students were assigned to their own computer and headsets in the lab. They were then given instructions about the nature of the task and directions as to how to hear the questions and how to record their answers.

Each of the five questions for every diagnostic was prerecorded and delivered to students via the conversations application from the Center for Language Education and Research housed at Michigan State University (CLEAR, 2011). The conversations application is free and allows teachers the ability to record questions audio or video prompts. The application was also chosen because it allows the ability to build in timing restrictions for students’ responses and creates an archived audio file that can be easily accessed by teachers after administering the exam. Students heard each question asked twice and then were prompted to respond. In addition to hearing the questions being posed to them on the computer, students also received a printed copy of the questions. This was done to ensure that the speaking diagnostic focused on students’ speaking abilities and not on their listening comprehension skills. It should also be noted that students were instructed to respond to each question by speaking for 35 seconds. The timing feature in the application therefore stopped recording students’ responses after 35 seconds and moved students on to the next question.

Similar to the speaking diagnostics, students in both the traditional and hybrid groups were asked to report to a computer lab during weeks 2 and 15. There was no information given to them before the two writing diagnostics were carried out. That is, students were told the day of the diagnostics that they would be doing some additional practice with writing in the lab and nothing more. On the day of the diagnostics, each student was assigned to a computer. The researcher and cooperating instructor described the writing activity and answered any questions students had before they began to do the writing diagnostic. Each writing diagnostic was similar in that every one provided some structure for students and asked them to do similar things. In diagnostic 1, each student described him- or herself and his or her family in the United States to a future host family in Spain. In diagnostic 2, each student described his or her university or university life to a pen pal in Chile (see Appendices 9-B and 9-C for both writing prompts). For both diagnostics, students in each class had 25 minutes to write and composed their work electronically in a Word document. Students were not allowed to use any resources while they wrote (i.e., no hard copy or electronic dictionaries or translators, and they were not allowed to use their textbooks). After completing each writing diagnostic, the files were saved and collected by the researcher.

Data Analysis
Data analysis involved the rating of the speaking and writing samples collected in both the traditional and hybrid classes. Both diagnostics for speaking and writing were rated and compared to discover any differences in gains between students in each class format. The ratings for the speaking samples were based on a rubric that assessed students’ answers to each of the five questions. Embedded in the rubric were the following five criteria: thoroughness, ease of expression, use of appropriate vocabulary, grammatical accuracy, and correct pronunciation (see Appendix 9-D for speaking rubric). Each answer for each question was therefore rated individually. Each of the five scores was totaled, and an average speaking score for each diagnostic was determined for every student.

The ratings for the writing samples were based on a rubric whose criteria consisted of two sub-areas: one score for content, organization, and coherence and another score for the quality of language or grammatical accuracy (see Appendix 9-E for writing rubric). The scores for each sub-area were combined to calculate a final written score for each writing sample for every student across both classes. The final scores for each writing diagnostic for each student were compared to determine which class format (i.e., traditional or hybrid) has more gains in writing ability over the course of the semester.

It is important to note here that two raters were used to carry out the ratings for both the speaking and writing samples. The raters were experienced full-time lecturers who were familiar with the course in which this project took place. Before carrying out their ratings, the researcher met with each rater individually and provided some basic training for them by answering their questions about how to interpret and apply both of the rubrics used in the study. Sample ratings for both writing and speaking samples were also carried out during the mini training sessions. After each of the two raters finished rating the speaking and writing samples, the researcher compared the results. Interrater reliability was determined to be 0.93. There were some discrepancies with some of the student samples between ratings. However, in those cases, the researcher consulted with the raters and came to an agreement about each rating.

Results
The results are presented based on each research question investigated in this project.

RQ1. What are the Differences in Speaking Gains of Students Enrolled in a Hybrid Course Compared with a Traditional F2F Course?
A Shapiro-Wilk normality test was first used to determine whether the variability or variation of the differences between speaking diagnostic 1 and 2 were normally distributed between the traditional and hybrid classes. The test determined that for both classes, differences in variation did not adhere to acceptable patterns of variability. Thus, a Wilcoxon rank sum test was used to more accurately understand differences between speaking diagnostic 1 and 2 in each of the classes. As can be seen in Table 9-1, there were no statistically significant differences between the traditional and hybrid courses with respect to speaking gains over the course of the semester. In other words, the hybrid students performed as well as their traditional counterparts with respect to the development of their oral proficiency over the course of the semester.
Table 9-1. Differences in Speaking and Writing Gains Across Traditional and Hybrid Courses

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*p < .05.

RQ2. What are the Differences in Writing Gains of Students Enrolled in a Hybrid Course Compared with a Traditional F2F Course?

Similar to research question 1, a Shapiro-Wilk normality test was first used to determine how the distribution of scores varied between both of the two writing diagnostics and across both types of classes. Similar to the speaking diagnostics, the normality test determined that the variation of scores did not follow a normal distribution. Therefore, a Wilcoxon rank sum test was run to determine any differences in writing gains between diagnostics 1 and 2 across both classes. Table 9-1 indicates that in the case of writing, there was a statistically significant difference between the traditional and hybrid courses. Specifically, students in the hybrid group improved their writing ability more than the students in the traditional course. Reasons as to why these differences appeared are explored below.

**Discussion and Conclusion**

This small-scale study has attempted to contribute to the ongoing discussion about the linguistic benefits and challenges for students enrolled in a hybrid language course. As we have seen, the results of the various diagnostic measures indicate that for the students participating in this study, those who were enrolled in the hybrid section experienced comparable gains as those enrolled in the traditional section of the same course with respect to their speaking development. These results are similar to previous comparative studies that have also looked at speaking ability (Blake et al., 2008; Chenoweth & Murday, 2006; Chenoweth et al., 2006; Echávez-Solano, 2003; Young, 2008). Although care must be taken when comparing the aforementioned comparative-oriented studies because of a number of different variables inherent in each project, a growing number of empirically based studies have indicated that less F2F class time does not translate into students in hybrid courses not being able to develop their L2 speaking ability.

Anecdotaly, many practitioners and researchers in the field of FL education and instructed L2 acquisition are skeptical about the possibility of learners in hybrid courses fully developing their oral skills compared with students in traditional L2 classrooms. However, as more interactive technology continues to evolve and more empirical work is carried out and established over time, fears of students not being able to fully develop their L2 speaking skills will be mitigated.

We have also seen how the learners in the hybrid section made more improvements in their writing ability over the course of the semester compared with the students enrolled in the traditional section. Again, these results are similar to those of previous studies that have looked at writing ability of students in hybrid and traditional L2 course contexts. Although it is uncertain as to why the learners in the hybrid section had more gains in their writing ability when compared to their counterparts in the traditional section, one can hypothesize that the learners possibly produced more written language doing the biweekly journals in their personal blogs and therefore simply had more time on task with practicing writing in Spanish. Again, the biweekly journal assignments in the hybrid sections were intended to compensate for the writing that might take place during the one day per week away from the classroom. This reason is merely speculative, and more investigation is needed to clearly determine why the hybrid students improved their writing more than the traditional students.

Although this study did not specifically focus on the effects of the Web 2.0 tools that were incorporated in the hybrid section in this study (i.e., blogs and the conferencing tool Wimba), it is worth noting that these new tools will only allow for greater interaction and the building of a community of learners for both traditional and hybrid L2 courses. In the case of hybrid courses, these tools will connect learners in a more meaningful way and will also allow for teachers to interact with their students even when they are not in a physical classroom space. Given the increased number of interactions afforded to learners in hybrid courses via an ever-evolving array of Web 2.0 tools, linguistic gains by learners in hybrid courses may likely increase compared with learners in traditional courses. However, future research efforts will need to confirm this.

**Limitations**

As previously mentioned, this study involved a small number of students. More students enrolled in additional sections of each of the two course formats would have increased the validity of the study's findings. The researcher recognized this limitation when conceptualizing the project. However, scheduling issues and the availability of adequate instructors to teach additional hybrid sections of the course during the semester in which this study took place made it impossible to add more hybrid courses and students to the project. A related limitation involves the lack of control for gender in both classes. However, given the ecological or naturalistic nature of the study, this gender difference could not be controlled.

The study would have also benefitted from a closer examination of each of the components that made up spoken and written discourse as defined in it. Specifically, the rubrics used included a variety of categories (e.g., quantity, fluency, grammar, vocabulary, and pronunciation made up the oral rubric). A more fine-grained linguistic analysis of each of these features for speaking and those that defined written discourse in the writing rubric would have shed more light on the differences in students' writing and speaking gains in both classes. This is a clear limitation that needs to be addressed in a follow-up study.
Future Avenues of Research

Future work in this area should focus more on a variety of aspects. One area of research that has currently received some attention looks at characteristics of learners that may indicate why they are successful in hybrid learning contexts. Specifically, a number of learner variables that are not related to the linguistic and technological competencies of learners, such as personality traits (e.g., conscientiousness, being open to new experiences), may indeed help determine whether or not learners are able to learn and further develop their L2 abilities in a hybrid context. Blake and Bilinski Arispe (forthcoming) are currently working on this issue, and it is likely that more research in this area will be carried out in the near future.

A second area of research related to hybrid language courses has to do with computer literacy itself. Given the fact that many undergraduate students arrive to L2 courses having been immersed in and grown up with technology since they were born, they may indeed facilitate their learning experience in a hybrid context. Many hybrid—traditional comparative studies do not include this kind of information when looking at differences in student outcomes in the two contexts. Future work should attempt to describe what level of computer literacy one needs to have in order to be successful in a L2 hybrid course.

Finally, much more work is needed to understand how the proliferation of Web 2.0 tools is changing the ways in which students learn the L2 (in both hybrid and traditional contexts) and how they are affecting how L2 teachers approach their jobs in hybrid language learning contexts. Specifically, what training do teachers need to have in order to create a hybrid learning environment in hybrid and online contexts? What L2 teaching methods can successfully be transferred from traditional to hybrid and online learning contexts? Does the experience of teaching a hybrid language course have a reverse effect—that is, can anything (e.g., tools, tasks, concepts) that works well in a hybrid environment be applied to and improve teaching in traditional contexts? These are just some of the questions and research areas that still need to be addressed regarding L2 teaching and learning in hybrid environments. Hopefully, more research will soon answer these questions.

References


Appendix 9-A. Speaking Diagnostics 1 and 2

Diagnostic #1

(Week 2)

NOTE: Students were given 35 seconds to respond to each question.

Pregunta #1: ¿Quién es tu mejor amigo o amiga? ¿Por qué es tu mejor amigo o amiga? Describelo/la.
Pregunta #2: Describe tu rutina diaria desde la mañana hasta la noche.
Pregunta #3: ¿Qué hiciste durante las vacaciones de Navidad (Christmas)?
Pregunta #4: ¿Qué te gusta hacer en tu tiempo libre?
Pregunta #5: ¿Qué quieres hacer después de graduarte de la universidad?

Diagnostic #2

(Week 15)

NOTE: Students were given 35 seconds to respond to each question.

Pregunta #1: ¿Cuál es tu programa de televisión favorito? ¿Por qué es tu programa favorito? Describelo.
Pregunta #2: Describe lo que haces normalmente cada día después de tu clase de español.
Pregunta #3: ¿Qué hiciste durante las vacaciones de Spring Break?
Pregunta #4: ¿Qué te gusta hacer los fines de semana?
Pregunta #5: ¿Qué tipo de trabajo quieres después de graduarte de la universidad? ¿Por qué?

Appendix 9-B. Writing Diagnostic #1

Week 2

Un semestre en España

Instructions. You have recently been accepted to participate in a study abroad experience in Madrid, Spain during this upcoming summer. While in Spain, you will be living with a host family. The study abroad program has asked you to write a letter to your host family in order to introduce and describe a bit more about yourself. Follow these steps:

1. Introduction
   - Introduce yourself. You may want to include a physical description of yourself along with information about why you chose to study in Spain and/or why you are interested in learning Spanish.

Appendix 9-C. Writing Diagnostic #2

Week 15

Una descripción de tu universidad

Instructions. You have recently started communicating with a Chilean pen pal (Sofía) who attends the University of Santiago. In the last letter that you received from her, Sofía indicated that she would like to learn more about what it is like being a student at your university. Write a response to her where you do the following:

1. Introduction
   - Begin by telling her why you chose to come to University X.

2. Body of the text
   - Describe the kinds of classes that you are currently taking along with information about the professors who teach those courses (e.g., which course is your favorite, which is your least favorite, and why)
   - Indicate what kinds of social activities are available to students at University X.
   - You can include any other information in this section that you think helps describe University X to Sofía.

3. Conclusion
   - Write a conclusion where you pose a few questions to Sofía about her university/her university experience in Chile.
Appendix 9-D. Rubric for Speaking Diagnostics 1 and 2

NOTE: The rubric below was used for each response to each question on each of the diagnostics for every student. An average speaking score (i.e., the average score on all five questions) for each diagnostic was calculated for every student.

Excellent (Score of 5)
Response answers question thoroughly.
Considerable ease of expression and high level of fluency.
Wide range of vocabulary.
Very good pronunciation.

Very Good (Score of 4)
Response answers question well.
Ease of expression and good fluency.
Good range of vocabulary.
Few errors in structure.
Good pronunciation.

Good (Score of 3)
Response addresses or answers question adequately.
Some fluency with occasional hesitancy; may self-correct.
Adequate vocabulary; few Anglicisms.
Some errors in structure.
Pronunciation that may interfere with communication.

Fair (Score of 2)
Response addresses question inadequately; may be unfinished due to lack of resources.
Labored expression, halting; limited to no fluency.
Few vocabulary resources.
Limited control of structures; fragmented Spanish.
Pronunciation that interferes with communication.

Poor (Score of 1)
Response clearly does not address the question.
Clearly does not understand the question.
"No sé" or "No entendi la pregunta."
No attempt made (although microphone is open and recording).
Mere sighs or nonsense utterances.

*If a student speaks less than half the time for a question, deduct 1 pt. from score for that question.

Appendix 9-E. Rubric for Writing Diagnostics 1 and 2

Content, Organization, Coherence

8-10: Writer has followed instructions and has written a coherent and convincing composition/letter. Length is sufficient given the time parameters and covers almost all of the points presented in the guide (introduction, body, conclusion). Writing is comprehensible throughout. Overall impression is one of coherence and completeness.

6-7: Structure of composition is clearly evident, but not all sections are fully developed. Use of surface-level translation strategy causes meaning to break down in places. Length is adequate or marginally adequate. Provides some details, but not enough to create an excellent composition/letter. Some attention to coherence is needed.

3-5: Weak organization and coherence. Shows evidence of "stream-of-consciousness" writing, rather than thoughtful organization. Considerable use of surface-level translation strategy causes frequent breakdowns of meaning. Clearly too short to do justice to the topic. Details may be seriously lacking.

1-2: Virtually no coherence or organization. Meaning may frequently be hard to decipher. Very poor in terms of content and length.

Quality of Language/Grammar

8-10: Accuracy in vocabulary and grammar is quite good, although there may be some errors, particularly in structures beyond the student's level. No systematic errors in agreement (e.g., subject-verb, noun-adjective) are present. Use and control of the present tense is apparent. To get a 9 or 10, there should be few errors in the basic structures that students at this level are expected to know well.

6-7: Accuracy in vocabulary and structure is acceptable, but there will be a good number of errors in structures that the student should know. Student may make errors in use of some familiar structures.

3-5: Accuracy in vocabulary and structure is weak, with errors in almost every sentence.

1-2: Very poor in all ways. Error-ridden and difficult to understand.