Student Learning Outcomes in Hybrid and Face-to-Face Beginning Spanish Language Courses

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Abstract
This study investigates language learner outcomes that were gathered for the Beginning Spanish Hybrid Pilot Program at the University of Nevada, Reno. The study investigates whether students enrolled in Beginning Spanish I (SPAN 111) and Beginning Spanish II (SPAN 112) hybrid courses arrive at the same learning outcomes as those students enrolled in the equivalent traditional face-to-face courses. Students from 15 hybrid Spanish language courses (first and second semester) and 15 traditional (offline, face-to-face) courses from Fall 2011 through Spring 2013 were assessed. Multiple measurements were used to compare learning outcomes between hybrid and face-to-face students at both levels (SPAN 111 and 112) in oral production, written production, reading comprehension, listening comprehension, grammar knowledge, and vocabulary acquisition using four measures: Versant for Spanish scores; BYU placement test scores; end of semester final exam scores; and, final course grades. The statistical analyses of the data indicate no significant difference between the hybrid and face-to-face courses on any of the measures or levels suggesting that the hybrid online language courses have been successful: the students in the hybrid courses made progress in their second language learning performance similar to that of the students in the equivalent traditional face-to-face courses. Student and instructor feedback, reflecting attitudes and experiences with the hybrid courses are used to better understand the comparative results. The qualitative data suggest that students need instructor guidance and that both students and instructors need ongoing technical support for the successful implementation of hybrid language courses; however, hybrid students appear have the characteristics of being more motivated, self-disciplined and responsible for their learning.

1. Introduction
The debate over the future education in the digital age is no longer if it is going to happen but what and how are the best ways to make it happen. Currently, there are three general online learning situations: a web-facilitated conventional face-to-face class; a hybrid class where half the time is spent in class and the other half is on the web; and, a fully virtual online course. Because of the apprehensions concerning the quality of student-learning outcomes in online education, in 2009 the U.S. Department of Education published a study that compared online learning with traditional face-to-face learning at the postsecondary level [1]. The data suggest that students who took all (virtual) or part (hybrid) of their classes online performed significantly better than those students in the traditional face-to-face classroom. In addition, they found that those students in hybrid online learning classes did significantly better than those in entirely online classes. Following this trend, the interest in online language instruction has motivated a number of studies to compare different learning outcomes ([2], [3], [4]), to present innovative games and techniques [5] among many others. As a natural consequence, administrative and faculty interest in online teaching is growing. Unlike other institutions where hybrid classes are created because of classroom shortages [6], instructor shortages [4], or even to increase the number of students while maintaining the same number of instructors [7], hybrid language instruction was introduced to the first year Beginning Spanish language program at the University of Nevada, Reno (UNR) two years ago to make Spanish language courses available to a wider population of students who would not normally be able to make it to campus four hours a week. Two new hybrid courses were created for Beginning Spanish I and II (SPAN 111 and 112), each with four sections, which meet two hours a week (instead of four) and incorporate up to seven hours of web-based practice activities per week outside of the classroom. These hybrid classes paralleled the traditional face-to-face classes in content and activities; however, the hybrid students were required to complete many activities prior to reviewing them in the class with their instructor.The purpose of this study is to determine whether the students enrolled in the hybrid classes reached similar learning outcomes as those students enrolled in the equivalent traditional face-to-face courses.

2. Hybrid and face-to-face Spanish courses

At UNR, the Department of Foreign Languages and Literatures offers fifteen to twenty sections of Beginning Spanish I and II traditional face-to-face Spanish classes each semester in comparison to three to four sections of hybrid Beginning Spanish I in the Fall semester and three to four sections of Beginning Spanish II. In addition, we will start offering only one section of entirely online virtual Beginning Spanish I and II courses each semester.

The hybrid and face-to-face Beginning Spanish I and II courses at UNR are similar in that the students study the same number of chapters using the same textbook [8] and the course syllabi are similar in their course components. The chapter exams, three oral interview activities (presentational, descriptive, and interactive), and the core homework assignments are also the same for both learning contexts. For the core homework assignments, both course types rely heavily on the McGraw-Hill Publishers' *Spanish Connect*, a web-based application that offers various types of grammar, vocabulary, reading, speaking, listening, and writing activities: 1) automatically graded workbook/lab activities providing feedback after the students' third wrong attempt; 2) instructor graded workbook/lab activities; 3) *LearnSmart* Flashcard activities that review chapter specific grammar and vocabulary and point out to the students where their weaknesses might be; 4) interactive *Mundo Interactivo* speaking and writing activities that are task-based scenarios that have the students explore a wide variety of topics within a cultural framework; and, 5) instructor graded extended writing activities that include short sentence answers, diary entries, and guided writing activities. In both class types, students are fully immersed in the second language as they engage in a variety of task-based activities (in-class surveys, interviews, and information gap activities) identified in their texts as activities of communicating.

In addition, both course types are housed entirely in the Blackboard Learning System, which is a virtual learning environment and course management system. Blackboard allows educators to add web-based elements to traditionally face-to-face courses and to also foster easy development of courses with fewer or no face-to-face meetings. Blackboard allows easy communication with and among students (asynchronous and synchronous chats and discussions), course content can be posted easily (supplementary worksheets, articles, assignments, video links, etc.), voice recordings, quizzes, and assignments can be accessed and posted online, and an online grade book for instructors to post grades and for students to view. Access to Blackboard for these Spanish courses allows for increased availability to material, improved communication, and tracking of work in the course.

The hybrid courses differ from the face-to-face courses in that instead of meeting four times a week for fifty minutes each class, class meetings were reduced to two fifty minute classes and outside online-work was increased to approximately seven hours per week (from four). In addition to the core homework assignments, the students completed additional exercises to complete in their e-book before seeing the material in class with their instructor. In this manner, the students came to class prepared and class time was spent clarifying any grammatical or lexical ambiguities or difficulties and the instructor is then able to focus on completing activities with attention to both form and meaning of the structure and on communication skills with pair-work activities focusing on oral interaction and negotiation of meaning. One drawback of hybrid language learning might be, at least with the current textbook, that the students miss the much expected teacher-fronted explanation of the grammar or vocabulary structure and then the progression of activities from structured input activities (which require no production) to structured output activities (which require production).

3. Previous studies on the efficacy of hybrid language learning

As mentioned earlier, hybrid and online learning are on the rise in general as well as in foreign language learning contexts. With the increased number of hybrid and online courses, brings an increase in research in the field. In my survey of literature on the effectiveness of hybrid courses on student learning, I found that many of the studies researching the effectiveness of hybrid language learning used student grades as a measurement ([9], [4], among others) or *Versant for Spanish* scores to measure oral proficiency[2]. However, few studies to date have empirically examined the effectiveness of a large-scale comparison of hybrid language learning using various measurements and at different levels. This study helps address this gap by investigating the effectiveness of hybrid language courses on students' learning outcomes using data from four different measures. In

addition, the data was collected from four face-to-face and four hybrid Beginning Spanish I (SPAN 111) courses and from four face-to-face and four hybrid Beginning Spanish II (SPAN 112) courses from Fall 2011 through Spring 2013. The study addresses the following research question:
- Are there differences among the SPAN 111 and SPAN 112 students enrolled in hybrid and face-to-face courses in terms of semester end scores on the following four measures:
- the language learners' *Versant for Spanish* test scores;
- the language learners' *Brigham Young University (BYU) Computerized Adaptive Placement Exam (CAPE)* Spanish test scores;
- the language learners' final exam test scores; and,
- the language learners' final course grades?

All students who were analyzed in this study were adults whose first language was English and could not identify themselves as heritage Spanish speakers.

4. *Versant for Spanish* test scores

In this study I used the *Versant for Spanish* testing instrument to measure oral proficiency. The test was administered by phone and scored automatically by means of speech recognition and parser software. The test, published by Pearson Publishers, required the SPAN 111 and SPAN 112 students to read aloud, listen and repeat, say the opposite, answer short questions, build sentences from jumbled-up word combinations, answer open-ended questions, and retell stories. Because the test is designed to elicit responses from the test-taker in real time, it estimates the test-taker's level of automaticity with the language. The overall score ranges from 0 to 80 and can be related with the Speaking Proficiency Guidelines used by the American Council of the Teaching of Foreign Languages (ACTFL). The following *Versant Spanish* test score ranges are listed here with their associated ACTFL level description for speaking. A *Versant Spanish* score of 20-22 would place the language learner at the Novice-Mid ACTFL level rating, 23-32 at Novice-High, 33-42 at Intermediate Low, 43-52 Intermediate Mid, 53-62 at Intermediate High, 63-72 at Advanced Low, 73-79 at Advanced Mid, and a score of 80 and Advanced High or higher.

The SPAN 111 students took this test towards the end of the Fall 2012 semester and the SPAN 112 students took this test towards the end of the Spring 2013 semester. Only SPAN 112 students who took hybrid SPAN 111 the previous semester could be included in the SPAN 112 hybrid group. The descriptive statistics for the test scores are summarized in Table 1. Overall, the language learners at the end of their SPAN 111 hybrid classes did slightly better (30.33) than the face-to-face students (28.89), and placing both groups at the ACTFL Novice High level at the end of SPAN 111. The language learners at the end of the SPAN 112 hybrid classes similarly did slightly better (34.19) than the face-to-face students (33.13).

Table 1. Descriptive statistics for hybrid vs. face-to-face *Versant for Spanish* test scores

Level	Learning Context	N	Mean	Std. Deviation	Std. Error
SPAN 111	Hybrid	27	30.33	7.49	1.44
	Face-to-face	28	28.89	1.09	1.09
SPAN 112	Hybrid	21	34.19	9.217	2.01
	Face-to-face	30	33.13	6.24	1.14

The test scores were submitted to a one-way ANOVA where the dependent value was the test score and the factor for the learning context (hybrid vs. face-to-face). The *F* statistics establishes that there is or is not a difference between group means. The significance value of the SPAN 111 *F* test =.638 (p < .428) and of the SPAN 112 *F* test = .239 (p<.327) meaning that the differences between the group means is not significant and therefore are performing equally across groups. On the *Versant for Spanish* oral proficiency test scores, there was no difference between the SPAN 111 and SPAN 112 hybrid and face-to-face language learners.

5. *BYU-CAPE* test scores

As a second measure, I used the *Brigham Young University Computerized Adaptive Spanish Placement Exam* test to measure reading proficiency and knowledge of grammar and vocabulary. How CAPE works is that it selects each test item as a result of the answer to the previous question. When the student answers an item correctly, a more difficult question is presented; if an item is answered incorrectly, an easier question is given. In short, the test adapts to the student's level of ability and will accurately determine the student's competency level in about twenty minutes. The scores range from 0 to above 800 and was calibrated in the following manner: a score of 0-265 was equivalent to SPAN 111; 266-319 to SPAN 112; 320-346 to SPAN 211 (third semester); and 347 and above to SPAN 212 (fourth semester).

The test was administered in a supervised language lab. The SPAN 111 students took this test towards the end of the Fall 2011 semester and the SPAN 112 students took this test towards the end of the Spring 2012 semester. These were not the same students who were measured with the previous *Versant for Spanish* test. The descriptive statistics for the test scores are summarized in Table 2. Overall, the language learners at the end of their SPAN 111 hybrid classes did slightly better (252.46) than the face-to-face students (235.75). The language learners at the end of the SPAN 112 hybrid classes similarly did slightly better (282.82) than the face-to-face students (271.27)

Table 2. Descriptive statistics for hybrid vs. face-to-face *BYU-CAPE* Spanish test scores

Level	Learning Context	N	Mean	Std. Deviation	Std. Error
SPAN 111	Hybrid	69	252.46	75.13	9.04
	Face-to-face	57	235.75	74.84	9.91
SPAN 112	Hybrid	73	282.82	84.97	9.94
	Face-to-face	51	281.27	70.89	9.93

The test scores were submitted to a one-way ANOVA where the dependent value was the test score and the factor for the learning context (hybrid vs. face-to-face). The significance value of the SPAN 111 *F* test = 1.549 (*p*<.216) and of the SPAN 112 *F* test = .011 (p <.915) meaning that the differences between the group means is not significant and therefore are performing equally across groups. On the *BYU-CAPE* placement test scores, there was no difference between the SPAN 111 and SPAN 112 hybrid and face-to-face language learners.

6. Class grades

As a third and fourth measures, I used the final exam test scores and the final grade scores as comparisons. The grades were collected from Spring 2012 SPAN 112 students and Fall 2012 SPAN 111 students. The descriptive statistics for the test scores are summarized in Table 3. Overall, the language learners at the end of their SPAN 111 face-to-face classes did slightly better than the hybrid students on both their final exams (F = 2.866, p<.092) and their course grades (F = 3.291, p<.072); however, the F test scores were not significant and therefore are performing equally across groups. The language learners at the end of their SPAN 112 hybrid classes did slightly better than the face-to-face students on their final exams (F = 2.662, p<.105) and a little lower on their course grades (F = .843, p<.360); however, the F test scores were not significant and therefore are performing equally across groups.

Table 3. Descriptive statistics for hybrid vs. face-to-face Final Exam test scores and Course Grades

	Learning Context	N	Mean	Std. Deviation	Std. Error
SPAN 111					
F. Exam	Hybrid	80	73.62	13.42	1.50
	Face-to-face	104	77.02	13.55	1.32
Course	Hybrid	82	80.44	12.50	1.38
Grade	Face-to-face	80	83.62	9.6	1.07
SPAN 112					
F. Exam	Hybrid	87	64.59	16.08	1.72
	Face-to-face	44	59.70	16.46	2.48
Course	Hybrid	87	77.60	11.71	1.25
Grade	Face-to-face	88	79.12	10.16	1.08

7. Conclusions

Returning to my original research question: Are there differences among the SPAN 111 and SPAN 112 students enrolled in hybrid and face-to-face courses in terms of semester end scores on the following four measures: the language learners' *Versant for Spanish* test scores; the language learners' *BYU-CAPE* Spanish test scores; the language learners' final exam test scores; and, the language learners' final course grades? The answer is NO, the statistical analyses of the data indicate no significant difference between the hybrid and face-to-face courses on any of the measures or levels suggesting that the hybrid online language courses have been successful: the students in the hybrid courses made progress in their second language learning performance similar to that of the students in the equivalent traditional face-to-face courses. Student and instructor feedback, reflecting attitudes and experiences with the hybrid courses are discussed here to better understand the comparative results.

When given the choice, the students will choose the hybrid course over the four-day course. If left alone, the hybrid courses will be the first to fill up. The students are informed during the first week of class about the responsibilities that the course entails, and when the students find out what their workload will be, some realize that they would prefer to go to the regular four-day face-to-face course.The hybrid course is not a fast-track course. In reality, as it can be observed by our own students' comments, it requires additional work and commitment from the student. Therefore, a student who takes the SPAN 111 or 112 hybrid courses will not be in any way less prepared for second year Spanish courses than the regular four-day a week student.

Although a few students mentioned that hybrid courses are not for everyone, the majority of the students reported that the hybrid courses are an important offer for many university students who prefer to commit to the course while having the two free days to take another class, work, or take care of different responsibilities.

References

[1] U.S. Department of Education, Office of Planning, Evaluation, and Policy Development. (2009). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies.* Retrieved from http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf

[2] Blake, R., Wilson, N., Pardo Ballester, C., & Cetto, M. (2008). Measuring oral proficiency in distance, face-to-face, and blended classrooms. *Language Learning and Technology, 12,* 114-127.

[3] Chenoweth, N., Ushida, E., & Murday, K. (2006). Student learning in hybrid French and Spanish courses: An overview of language online. *CALICO Journal, 24 (1),* 115-145.

[4] Scida, E. & Saury, R. (2006). Hybrid courses and their impact on student and classroom performance: A case study at the University of Virginia. *CALICO Journal, 23 (3),* 517-531.

[5] Blake, R. (2011). Current trends in online language learning. *Annual Review of Applied Linguistics, 31,* 19-35.

[6] Young, J. (2002). 'Hybrid' teaching seeks to end the divide between traditional and online instruction. *The Chronicle of Higher Education, March,* A33.

[7] Musumeci, D. (2002). The use of technology in high-enrollment courses: Implications for teacher education and communicative language teaching. In S. Savignon (Ed.), *Interpreting Communicative Language Teaching: Contexts and Concerns in Teacher Education* (pp. 154-164). Yale University Press.

[8] Dorwick, T., Pérez-Gironés, A.M., Becher, A., Isabelli, C. (2012). *Puntos de Partida, 9*th *edition.* New York: McGraw-Hill Higher Education.

[9] Lindsay, E. (2004). The best of both worlds: Teaching a hybrid course. *Academic Exchange Quarterly, 8(4),* 16-20.