

Comparative Analysis of Construction Spanish Class Format Results

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This paper mainly focuses on comparing the results between two Spanish for Construction class formats: a three credit (45 contact hours) junior/senior-level undergraduate course offered at Southern Illinois University- Edwardsville in Spring 2008 and a 16-contact hour module in a junior-level undergraduate internship at The University of Oklahoma also offered in Spring 2008. The course goal was to teach job-specific Spanish to non-Spanish speaking construction management personnel, with the long-term goal of improving job-site safety.

Key words: Spanish, foreign language, construction safety, Hispanics, Latinos

Introduction

The course, Spanish for Construction, was developed in Spring 2007 as a response to requests from the industry. The course has been offered five times, twice at Southern Illinois University- Edwardsville (SIUE) as a three credit junior/senior-level undergraduate class, twice as a 16-hour continuing education workshop for the St. Louis Metropolitan area construction industry and once as a 16-contact hour module as a part of a junior-level undergraduate internship at the University of Oklahoma (OU). The course goal was to teach job-specific Spanish to non-Spanish speaking construction management personnel, with the long-term goal of improving job-site safety. This course also addressed cultural issues such as the major Hispanic holidays that impact the construction industry, the role of religion in the work life of Hispanic workers, and other points of potential misunderstandings and conflict between Spanish and non-Spanish speakers resulting from language and cultural differences. The course objectives were to enable students to master basic Spanish vocabulary used in construction to be able to greet and compliment employees, give simple directions in Spanish and control medical and safety situations, and to understand more about the Hispanic culture as it impacts the construction workplace. The course focused on practical construction-oriented vocabulary, using scenarios involving common construction tools, equipment, situations, injury-causing hazards and first aid as the basis for teaching key vocabulary words and phrases. Real life examples were used to illustrate conflicts and misunderstanding that resulted from language and cultural differences in the jobsite. The course instructor for both the SIUE and OU courses was a native Spanish speaker whose professional expertise in architecture and construction management affords her the unique opportunity to meet the perceived need for construction related language instruction. For more information about the course design, including pedagogical considerations and course content please refer to a paper entitled "Teaching Spanish for Construction Managers" by Lopez del Puerto and Slattery, presented at the 2007 International Proceedings of Associated Schools of Construction 42nd Annual Conference in Flagstaff, AZ. This paper will mainly focus on comparing the results between the three credit (45 contact hours) junior/senior-level undergraduate class offered at SIUE in Spring 2008 and the 16-contact hour module in a junior-level undergraduate internship at OU, also offered in Spring 2008. It will also seek to contrast the differences between a formal full-semester class outcome with the shortened, more intense version of the same material and attempt to draw conclusions as to the adequacy of each format.

Survey

There were 17 students enrolled in the course offered at SIUE and 18 students enrolled in the course offered at OU. Both groups were comprised of undergraduate students in their early 20s. There was one female student enrolled in the course offered at SIUE and there was no female student enrolled in the course offered at OU. At the beginning of the course, students were asked to complete a brief questionnaire about their prior experience with Spanish. As can be seen in figure one, 94% of the students at SIUE and 88% of the students at OU had taken Spanish before.

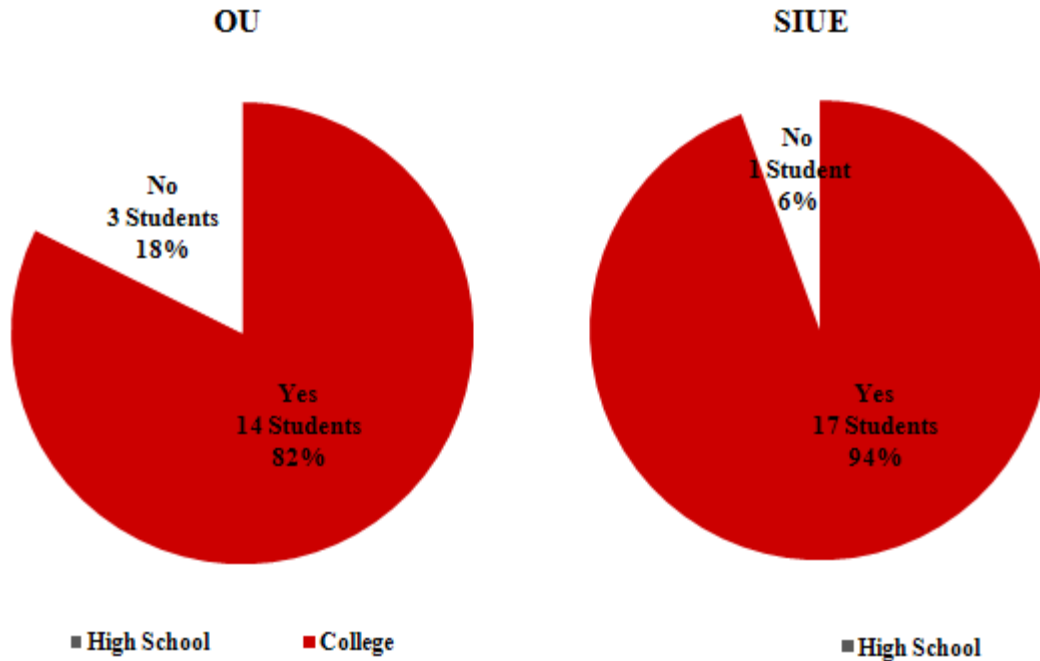


Figure 1: Percentage of students who had taken prior Spanish courses.

Students who had taken Spanish prior to this course were asked when and how long were the Spanish courses that they had taken. The majority of students had taken Spanish in High School, with the mode being two years in High School for both SIUE and OU. Only one student out of the 35 students surveyed had taken Spanish during college (see figure 2).

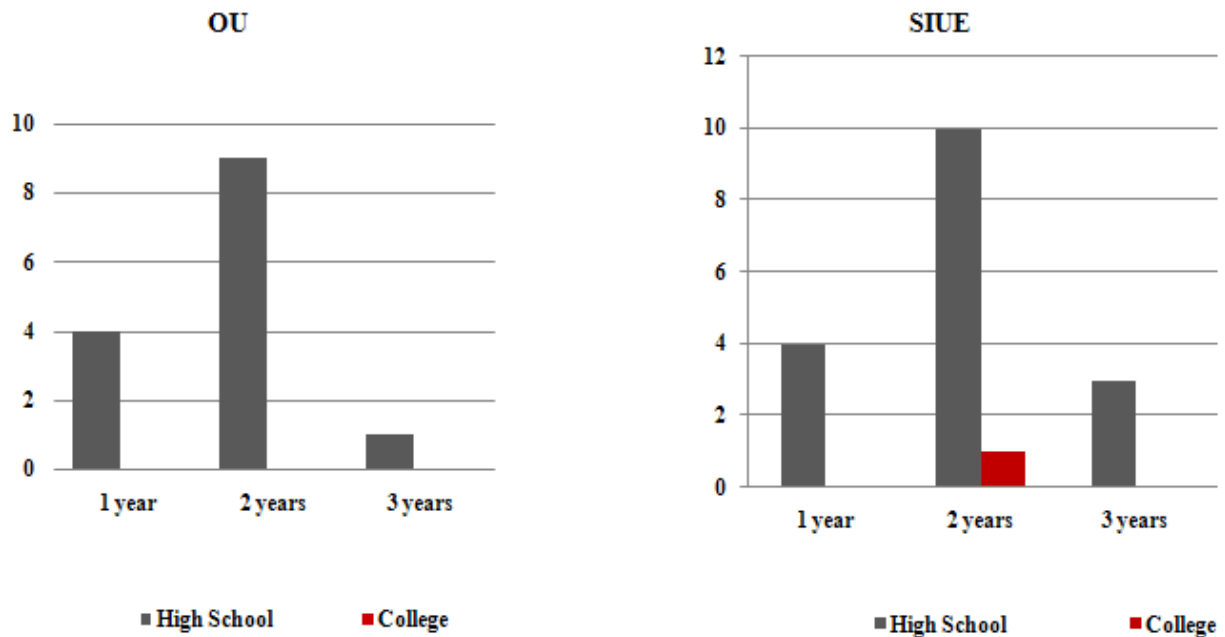


Figure 2: Duration and Grade-level of prior Spanish courses

Pre-test

Students were given a pre-test which consisted on some of the most common directions used on the jobsite, such as “put on your hard hat.” The results of the pre-test indicated that students had very little prior knowledge of Spanish for Construction (see figure 3).

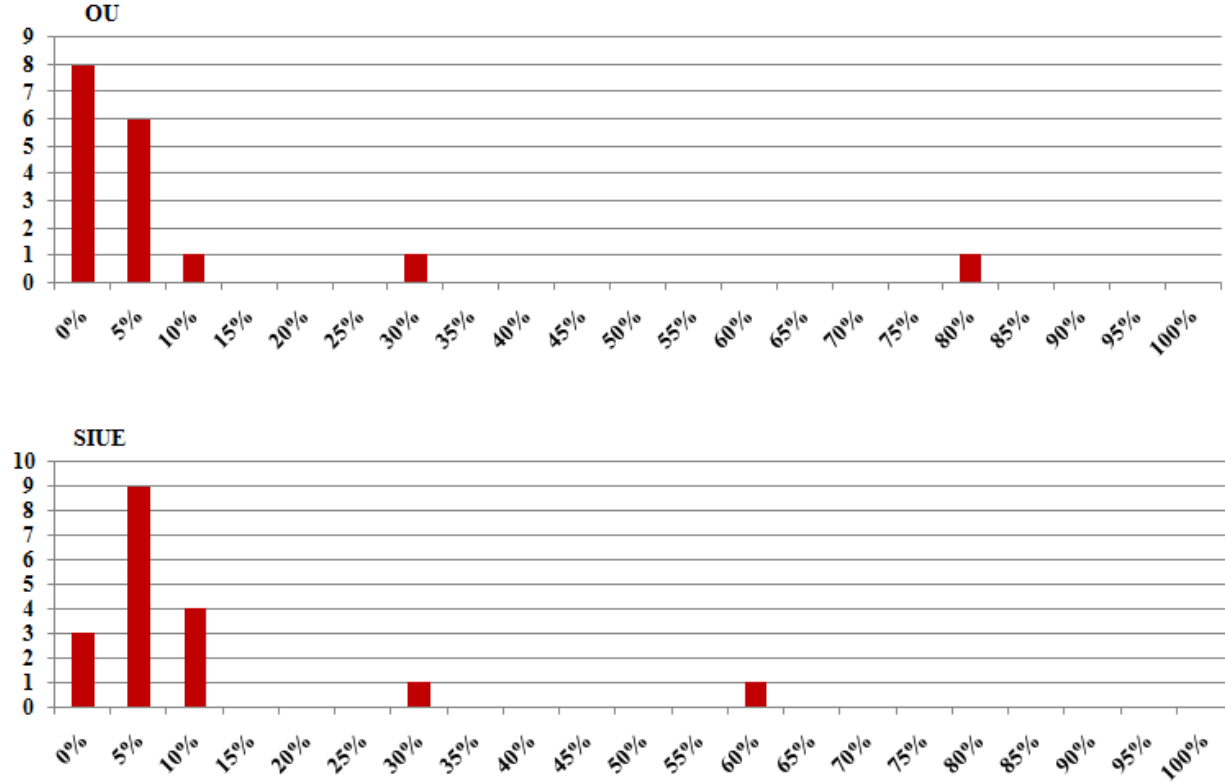


Figure 3: Pre-test results

Course Content

Building Confidence

One of the challenges of the course was that students were hesitant to speak out of fear of making mistakes in Spanish. In order to help the students build confidence, the instructor started with a review of the words in Spanish that most American students already know, such as *gracias* and *de nada*. The instructor also emphasized the value of facial and corporal expressions as a means to communicate and the importance of focusing in getting the message across instead of trying to speak perfectly.

Resources

In order to develop the course content, vocabulary lists from the several sources were consulted, including *Survival Spanish for Construction* (Melton, 2001), *Spanish for Gringos* (Harvey, 1999), *Learning Construction Spanglish* (Eddy and Herrera, 2000), *Easy to Learn Construction Spanish* (Gumucio, 2005), and *Workplace Spanish for Commercial Construction* (Workplace Spanish, Inc., 2004), “Spanish for Construction Sites” (Slick, S., 2001) and Means Spanish-English Dictionary (Reed Construction Data, 2006).

Cultural Awareness. With the purpose of improving understanding about how the Hispanic culture influences the personal and working lives of Hispanic construction workers several discussions took place. Students learned about the types of working visas available to non US citizens, the process of securing working visas and the requirements for construction companies to comply with the nation's immigration and customs laws. Students also learned about the role of religion and the holidays that may impact the jobsite, such as May 3rd (Construction laborers day in Mexico) and December 12 (Day of the Virgin of Guadalupe). Students also learned about the importance of making sure that non-English speakers understood their directions. Non-English speakers often nod yes even when they do not understand what they are being told. Therefore, it is important for students to double check that Hispanic construction workers understand their directions. An easy way to achieve this is to ask the workers to repeat what they were told or to ask them questions about it.

Activities. Lillyman (1993) asserts that instruction should include intensive practice on recognition of vocabulary in class, through role-playing, one-on-one repetitive practice with a partner, and memorization of key phrases. In both the three-credit junior/senior-level undergraduate courses at SIUE and the 16-contact hour module at OU, students spent a significant amount of class time practicing the vocabulary/ phrases. One of the activities that proved to be most beneficial to students was to play a modified version of the children's board game "Chutes and Ladders." Participants were divided into teams of 2 or 3 students. A stack of questions was placed on the board, and the students would draw a card which gave a scenario and asked them to answer in Spanish. For example, if the question was, "Tell a worker that he should bring a hard hat", and the team answered correctly (answer: *debe traer casco*), they would roll the dice and move their chip to the appropriate square. If they answered the question incorrectly, they would not roll the dice and it would be the next team's turn. By having Chutes and Ladders in the game, it made the activity fun, and balanced the different abilities in the classroom. Winning the game not only required knowledge of Spanish but also luck. The person who knew the most was not the winner every time.

Post-test Results

At the end of the course students were given a final exam. The average test score at SIUE was 96% compared to 88% at OU (see figure 4).

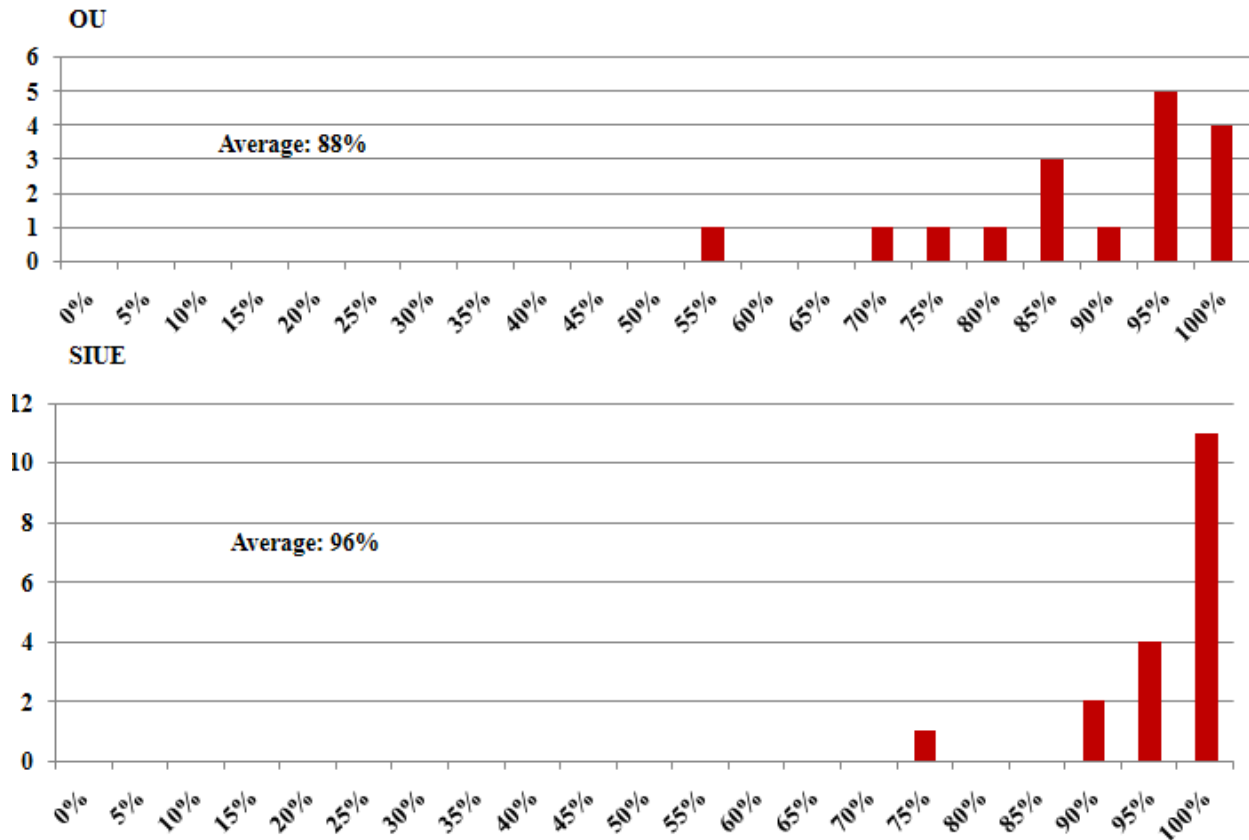


Figure 4: Post-test results

Conclusions

The course met the objectives. At the end of the course the students had a better understanding about the Hispanic culture and knew enough Spanish to be able to greet and compliment employees, give simple directions and control medical and safety situations.

The full semester format proved to produce a higher level of retention as evidenced by the fact that students scored an average of 96% in the post-test versus the 88% average score in the 16-hour format.

The fact that students scored an average of 88% on the post-test in the 16-hour format indicates that the minimum objectives of the course can indeed be met in the intense format.

The higher retention rate in the full semester format may be due to the additional time to review the material. According to Reynolds (1991), reviewing material that has been covered during a previous session increases retention.

The course evaluation in both sections were very positive, 89% of the students in the 16-hour format and 88% of the students in the full semester format indicated that they believe the course will be beneficial to their careers in the construction industry.

Ninety four percent of the students in the 16-hour format and 95% of the students in the full semester format rated the overall quality of the content of the course as excellent or very good.

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