

Teaching Spanish to Construction Managers

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A new course, *Hispanics in Construction*, is being developed at Southern Illinois University Edwardsville (SIUE) as a senior-level undergraduate elective and as a continuing education workshop for the local construction industry. The course objective is to prepare construction management graduates who have little or no prior foreign language training to communicate with Spanish-speaking workers on construction job-sites, and understand cultural differences that may lead to miscommunication. The course content will emphasize construction safety. Development of course materials and pedagogy will be examined.

Keywords : Spanish, Hispanic, foreign language, construction safety

Introduction

Communications between English-speaking construction management personnel and their Spanish-speaking workforce is a growing concern, particularly with regard to jobsite safety issues. The number of Hispanics in the U.S. has increased steadily in the last few decades. In 1980, the Hispanic population accounted for 6.4% of all U.S. residents (McManus, et al., 1983). In 2000, that number had increased to 12.4%, or 35.3 million of the 281.4 millions U.S. residents, with Mexican Americans making up 58.5% of all residents of Hispanic origin (Guzmán, 2001). While the most sizeable Hispanic populations still tend to be in the border states of the Southwest and in Florida, Hispanics represented between 6 and 24.9% of the population in several unexpected locations, including counties in Georgia, North Carolina, Iowa, Arkansas, Minnesota, and Nebraska. States such as Illinois and New York, and cities including Philadelphia also have large populations of Hispanic origin (Guzmán, 2001). According to population projections of the U.S. Census Bureau, by 2050 24.4% of the total U.S. population will be of Hispanic origin (U.S. Census, 2004). In 2004, the construction industry employed 21% Hispanic workers, significantly more than the average of 13% for all industries (Simpson, 2006).

While the St. Louis construction workforce is not heavily Hispanic, a local construction company has encountered an increasingly Spanish-speaking workforce on projects in South Carolina, Nevada, Puerto Rico and other areas, and encouraged the SIUE Department of Construction to develop a course to improve communication between English-speaking management personnel and Spanish-speaking workers. While the immediate need could be met through a short course, the Department of Construction advertised the course, titled “Hispanics in Construction,” as an undergraduate elective, and in the first offering has attracted sufficient construction students to justify offering the course. The course instructor is a native Spanish speaker whose professional expertise in architecture and construction management affords SIUE a unique opportunity to meet the perceived need for language instruction. The course will focus 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. Cultural issues such as the major holidays that impact Hispanic workers in the construction industry, the role of religion in the work life of Hispanic workers, polite ways to address and direct workers, and other points of potential misunderstandings and conflict resulting from language and cultural differences will also be introduced.

Review of Literature

So-called “Survival Spanish” emerged in the mid-1970s as pre-packaged courses for various professions dealing with a growing Hispanic population in the U.S. (Lillyman, 1993). By the mid-1970s, these courses, variously titled “Commercial Spanish,” “Street Spanish,” or specifically tied to an occupation, such as “Spanish for Medical Personnel” were standard offerings at community colleges and urban college campuses in the U.S. (Honig and Brod, 1974). Command Spanish® is a commercial provider of occupational language training materials that trains and certifies instructors, and licenses institutions of higher education to be registered providers. A review of Command Spanish® providers indicates that most participating institutions are community colleges. There are four licensed official registered providers at Illinois community colleges, and none in neighboring Missouri.

Occupational language courses are designed to teach workers basic skills in Spanish language for the contextual needs of a particular occupation: nurses, lawyers, teachers, school counselors, and social workers are often mentioned in the literature (Honig and Brod, 1974, Breseler and Schultz, 1980, Lillyman, 1993). Surprisingly, the need for “survival Spanish” for the construction industry seems to have been recognized only within the past few years. In their exhaustive listing of occupations that would benefit from having a foreign language as an auxiliary skill, Honig and Brod (1974) made no mention of construction workers or construction professionals. Only one paper on the topic of foreign language competency of construction management undergraduate students can be identified in the conference proceedings of the Associated Schools of Construction from 1987 to the present (Kay, 2001), and one tangentially related to foreign language in the Journal of Construction Education from 1996 to the present (Bodapati and Kay, 1999). Foreign language courses were not part of the curriculum at member schools of the Associated Schools of Construction in a survey by Kibert, et al. (1992), and surveys of needed skills of construction management graduates do not list foreign language, but focus on computing, oral and written communication (in English), practical field experience, and knowledge of construction law (Mead and Gehrig, 1995, Sounder and Gier, 2006). Foreign language competency currently is not a required element of the curriculum of construction programs accredited by the American Council for Construction Education (www.acce-hq.org).

Thus, while other professions have recognized the need for a minimal degree of foreign language competency, the construction industry seems to have arrived late at the realization that changes in the construction workforce will make foreign language skills a valuable asset to the construction professional. The Associated General Contractors’ Tool Box Safety Talk series appeared in Spanish in the late 1990s, and its guide for a basic company safety program appeared in Spanish in 1998. Melton’s *Survival Spanish for Construction* was published in 2001, and a variety of Spanish-English construction dictionaries published by R.S Means, McGraw-Hill, and DeWalt have appeared since 2001. Courses in Spanish for construction began appearing in

community colleges and as continuing education courses at universities such as the University of Alabama Birmingham in the early 21st century as well. Central Piedmont Community College in Charlotte, North Carolina teaches Command Spanish® Program called Spanish for Construction Sites, a “comprehensive Spanish language program that provides immediate access to functional language skills for non-Spanish-speaking construction site supervisors.”

Course Objective

The course objective is to enable students to master a basic construction vocabulary in the Spanish language in both spoken and written form, and to promote understanding of Hispanic culture.

Course Content

Survival language courses focus on a particular need. Travel-oriented courses prepare tourists to ask for directions to cultural attractions, hotels or good restaurants. Construction managers need to direct the activities on a jobsite. This course will focus on construction safety, and the course material will be built around typical jobsite scenarios in which safety is a concern, placing the vocabulary in context. A list of the top ten safety issues and a copy of a company safety orientation, together with material from the OSHA 10-hour safety certification course are the basis for course scenarios and relevant vocabulary. Vocabulary lists from other sources will be consulted, including *Survival Spanish for Construction* (Melton, 2001), *Learning Construction Spanglish* (Eddy and Herrera, 2000), *Easy to Learn Construction Spanish* (Gumucio, 2005), and *Workplace Spanish for Commercial Construction* (Workplace Spanish, Inc., 2004). The course will use the Means Spanish-English Dictionary as the primary reference source, and will include extensive speaking and listening time outside the classroom to build skills introduced in the classroom.

Week	Topic
1	Introduction and Basic Vocabulary
2	Personal Protective Equipment
3	Hand Tools
4	Power Tools
5	Equipment
6	Hazards on the Jobsite
7	Scaffolds, Ladders and Lifts
8	Electricity and Safety
9	Trenching and Excavation
10	Common Injuries
11	First Aid
12	Giving Direction to Workers
13	Courtesy and Politeness
14	Hispanic Culture and the Workplace
15	Review and Fiesta Night

Pedagogical Considerations

A variety of instructional techniques are available for teaching of a second language to adult learners who have little or no previous experience with the Spanish language. Benseler (1980) summarized the various approaches used in college-level foreign language instruction, and concluded that there is no consensus on which approach is most effective. The proposed teaching method will most closely resemble the audiolingual approach introduced by the U.S. Army Specialized Training Program during World War II (Benseler, 1980). The audiolingual method is based on the theory that language is learned through habit, and emphasizes speaking in everyday language rather than reading, translating, or forming correct grammatical sentences. Teaching techniques include a variety of active-learning situations in which students hear, speak, see, and write new vocabulary. 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. The instructor will act as a facilitator, directing the students in activities, guiding and providing instruction, but with little lecturing. Native Spanish speaking construction tradesmen will be recruited to assist in oral quizzing of students, and students will attend Spanish conversation hours on campus for additional listening and speaking practice. Examinations will include written vocabulary identification, with individual testing on correct pronunciation and understanding of spoken words.

Daily introduction of vocabulary will include no more than twenty new words in the appropriate context, and will build on previously mastered vocabulary. Single word commands and simple nouns will make up the bulk of the vocabulary. Mastery of grammar, parts of speech, conjugation of verbs, and other foreign language learning skills will be de-emphasized or eliminated. Listening will be done in small doses on the order of one to five minutes, and should consist of words that fit in the context of construction. A video segment from a Spanish-language episode of Bob the Builder® will be used to assess aural comprehension of basic spoken Spanish. Desired student outcomes include recognition of written words, recognition of spoken words, correct identification and usage in written and spoken form. The objective is for the student to achieve a vocabulary of 100 key words and subject-verb phrases by the end of the course.

Classroom Resources

The classroom setting, including class size, instructor, and available resources are essential to facilitate learning a second language. A low student-to-teacher ratio is essential for learning, and recommended class size for beginning language classes is twenty. The instructor is a key component of the classroom. The instructor should be trained in foreign language instruction for adult learners. Professional associations such as the American Council for Teaching Foreign Languages (ACTFL) and Teachers of English to Speakers of Other Languages (TESOL) provide guidelines and certification of foreign language instructors. Desired characteristics for the instructor should include not only fluency in the both the primary and secondary language of the students, but good organization skills and an approachable manner that does not discourage or intimidate students, who will feel anxiety about their lack of foreign language skills. The classroom should accommodate a variety of presentation media for visual reinforcement of spoken or written words or phrases. Graphics such as posters, worksheets and photographs should be available to give visual clues to the connection between written words and their

meanings. Audio resources should be available to reinforce pronunciation and understanding of spoken communication. Finally, print material should be available to provide reinforcement for the visual or aural resources.

Additional Opportunities

The course is being developed as a senior-level undergraduate elective. The course will meet for three hours once weekly over a fifteen week semester, for a total of 45 instructional hours. The course will also be offered in the summer as a continuing education course in a compressed, one-week format for local construction professionals. The initial offering will be structured as a 2-day workshop meeting 8 hours per day, with a review session scheduled 6 months after completion of the workshop to assess retention and language development.

Conclusions

Instruction in occupational Spanish has been offered at community colleges across the United States since the 1970s, but courses aimed at the construction industry have appeared only recently. Four-year construction management programs typically do not include foreign language training, and industry surveys historically have not given priority to foreign language skills as a desirable program outcome for undergraduates. However, the growing Hispanic population and recruitment of Hispanic workers by the construction trades will increase the need for construction management personnel to have a working knowledge of the Spanish language in the context of construction jobsite situations, especially safety. The SIUE Department of Construction is offering construction management undergraduate students and local construction professionals an opportunity to develop basic communication skills in Spanish.

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