

Relevant, Memorable, and Brief: A New Approach to Teaching Spanish in a Construction Safety Course

James L. Jenkins

Purdue University
West Lafayette, Indiana

Bradley Hartmann

Red Angle, Inc.
Chicago, Illinois

Construction work continues to remain a deadly occupation for workers from all ethnic backgrounds. It is especially dangerous for Hispanic workers possessing limited English skills and safety knowledge. Studies indicate that Hispanic workers are 80 percent more likely to die in the American workplace than workers of any other race and account for approximately 30 percent of recent construction-related fatalities. Experts agree that the main cause for these high rates is due to the language barrier that exists between Spanish-speaking workers and English-speaking supervisors. To help alleviate this communication gap, *Construction Spanish* has been added to the safety course at Purdue University. This 6-week *Construction Spanish* program utilizes a blended approach of online instruction supplemented with live lectures taught by an industry professional. This paper reviews the need for teaching Construction Spanish to future construction supervisors and the means and methods implemented at Purdue University. Additionally, a summary of the student survey results is presented.

Key Words: Hispanic safety, construction Spanish, construction fatalities, Red Angle

The Term *Hispanic* Defined

Per U.S. Census definitions, the term *Hispanic* refers to people whose origin are Mexican, Puerto Rican, Cuban, Central or South American, or other Hispanic/Latino background, regardless of race (U.S. Census Bureau, 2015).

Introduction

Hispanic workers are more likely to die on the construction jobsite than other American workers. A review of data from the Bureau of Labor Statistics (BLS) shows that Hispanic workers accounted for 251 (30.3 percent) of the 828 construction deaths in 2013, but only comprised about 20.9 percent of the construction workforce (BLS, 2013; BLS, 2014). These rates have the potential of growing due to the ever increasing number of Hispanics immigrating to the United States and the influx of these workers entering the construction workforce each year (Pew, 2013; Stakes 2006). One reason for the high fatality rates of Hispanic workers is due to the English/Spanish language barrier that exists in the workplace. These workers are often confused by commands or safety warnings given by non-Spanish speaking supervisors. To help alleviate this communication issue, one method adopted by the authors is to teach common construction phrases in Spanish to students enrolled in Purdue University's Construction Safety course. The objective is to help these future construction managers interact with their Hispanic workers in the hopes of promoting better safety communication on their jobsites.

Hispanics in the U.S. Population

There is a change in the composition of the American workforce. Recent U.S. Census information in 2015 projects that the U.S. population will increase from 319 million people in 2014 up to 417 million people in 2060 (Colby & Ortman, 2015). This increase will be due in part to the immigration of foreign-born workers (Pew, 2013). By 2060, nearly one in five of the nation's total population (18.8 percent) is projected to be foreign-born (Colby & Ortman, 2015). According to the Pew Hispanic Center (2013), the current immigrant wave has been largely comprised of arrivals from Latin America (50 percent) and Asia (27 percent). However, immigration isn't the only reason for the increase. U.S. births are also a driving force behind the increase in the Hispanic population since 2000 (Pew, 2013). The U.S. Census Bureau estimates that the natural increase (which is number of births minus deaths) accounted for

close to 78 percent of the total change in the U.S. Hispanic population from years 2012 to 2013 (Brown, 2014). With immigration and birth rates, the overall Hispanic population is projected to increase from 17 percent of the U.S. population (55 million people) in 2014 to 29 percent of the U.S. population (119 million people) in 2060, an increase of 115 percent (Colby & Ortman, 2015; U.S. Census Bureau, 2014). This influx of foreign immigrants not only affects the size of the U.S. Hispanic population, but will also have an effect on the future composition of the American workforce as well.

Plight of the Hispanic Worker in the American Workplace

Sadly, statistics show that Hispanic workers are more likely to die in the workplace than other American workers. The fatal injury rate for Hispanic or Latino workers in 2013 was 3.8 per 100,000 full-time equivalent (FTE) workers, which was higher than the national overall rate of 3.2 per 100,000 FTE workers. According to the Bureau of Labor Statistics, there were 845 fatal work injuries involving foreign-born (all racial/ethnic groups) workers in 2013, of which the greatest share (352 or 42 percent) of foreign-born workers were born in Mexico (BLS, 2013). The 797 fatal work injuries among Hispanic workers in the American workplace were 7 percent higher in 2013 when compared to the 748 deaths in 2012. The 797 Hispanic worker deaths in 2013 constituted the highest total for this demographic since 2008. Fatal work injuries were lower among all other major racial/ethnic groups. Of the 797 fatal work injuries incurred by Hispanic workers, 527 (or 66 percent) involved foreign-born workers (BLS, 2013).

Hispanics Workers on the Construction Jobsite

While many Hispanics coming into the United States seek work in the agricultural sector, the ever increasing industry of choice is construction (Stakes, 2006). The United States construction industry traditionally attracts and employs the greatest proportion of Hispanic workers of any national industry (Walter, 2010). However, construction is a dangerous industry. Statistics from BLS (2013) show that overall there were 4,585 fatalities in the United States workplace in 2013, with construction accounting for 828 (18 percent) of these deaths. The 828 fatal work injuries in construction (2.7 percent higher than the total experienced by construction in 2012) accounted for the highest number of fatal work injuries of any American industry sector in 2013 and represented the largest number of fatal work injuries in private construction since 2009 (BLS, 2013).

The construction industry was especially dangerous for Hispanic workers. A review of BLS Data shows that Hispanic workers accounted for 251 (30.3 percent) of the 828 construction deaths in 2013 (BLS, 2014). This is a slight decrease in overall percentage of workforce based on the 245 of 806 (30.4 percent) construction fatalities in 2012, but was a significant increase percentage-wise when compared to the 216 (29.3 percent) of 738 deaths suffered in 2011. These fatality statistics become even more alarming when comparing the number of Hispanic workers to the rest of the construction workforce population. BLS data tables showing employed persons in nonagricultural industries by age, sex, race, and Hispanic or Latino ethnicity indicate that Hispanics only comprised about 20 percent of the construction workforce (20.9 percent in 2013, 20.1 percent in 2012, and 19.9 percent in 2011) but accounted for the aforementioned 30 percent of construction fatalities (BLS, 2013).

A simple calculation of the fatality numbers (828 fatalities divided by 277 workdays) reveals that 2 to 3 construction workers die daily on the jobsite. Since Hispanic workers account for close to one-third of the construction deaths, one could assume that at least one Hispanic construction worker is killed on the jobsite every workday.

Language Barrier

According to Stakes (2006), a big factor contributing to the high fatality statistics of Hispanic workers is the English/Spanish language barrier. Workers with limited English skills can't understand the directions given by their supervisors, nor can their English supervisors effectively communicate their requirements. Additionally, many Hispanic workers are unable to read or understand English and often confuse commands or safety warnings given by non-Spanish speaking supervisors. These issues put these workers in precarious positions.

Worker safety can be improved by facilitating communication between Hispanic workers and their supervisors. According to Stakes (2006), clear communication on the jobsite can make a difference between life and death. Knowing key construction terminology and phrases in Spanish enable site supervisors to effectively convey safety

instructions. Learning the workers' language can also go far in terms of improving employee morale and building relationships. Fluency isn't necessary. Just the effort to communicate will be highly appreciated, as it shows that one cares about their workers and their culture (Stakes, 2006).

Spanish in the Construction Curriculum

The notion of teaching future construction managers key construction terminology and phrases in Spanish to help breakdown the English/Spanish communication barrier is not a new concept. A few colleges and universities offer a course in Construction Spanish. For example, Austin Community College in Austin, Texas offers *FRNL 1301 - Occupational Specific Foreign Language*, taught through the Building Construction Technology department. Per the program description, students learn commonly used phrases and construction terms in Spanish over the course of the semester (Austin Community College, 2015).

Construction Spanish has also been taught in Associated Schools of Construction (ASC) classrooms. A 3-credit hour Construction Spanish course was recently taught at Southern Illinois University Edwardsville. This course included construction-oriented vocabulary and also addressed Hispanic cultural issues, including holidays and religion (Lopez del Puerto & Slattery, 2007). Additionally, a 16-hour module was offered at the University of Oklahoma to teach job-specific Spanish to non-Spanish speaking construction management personnel. The course instructor for both the SIUE and OU courses was a native Spanish speaker who had professional experience in construction management (Lopez del Puerto, 2009).

Professional Spanish language programs are also available via the internet. For example, the Workplace Spanish © for Construction program uses a manual and audio CD where the user can self-teach themselves common Spanish terms & phrases that are frequently used in the construction industry (Workplace Spanish, 2015). Rosetta Stone offers an online subscription and app for computers, tablets, and smartphones that uses speech recognition software to compare the learner's pronunciation to native speakers of the language (Rosetta Stone, 2015). OSHA offers English-to-Spanish translations online by listing pronunciation guide for frequently used construction industry terms (OSHA Frequent Terms, 2015). The website for 2nd Language Success offers a program titled *Spanish in a Pinch*, which provides "cheat sheets" for translating English-to-Spanish term phonetically for various construction occupations (2nd Language Success, 2015). A PDF version of the handout provided by Spanish-in-a-Pinch at the 2006 National Association of Home Builders (NAHB) International Builder's Show in Orlando, Florida can be accessed via the internet (NAHB, 2015).

Construction Spanish in Purdue University's Construction Management Safety Course

To help meet the need of teaching Spanish terms to English-speaking construction students at Purdue University, many CD-based and online language courses began to be evaluated in 2010. After researching the aforementioned options, it was determined that an actual course needed to be designed. As a result, the development of a Construction Spanish elective course was initiated. This development, with help from the College of Liberal Arts at Purdue University, proceeded through unfunded research by Professor Jenkins. However, course development stopped in March 2011, when the House Enrolled Act 1220 (HEA 1220) was passed and signed by the General Assembly of the State of Indiana. HEA 1220 limited the number of credit hours required for bachelor (120 credit hours) and associate degrees (60 credit hours) for all universities in Indiana. This law was enacted to allow students a better chance to graduate with a degree in a maximum of four years and took effect on July 1, 2012 (House Enrolled Act, 2012). This decree resulted in the elimination of nine credit hours from the BCM curriculum's original 129 hours, thereby reducing total credit hours down to 120 hours. Thus, any additional courses not included in the core curriculum, such as the proposed *Construction Spanish* course, had to be eliminated.

In the spring of 2012, it was determined that the Construction Spanish topic needed to be included in an existing course. The safety course was deemed to be the obvious choice to include this important topic. In the *BCM 457-Construction Safety* course, students are able to earn the OSHA 30-hour card. The 30-hour card coursework provides a greater depth and variety of training on an expanded list of safety topics associated with workplace hazards in the construction industry. However, the stringent requirements set for the 30-hour card limits the amount of time during the semester that can be spent on other related safety topics in the BCM 457 course (OSHA Outreach Training, 2015). Therefore, the issue of how to effectively teach Construction Spanish to students under limited

time constraints presented an obstacle. The answer to how Spanish could be successfully incorporated in the safety class presented itself when the authors met on Purdue's campus in the spring 2012.

Background of Red Angle, Inc.

Red Angle, Inc. was established in 2011 with the mission to improve communication between English-speaking job site leadership and the Hispanic workforce. Red Angle's founder and president, Bradley Hartmann, grew up in the construction industry. From the age of 15, Hartmann's summer and winter breaks were spent working in the construction industry—lumber yards, various job sites, and an architectural firm. Hartmann attended the University of Illinois at Champaign-Urbana and obtained a degree in Spanish. Upon graduation in 2000, Hartmann joined national home builder Pulte Homes in Chicago where he immediately found his Spanish skills were valuable—and rare.

As a Pulte Homes Project Manager, Hartmann and his team of construction managers (CM) decided to decrease the rarity that was a CM who could speak Spanish. Hartmann designed his own “Construction Spanish” program to teach his team. The goal was not fluency, but rather construction-specific language skills to solve problems and have fun doing it. The team expressed to Hartmann the following goals: relevancy, brevity (less than 10 minutes a day), humor, and multi-media to help incorporate the different ways people learn. Then, as now, these attributes drive Red Angle's 6-Week *Safety Spanish* program delivered at Purdue University as well as many of the nation's largest construction firms: Kiewit, Turner, McCarthy, Walsh, Zachry, Ryan Companies, Sundt, Beck and McShane.

Outline of the Construction Spanish Course

Safety Spanish is delivered in the *BCM 457-Construction Safety* course at Purdue University. The *Safety Spanish* course is a blended-learning program that requires less than 10 minutes a day. Red Angle's Bradley Hartmann conducts three (3) classroom workshops with the students—at the beginning, middle and end of the six-week *Safety Spanish* course. Integrating games, exercises, and active conversations, the workshops aim to engage and distance the students from their past foreign language classroom experiences that have resulted in very little present-day value.

In addition to the in-class workshops led by Hartmann, each student receives a *Safety Spanish* kit that includes the following elements: *Safety Spanish* book, 6 workbooks (one for each week), *Safety Spanish* flash cards, and a course content map named “El Camino” or *the path*.

Not included in the kit are the daily digital videos that drive the *Safety Spanish* course. On a daily basis, each student will receive a pre-scheduled email from Red Angle with a link to view the daily video. The daily video ranges from 2-5 minutes in length. After the video is viewed, students complete one page in the workbook. These two learning exercises (watching the daily video and completing one page in the workbook) help build a habit of acquiring construction-specific language skills.

At the end of each week, students submit their completed workbook to the professor. The remaining *Safety Spanish* tools (book, flash cards, *El Camino* map) are provided to accommodate the different learning styles of each student (also available is a 2-disc *Safety Spanish* audio CD, although we are not presently using this tool at Purdue). The different tools used in *Safety Spanish* have been designed to accommodate the different learning styles of students— Visual (daily video, workbook, flash cards), Auditory (daily video, audio CD), Read/write (workbook, weekly quiz) and Kinesthetic (classroom exercises, audio/video practice sessions).

Teams and Scoring

To increase engagement, accountability and establish an atmosphere of friendly competition, each class forms into teams of five-to-six students. The teams are given names of vehicles commonly found in the U.S. with Spanish names (GMC Sierra, Honda Del Sol, Buick Verano, Mitsubishi Montero, Isuzu Hombre, etc) and each Monday a Scoreboard is shared with the class. Scores are determined by collective point system. Red Angle's learning management system has visibility into which students watched the daily video and for how long. One (1) point is awarded per student for watching that day's video on the day it is delivered to them. As commonly known,

cramming is a poor way to retain information long-term. Each Friday at noon, a brief quiz with five (5) questions is completed by each student to revisit that week's content. This quiz is worth five (5) points. As discussed previously, students hand in their completed workbook each Friday—that is worth 5 points as well. Each week, each student can score 15 points (daily video (5 points), weekly quiz (5 points) and weekly workbook (5 points)).

Coaching

To ensure correct pronunciation and build confidence, students record themselves speaking in Week 5 and Week 6 (audio-only in Week 5, video in Week 6) and submit the digital files to Red Angle on a daily basis. Red Angle staff listens to the students practicing and provides real-time coaching and encouragement.

Tabulation of the Student Survey Results

The following is a tabulation and discussion of the student survey results. Students in *the BCM 457 – Construction Safety* course were given two surveys; a pre-program survey and a post-program survey. The pre-program survey had six questions (questions 1-6) and had seventy (100 percent) student responses; the three question post-program survey (questions 7-9) had thirty (43 percent) responses.

The initial survey was used to ascertain the extent of each student's Spanish speaking skills and their perspective on the language barrier. The survey questions and the number of responses are provided.

1. Did you study Spanish in grade school, high school or college?

Yes	59
No	11

Out of the seventy students that responded to the survey, fifty-nine (84 percent) students indicated that they studied Spanish in high school. The remaining eleven students (sixteen percent) did not take high school Spanish.

2. How would you describe your current Spanish skills?

Nada...I'm a blank slate.	12
Un poquito...I know a wee bit of Español.	24
I know some basic phrases...plus the menú at Taco Bell	22
I'm fluent.	2

Out of the sixty students that responded to this question, twelve (20 percent) students indicated they had zero current Spanish skills. Twenty-four (40 percent) students indicated they knew a little Spanish, while twenty-two (37 percent) knew some basic Spanish phrases . . . along with the Taco Bell menu. Two (3 percent) students were fluent in Spanish; they were native speakers with ethnic ties to Mexico. The responses to this question demonstrated that the majority of students (46 of 60, 77 percent) entered the class with some level of existing Spanish skills.

3. If you could speak key words and phrases in Spanish, do you believe you'd be more effective in your job in construction?

Yes	67
No	0

One hundred percent of students believed they would be more effective on the jobsite with the ability to communicate key words and phrases in Spanish. This data is critical as language retention among learners at all levels is reduced if students do not see a perceived benefit.

4. If the content is relevant, specific, and entertaining, are you optimistic you can learn new Spanish words and phrases to help you in construction?

Yes	66
No	1

Out of the sixty-seven students that responded to this question, sixty-six (99 percent) students were optimistic they

could learn new words and phrases in Spanish if the content was relevant, specific and entertaining. The responses indicated an overwhelming optimism to succeeding in learning relevant Spanish skills despite the majority of students having previously studied the language (84 percent, data from question 1).

5. How well do you understand the Hispanic culture and the ways it affects worker behavior?

Not at all	10
Slightly	45
Well	9
Very well	3

Out of the sixty-seven students that responded to this question, ten (15 percent) students indicated they did not understand the Hispanic culture and how it impacted behavior at all. Forty-five (67 percent) students indicated they understood Hispanic culture slightly, while nine (13 percent) students indicated they understood the Hispanic culture well. Three (4 percent) students indicated they understood the culture very well—two of whom were native Spanish-speakers of Mexican heritage. As leadership is comprised of both language and cultural skills, these responses helped us better understand the students' current level of understanding of Hispanics.

6. Can you please describe a memorable experience involving an English/Spanish language barrier?

Students were very candid and specific about their past experiences involving the language barrier. Eleven students (32 percent of 30 respondents to this question) referred to specific safety challenges. Another eight (27 percent) students referred to a general difficulty in assigning and/or following up on tasks.

7. Following the 6 Week Safety Spanish program, tell us about your confidence levels...

	Yes	No
Do you feel confident you'll REMEMBER what you learned?	29	1
Do you feel confident you will USE what you learned?	27	3

Following the program's completion, twenty-nine (97 percent) students out of 30 felt confident they would remember the Safety Spanish content covered in class. Twenty-seven (90 percent) students felt confident they would use the Spanish skills learned on the job. This data reinforces our conviction that small, relevant, bite-size chunks of language training delivered in an entertaining way can build confidence in students' abilities to bridge the language gap on the job.

Student Comments

8. What did you like about the program? Is there anything you'd like more of?

A major portion of these responses indicated an appreciation for focusing on the construction-relevant basics that only required a few minutes each day watching a video delivered via smartphone. Others endorsed the value in keeping the learning atmosphere "light and fun." Several students recalled specific memorization techniques taught for certain terms or phrases, citing pop cultural and/or real-life references like "Wear your CASCO (hardhat) to COSTCO" and "Charlie Brown wears a CHALECO (safety vest)."

9. What didn't you like about the program? Is there anything you'd like less of?

Of thirty post-program respondents, only four (13 percent) students offered feedback to this question. Two (50 percent) students noted an interest in making the program more challenging by removing the workbook videos (videos detailing the correct answers and thought process for the workbook) available online and forcing fellow classmates to complete the workbooks on their own.

Discussion of Results

Within the constraints of existing credit hour guidelines at Purdue University, the Safety Spanish program has proven relevant and of interest to students as 100 percent of students in the data set (67 respondents) indicated an expectation of improved performance on the job with construction-relevant Spanish skills. The blended learning format (daily videos, workbooks, flash cards) appeals to students as does the minimal time investment—a benefit to the students (97 percent indicated a confidence in their ability to remember the content) as well as the maximization of class learning within a course delivering an OSHA 30 card.

Given the lack of general understanding of the Hispanic culture and how it affects Hispanic worker behavior (82 percent of students indicated they have little to no understanding), an opportunity exists to include more cultural content in the program without significantly increasing the daily time commitment. This can be done by weaving cultural content in the story-telling of the brief daily videos and during the three classroom workshops.

It is the perception of all participants—students and faculty alike—that the program was memorable, relevant and helpful, delivering significant learning value within a few minutes each day for six weeks. It should be noted that a few students felt the idea of learning Spanish skills to communicate more effectively on the job was not their responsibility, but that of the Hispanic worker because “In America, we speak English.” While few disagree with this sentiment, the overwhelming majority (90 percent of respondents) indicated they planned to use what they had learned on the job.

Conclusion

Teaching future construction managers key construction terminology and phrases in Spanish to breakdown the English/Spanish communication barrier is not a new concept. A few colleges and universities offer a course in Construction Spanish. The increase in the Hispanic population and resulting employment in construction trades necessitates that supervisory personnel have knowledge of key Spanish terms and phrases. Due to limits on credit hours at Purdue University, a full-semester Construction Spanish course was not a viable option. The 6-week Construction Spanish program by Red Angle, Inc. utilizes online instruction and live lecture taught by an industry professional and offers an effective way for students in the *BCM 457-Construction Safety* course to learn key phrases in Spanish. This program not only has flexibility to align with the needs of the construction industry, but also retains the rigor of academic standards. The testing and evaluation of students enrolled in this program reinforce that this type of training can be delivered effectively and still attain increases in participant knowledge and the confidence to communicate commands or safety warnings to Hispanic workers on the jobsite and have a positive impact on fatality rates for this demographic group.

References

Austin Community College (2015): <http://www.austincc.edu/bct/constructionspanish.php>

Brown, A. (2014). *U.S. Hispanic and Asian populations growing, but for different reasons*. Retrieved October 23, 2015 from Pew Research Center website: <http://www.pewresearch.org/fact-tank/2014/06/26/u-s-hispanic-and-asian-populations-growing-but-for-different-reasons/>

Bureau of Labor Statistics (2013). *Labor Force Statistics from the Current Population Survey*. Downloaded October 4, 2015 from <http://www.bls.gov/cps/tables.htm>

Bureau of Labor Statistics (2014). *Fatal occupational injuries incurred by Hispanic or Latino workers, 2010-2014*. Downloaded October 4, 2015 from <http://www.bls.gov/iif/oshwc/cfoi/hispanic.pdf>

Colby, S. L., and Ortman, J. M. (2015). *Projections of the Size and Composition of the U.S. Population: 2014 to 2060*. Downloaded October 23, 2015 from <https://www.census.gov/content/dam/Census/library/publications/2015/demo/p25-1143.pdf>

House Enrolled Act No. 1220 (2012). Downloaded October 24, 2015 from: <http://www.in.gov/legislative/bills/2012/PDF/HE/HE1220.1.pdf>

Lopez del Puerto, C. (2009, April). *Comparative analysis of construction Spanish class format results*. International

Proceedings of Associated Schools of Construction 45th Annual Conference, Gainesville, FL

Lopez del Puerto, C., and Slattery, D. (2007, April). *Teaching Spanish for Construction Managers*, International Proceedings of Associated Schools of Construction 43rd Annual Conference, Flagstaff, AZ

National Association of Home Builders (2006). *Spanish in a Pinch Handout*. NAHB International Builder's Show, January 2006, Orlando, Florida. Downloaded October 4, 2015 from: http://www.buildersshow.com/Documents/edu_handouts/Spanish%20in%20a%20Pinch.pdf

OSHA Outreach Training Program (2015) website: <https://www.osha.gov/dte/outreach/construction/index.html>
OSHA Frequently Used Construction Industry Terms (2015): https://www.osha.gov/dcsp/compliance_assistance/spanish_dictionaries.html

Pew Research Center (2013, January). *A nation of immigrants*. Pew research Hispanic trends project , Washington, DC. Downloaded September 20, 2015 from: <http://www.pewhispanic.org/2013/01/29/a-nation-of-immigrants>.

Pew Hispanic Center (2006, October). *From 200 million to 300 million: The numbers behind population growth*. Retrieved February, 13, 2007, from <http://pewhispanic.org/factsheets/factsheet.php?FactsheetID=25>

Pierson, E. (2005, March 2). *Private coalition to work for improved construction safety among Hispanics*. Retrieved December 8, 2006, from http://www.brownsvilleherald.com/ts_more.php?id=63957_0_10_0_C

Rosetta Stone: <http://www.rosettastone.com/learn-spanish>

Stakes, V. (2006). *Bridging the gap with Hispanic workers*. Contractor Magazine, 53 (9),30-94.

U.S. Census Bureau population projection website (2014): <http://www.census.gov/population/projections/data/national/2014.html>

U.S. Census Bureau website (2015): <http://www.census.gov/topics/population/hispanic-origin/about.html>

Walter, L. (2010). *Hispanic construction workers face health care challenges*. EHS Today , safety. Retrieved from <http://ehstoday.com/construction/news/hispanic-construction-workers-health-care-challenges-8796/>

Workplace Spanish © for Construction (2015) : <http://www.workplacespanish.com/construction.shtml>

Vazquez, R. and Stalnaker, C. (2004, June). *Latino workers in the construction industry*. Professional Safety , 49, 24-28.

2nd Language Success (2015) website: <http://2ndlanguagesuccess.com/>