

DEVELOPING AN EFFECTIVE CONSTRUCTION TRAINING PROGRAM FOR HISPANIC SUPERVISORS AND CRAFT WORKERS

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16. Abstract <p>Hispanics make up a growing percentage of the craft workers entering the construction industry, and this has created several challenges for American construction companies. This study addresses the situation by investigating training needs for Hispanic construction craft workers and developing a training program for them within the industry. In order to evaluate current craft workers' conditions within the construction industry, Iowa State University researchers conducted a survey, with 98 Hispanic craft workers as respondents from 10 construction companies, to determine current working conditions. The results confirm that the language barrier is an obstacle for both the Hispanic workers and the English-speaking employees involved in construction projects.</p> <p>As a part of this research, two training courses were designed to help both American construction companies and their Hispanic labor force to overcome the barriers that keep them from succeeding safely and productively. A training course titled <i>English as a Second Language Survival Course</i> was developed to facilitate basic communication between Hispanic workers and their American supervisors using construction-focused terminology. This course was delivered once as a trial run for a two-hour duration and twice for a full-length duration of eight hours. Important feedback was obtained from participants as part of the evaluations of the course. "How much of the course contents will be useful in your working environment" was asked; 40% of workers said "all of it" and 60% said "most of it." Another question was "Was it worth taking the time to attend the course?" to which 94% answered "definitely" and 6% answered "yes."</p> <p>A second training course titled <i>Stepping Up to Supervisor Course for Hispanic Construction Workers</i> was also developed to provide an effective tool to help companies promote those Hispanic craft workers whose willingness and skills meet the requirements to advance to a supervisory position in an American construction company. This course will be offered in the spring of 2004.</p>			
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TABLE OF CONTENTS

ACKNOWLEDGMENTS	VII
EXECUTIVE SUMMARY	IX
1. INTRODUCTION	1
1.1. Background.....	1
1.2. Problem Statement.....	2
1.3. Project Objectives.....	2
1.4. Definition of Terms.....	3
1.5. Economic Justification.....	3
1.6. Report Organization.....	3
2. LITERATURE REVIEW	4
2.1. Background.....	4
2.2. Overview and Trends of the Hispanic Population in the United States.....	4
2.3. Hispanics and the U.S. Labor Force	6
2.3.1. Foreign-born Workers in the United States	6
2.3.2. The Construction Industry and the U.S. Economy	8
2.3.3. Management Goals through Training	8
2.4. Summary of Available Training Material for Hispanic Construction Workers	9
2.4.1. Training Programs	10
2.5. Description of Cultural Differences between American and Hispanic Cultures Embedded in the Course Contents.....	12
2.6. Concluding Remarks.....	15
3. RESEARCH METHODOLOGY.....	17
3.1. Introduction.....	17
3.2. Questionnaire Design, Data Collection, and Data Analysis, Evaluation, and Results	19
3.3. Training Courses.....	29
3.3.1. English as a Second Language Survival Course.....	29
3.3.2. Stepping Up to Supervisor Course for Hispanic Construction Workers	30
3.4. Concluding Remarks.....	31
4. TRAINING COURSE DEVELOPMENT.....	32
4.1. Introduction.....	32
4.2. Systematic Approach for Training Course Development.....	32
5. TRAINING COURSE CONTENTS.....	36
5.1. English as a Second Language Survival Course.....	36
5.2. Stepping Up to Supervisor Course for Hispanic Construction Workers	46

5.3. Training Course Effectiveness	53
6. CONCLUSIONS AND RECOMMENDATIONS	55
REFERENCES	58
Appendix A: Questionnaire for Hispanic Construction Workers	
Appendix B: Results of Questionnaire for Hispanic Construction Workers	
Appendix C: English as a Second Language Survival Course	
Appendix D: <i>Stepping Up to Supervisor Course for Hispanic Construction Workers</i>	
Appendix E: <i>English as a Second Language Survival Course</i> Evaluation Results	

LIST OF FIGURES

Figure 2.1. Hispanic population growth from 1990 to 2000 by group	5
Figure 2.2. Hispanic population in Iowa: 2000 actual vs. 1995–2025 projections	6
Figure 2.3. Fatal injuries by event of exposure and ethnic group (2001 data)	7
Figure 2.4. Comparison between Mexico and United States according to power distance.....	13
Figure 2.5. Comparison between Mexico and United States according to individualism.....	13
Figure 2.6. Comparison between Mexico and United States according to masculinity	14
Figure 2.7. Comparison between Mexico and United States according to uncertainty avoidance	14
Figure 3.1. Research methodology	18
Figure 3.2. Comparison of results for question 1, “Have you ever taken a course to help you learn English?”	21
Figure 5.1. Examples from ESL Survival Course.....	37
Figure 5.2. Examples from <i>Stepping Up to Supervisor Course for Hispanic Construction Workers</i>	47

LIST OF TABLES

Table 2.1. United States, top-three states, and Iowa by Hispanic population, 1990 and 2000.....	5
Table 2.2. Employment by the goods-producing industry, 1990–2000 and 2000–2010.....	8
Table 2.3. Comparison of general aspects between Mexican and American cultures according to Hofstede	16
Table 3.1. Objectives and questionnaire used for training course development	23

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EXECUTIVE SUMMARY

Over the last decade, a growing percentage of the craft workers entering the construction industry have been Hispanic, which has created several challenges for American construction companies. By the end of 2001, the construction industry reached the highest rates ever of accidents and fatalities for Hispanic workers, according to the U.S. Bureau of Labor Statistics found.

Ineffective management has been identified as one of the major causes of low labor productivity and high accident rates on some construction jobs employing Hispanics. These kinds of failures lead to a loss of reputation, high unanticipated costs, and other problems for the construction companies. Statistics show that cultural differences, particularly language barriers, between the Hispanic construction workers and English-speaking management have been a decisive factor in the rise of accidents and fatalities for this population.

This study addresses the situation by investigating training needs for Hispanic construction craft workers and developing a training program for them within the industry.

In order to evaluate current craft workers' conditions within the construction industry, Iowa State University researchers conducted a survey of 98 Hispanic craft workers from 10 construction companies to determine current working conditions. The survey results confirm that the language barrier has become an obstacle for both English-speaking employees and the Hispanic workers involved in construction projects.

As a result of the survey findings, this research project offers two training courses designed to help both American construction companies and their Hispanic labor force to overcome the barriers that keep them from succeeding safely and productively. A training course titled *English as a Second Language Survival Course* was developed to facilitate basic communication between Hispanic workers and their English-speaking supervisors using construction-focused terminology. This course was delivered once at a trial-run duration of two hours and twice at the full-length duration of eight hours. Important feedback was obtained from participants as part of the evaluations of the course. When workers were asked how much of the course contents would be useful in their work environment, 40% of workers said "all of it" and 60% said "most of it." When workers were asked whether they thought it was worth taking the time to attend the course, 94% answered "definitely" and 6% answered "yes."

A second training course titled *Stepping Up to Supervisor Course for Hispanic Construction Workers* was developed to provide an effective tool to help companies promote those Hispanic craft workers whose willingness and skills meet the requirements to advance to a supervisory position in an American construction company. This course will be offered in the spring of 2004.

1. INTRODUCTION

1.1. Background

Hispanics are a large and growing part of the United States workforce. The U.S. Census Bureau showed Hispanics as the nation's largest ethnic or racial minority group in 2000. Hispanics are projected to make up 25% of the population of the United States by 2050.

Mexico has been the traditional source of Hispanic immigrant labor in the United States. However, in the past decade, trends started to change with immigrants coming from Central America and, more recently, from countries such as Ecuador, Argentina, Colombia, and Peru due to the deterioration of South American economies.

The construction sector attracts a great number of Hispanic workers due to the ease of entry, relatively high wages, limited need for English literacy, and the availability of jobs. As the number of Hispanics working in construction increases, the fatality rate has risen disproportionately. John Henshaw, the assistant secretary of labor for the Occupational Safety and Health Administration (OSHA), determined that in 2000 Hispanics accounted for an inconsistent number of workplace fatalities—13.8%, compared with their proportion of employment, 10.7% (Henshaw 2002). The construction industry accounts for about 7% of all employment and 20% of work site fatalities, and with Hispanics comprising 18.8% of construction employment.

With increased numbers of Hispanic employees and rising Hispanic fatality rates, employers have aggressively sought bilingual safety tools for their employees, including training classes, trainers, and training materials. Demand has also grown for basic Spanish language instruction for construction supervisors. Both OSHA and the National Safety Council (NSC) have addressed how to take the message of safety to both English and Spanish speakers.

As a result of these organizations' efforts, more support has been acquired from employers and associations. For instance, the Associated Builders and Contractors (ABC) and Associated General Contractors of America (AGC) both implemented Spanish language instruction into their safety programs. These improvements have been implemented where the Hispanic concentration is the greatest, the southern United States. Because of the high presence of Hispanics in the southern states, Hispanics in those areas have lately found themselves with fewer job opportunities and more difficulties integrating and have therefore moved north toward the less Hispanic-populated states such as in the Midwest.

Iowa has been affected by these trends, particularly within the construction sector. Furthermore, the construction industry is projected to experience one of the largest employment growths from 2000 to 2010.

1.2. Problem Statement

Because of the increasing numbers of Hispanic construction workers, as well as disproportionate number of fatalities among Hispanic construction workers, construction companies need to overcome new challenges. The Iowa Department of Transportation (Iowa DOT) has already started taking action, working with the Department of Civil, Construction and Environmental Engineering (CCEE) at Iowa State University to investigate training needs for Hispanics.

The Iowa State University research team performed a detailed assessment of the current conditions of the Hispanic population in the United States with emphasis on construction craft workers in Iowa. There are several reasons why Hispanics are experiencing greater accident rates. The risk inconsistency is generally blamed on language barriers, educational levels, and the preponderance of Hispanics working under unsafe conditions.

As part of this research, training tools were designed to overcome obstacles found on the jobsite due to language barriers and the resulting lack of adequate communication. These training tools include two easy-to-use training courses focused on Hispanic construction workers: *English as a Second Language (ESL) Survival Course* and *Stepping Up to Supervisor for Hispanic Construction Workers*. These courses will help construction companies create a more skilled and better-prepared Hispanic labor force. They will help to make sure that craft workers are aware of and understand risks involved in the workplace as well as help to establish effective communication between the company and its Hispanic workers.

This report presents the results of the Hispanic workforce project to provide American construction companies more information and tools to help decrease the increasing accident statistics and improve productivity and quality of work.

1.3. Project Objectives

The objective of this project is to provide effective tools for American construction companies interested in training and/or promoting those Hispanic employees whose skills meet their expectations for higher positions such as supervisor. This research also provides a tool to Hispanic craft workers who would like to learn to speak construction-related English.

In order for this project to provide successful solutions, it was necessary to assess the needs and interests of the Hispanic workers involved in construction in Iowa. Data collected through surveys represent the foundation for the development of valuable training courses.

The information gathered, results evaluated, and basic ESL and management training courses developed will be useful in helping both construction companies and their Hispanic workers to interact in a safer and more productive manner. If the training is implemented effectively, labor productivity is likely to increase and work site accidents are likely to decrease.

1.4. Definition of Terms

The term “Hispanic” is used in this report to conform with standard labor and census terminology. It is used as another word for “Latino.” The word “Latino” didn’t appeared in the U.S. Census until 2000. People who identify their origin as Mexican, Puerto Rican, Cuban, or Central or South American are considered Hispanic (Guzman 2001). Hispanics may be immigrants or U.S. citizens.

This report is primarily concerned with Hispanics in the construction industry whose primary language is Spanish and who do not yet have a firm command of English.

1.5. Economic Justification

This research took into consideration the employment statistics for construction companies with payroll by state in 1997, the latest Economic Census in the United States (U.S. Census Bureau 1997). The number of construction companies in the United States in 1997 was 656,448, with 4,395,365 construction workers. The payroll for all construction workers was \$119.6 billion dollars. The payroll for Hispanic construction workers accounted for 18.8% of the total, or \$22.5 billion dollars nationally. In Iowa, 7,941 companies were reported with 50,391 construction workers. The payroll for all employees in Iowa was \$1.7 trillion dollars; the payroll for construction workers in Iowa was \$1.3 billion dollars.

It is clear that the percentage of payrolls dedicated to construction workers is significant with respect to other industries and that Hispanics make up a large percentage of people working in construction. Construction companies stand to benefit from giving serious consideration to the implications on worker conditions as well as company productivity.

1.6. Report Organization

Chapter 1 introduces the topic, exposes an existing problem, discusses the objectives of this project, and defines the goals of this research project. Chapter 2 presents the literature review, starting with a general overview on the Hispanic and U.S. population before continuing with more detailed information on Hispanics influencing the construction industry in the United States. It concludes with a summary of available training material for Hispanics construction workers. Chapter 3 contains the methodology used for gathering necessary data, analyzing the results, and drawing reliable recommendations with which to develop and provide tools as a solution to the stated problem. Chapter 4 provides the procedure, systematic approach, and cultural aspects considered in the development of the training courses for Hispanic workers: *English as a Second Language Survival Course* and *Stepping Up to Supervisor Course for Hispanic Construction Workers*. Chapter 5 contains the contents for both courses. The ESL Survival Course consists of four main parts: (1) general, (2) inputs, (3) safety, and (4) various. At the end of the course, trainees receive an evaluation form for the course. The SUTS Course is organized into: (1) how to work with yourself, (2) how to work with an individual, (3) how to work with a group, and (4) key points. An evaluation form is provided at the end of the course to make sure that the objectives of the

course have been attained by the trainees. Finally, conclusions and recommendations are discussed in Chapter 6.

2. LITERATURE REVIEW

2.1. Background

From 1990 to 2000, the population of Hispanics in the United States grew by more than 50%, according to the U.S. Census Bureau. With such a drastic change, it is important to collect and analyze the most recent available data. This report collects, compiles, and analyzes the information necessary to study factors and trends of the Hispanic population involved in the U.S. construction industry. Several organizations' websites have been reviewed in order to obtain current information. These organizations include the U.S. Census Bureau, the U.S. Department of Labor, the Bureau of Labor Statistics (BLS), the Occupational Safety and Health Administration (OSHA), and the National Institute for Occupation Safety and Health (NIOSH).

2.2. Overview and Trends of the Hispanic Population in the United States

As a consequence of their growing numbers, Hispanics are significantly influencing the construction sector in the United States. A look at the information available on trends within the Hispanic population is necessary to gain insight into what has been occurring and what will occur in the construction industry. A compilation of the Current Population Survey (CPS) shows that in 2000, 35.3 million (or 12.5%) of the 281.4 million residents in the United States considered themselves Hispanic or Latino.

The word "Latino" first appeared in the Census 2000 as another term for "Hispanic." People of Hispanic origin are those who indicate that their origin was Mexican, Puerto Rican, Cuban, Central or South American (Guzman 2001). The Hispanic population growth in the United States from 1990 to 2000 was 57.9%, whereas the total U.S. population grew only 13.2% in the same time period. Besides this notable growth rate, there have also been changes within the Hispanic population distribution within this time frame. Mexicans increased 52.9% from 13.5 million to 20.6 million, Puerto Ricans increased 24.9%, Cubans increased 18.9%, and Hispanics from other origins increased 96.9% from 5.1 million to 10.0 million as depicted in Figure 2.1 (Guzman 2001). At the beginning of 2003, Hispanics became the nation's largest minority, accounting for 13.6% of the total U.S. population.

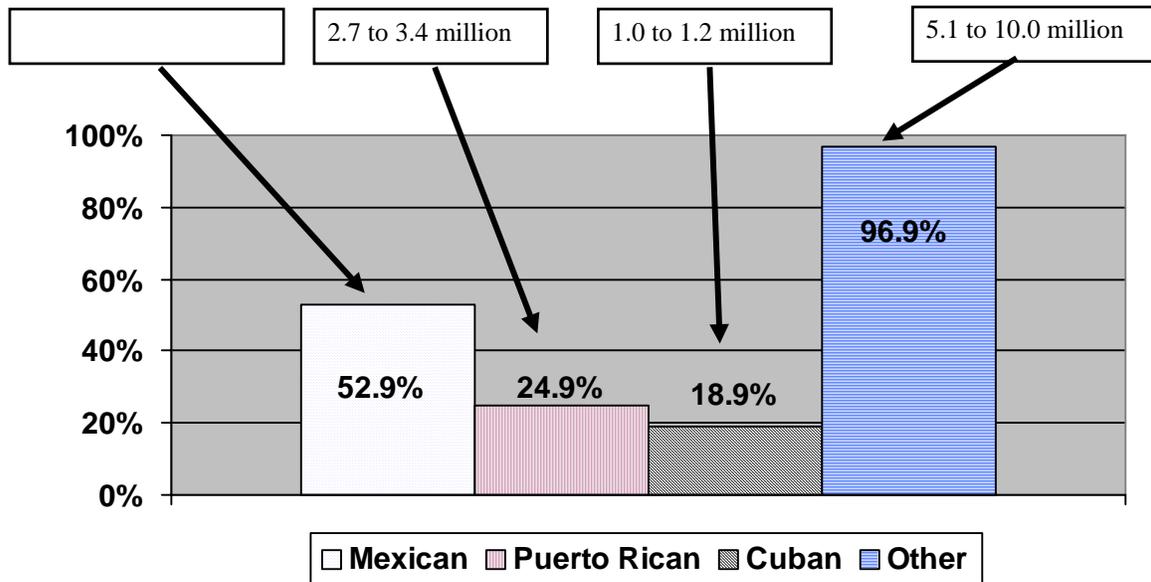


Figure 2.1. Hispanic population growth from 1990 to 2000 by group

Table 2.1 shows where the majority of the Hispanic population is concentrated and how fast these population centers grew from 1990 to 2000. More than three quarters of Hispanics in the United States lived in the West or South (primarily California and Texas). In 2000, 43.5% of Hispanics lived in the West and 32.8% lived in the South. The Northeast and Midwest accounted for 14.9% and 8.9%, respectively (Guzman 2001).

Table 2.1. United States, top-three states, and Iowa by Hispanic population, 1990 and 2000

Area	1990			2000		
	Total population	Hispanics Number	Hispanics Percent	Total population	Hispanics Number	Hispanics Percent
United States	248,709,873	22,354,059	9.0%	281,305,818	35,305,818	12.5%
California	29,760,021	7,687,938	25.8%	33,871,648	10,966,556	32.4%
Texas	16,986,510	4,339,905	25.5%	20,851,820	6,669,666	32.0%
New York	17,990,455	2,214,026	12.3%	18,976,457	2,867,583	15.1%
Iowa	2,776,755	32,647	1.2%	2,926,324	82,473	2.8%

According to the U.S. Census Bureau projections, by 2050 Hispanics are projected to make up 25% of the U.S. population. In Iowa, the Hispanic population in 2000 made up 2.8% (or 82,473) of the total population (2,926,324). Of the Hispanics, 74.2% were Mexicans, 3.3% were Puerto Ricans, 0.9% were Cubans, and 21.7% were other Hispanics (including Central and South Americans).

Figure 2.2 shows the difference between population projections and the actual population of Hispanics in Iowa. According to the population projections (U.S. Census Bureau 2000), there will be 96,000 Hispanics in Iowa by the end of 2025. This group has shown such a significant growth rate that the U.S. Census Bureau had projected this number to be about 54,000 by the end of 2000, but in reality the 2000 Census reported 82,000 Hispanics (a 65% increase) in the state of Iowa.

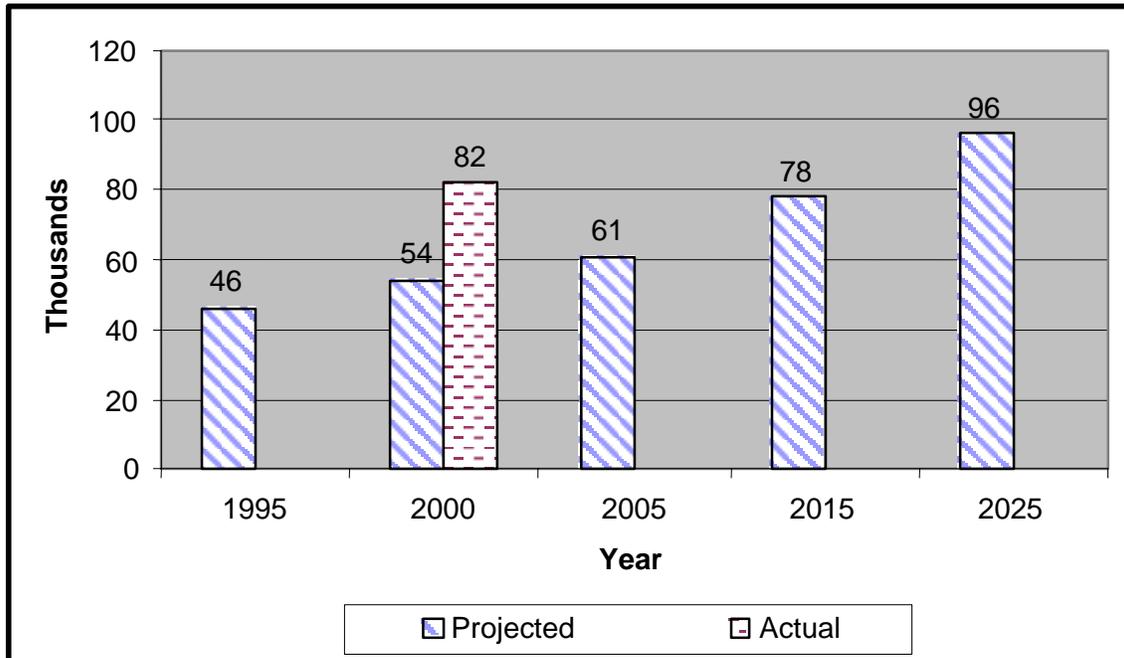


Figure 2.2. Hispanic population in Iowa: 2000 actual vs. 1995–2025 projections

2.3. Hispanics and the U.S. Labor Force

2.3.1. Foreign-born Workers in the United States

Population changes, such as the aging of the baby boom generation (those born from 1946 to 1964) and increasing racial and ethnic diversity within the U.S. population, continue to transform the American labor force. The U.S. labor force has been drastically influenced by the large increase of foreign-born workers since 1990. This relates directly to the U.S. economy in recent years. Between 1996 and 2000, this increase has contributed to a U.S. labor expansion, becoming nearly half of the net labor force increase (Mosisa 2000).

The CPS reported that even though the foreign-born tend to be less educated than the native born, they are more likely to be labor force participants than their native-born counterparts. Among the foreign-born population, labor force participation rates for whites were lower than for any other race/ethnic group (Mosisa 2000).

Given the foreign-born population trends in the U.S. construction labor force, needs assessments must be carried out by companies employing this diverse workforce. In addition,

companies must make strategic decisions to counteract past policies that did not incorporate the needs of a diverse workforce, one example of which would be implementing diversity training programs.

Hispanics living and working in the United States are the most exposed victims of environmental and occupational health problems and reported a disproportionate number of workplace fatalities in 2000. The 2000 BLS report on fatalities shows that 815 Hispanic or Latino workers died as a result of job-related injuries. This appears to be largely due to the fact that Hispanics are employed in the more dangerous industries. For instance, the construction industry accounts for only about 7% of all employment, but a disproportionately large percentage of workplace fatalities. As depicted in Figure 2.3, nearly 20% of Hispanic fatalities were due to falls and contact with equipment, events more common in construction work sites than other employment areas (Henshaw 2002).

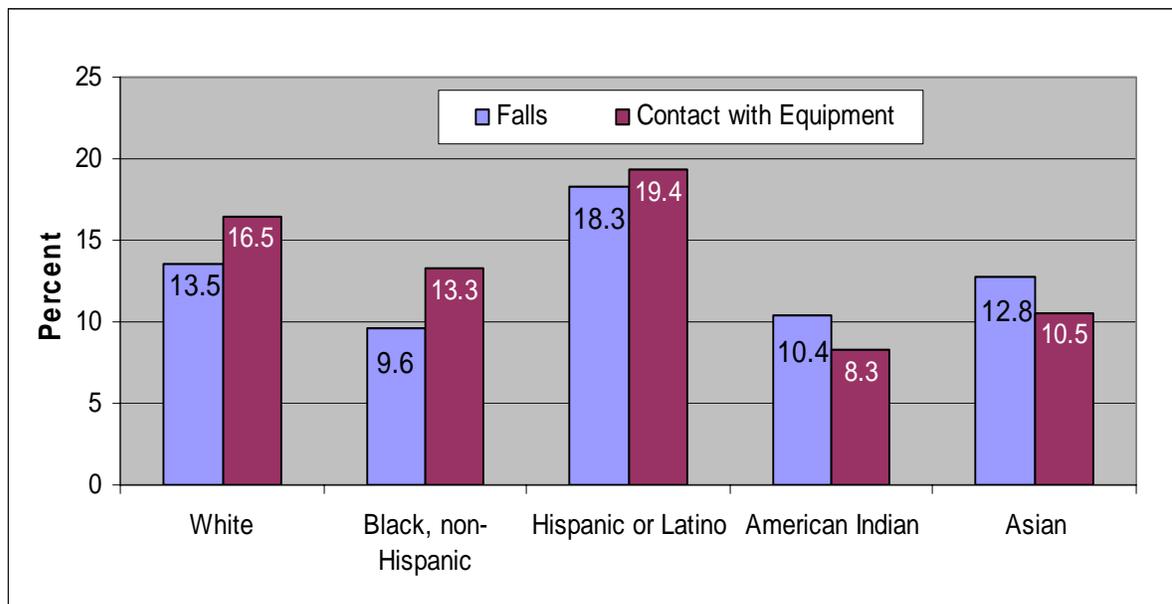


Figure 2.3. Fatal injuries by event of exposure and ethnic group (2001 data)

Recently, organizations have begun to not only reach out to a broader group of job seekers, but also provide effective training for new employees who, for whatever reason, lack the necessary skills for the work site. The idea is to ensure that regardless of their racial or ethnic background, construction workers have the skills they need. Because they come from other cultures, and might not speak English proficiently, immigrants might require more extensive training than other workers.

An effective training approach is therefore required to provide Hispanics not only with the right equipment and explanation of safety procedures, but also with a culturally meaningful explanation and conception of why safety is important. It must also illustrate how coming from a different culture can play an important role in safety issues.

2.3.2. The Construction Industry and the U.S. Economy

Berman et al. (2001) studied the employment growth influence in the U.S. economy during the past decade and showed employment reaching about 167.8 million by the end of 2000. The 2000–2010 projections show an expansion at approximately the same as that of the past decade with nearly 60% of total employment attributed to the service-producing industries.

These projections indicate that the construction industry (part of the goods-production sector) will continue to add jobs at a relatively slow growth of 0.5% yearly. The *Monthly Labor Review* of the BLS projected the construction industry to add 825,000 jobs by 2010 at a 1.2% growth rate, and also to be the goods-producing sector’s largest and fastest source of employment growth (Berman 2001).

The BLS projects employment by industry and by occupation. Total employment in the United States is projected to increase by 22.2 million (or 1.4%) from 2000 to 2010. Table 2.2 displays the total number of jobs by goods-producing industry and the average annual rate of change for the 1990–2000 period and projected for the 2000–2010 period. Within this industry, the construction industry has the largest growth in both periods.

Table 2.2. Employment by the goods-producing industry, 1990–2000 and 2000–2010

Industry	Thousands of jobs			Average annual rate of change	
	1990	2000	2010	1990–2000	2000–2010
Mining	709	543	488	-2.6%	-1.1%
Construction	5,120	6,698	7,522	2.7%	1.2%
Manufacturing	19,077	18,469	19,047	-0.3%	0.3%
Total of goods-producing industry	24,906	25,709	27,057	0.3%	0.5%
Total of all industries	124,324	145,594	167,751	1.6%	1.4%

Between 1990 and 2000, there was an increase of 40% in the number of construction jobs in the state of Iowa, from 71,304 to 100,527. Polk County accounted for 16.1% of the total, followed by Linn with 8.1%, and Scott with 5.9%.

The employment statistics indicate that the Hispanic population in the United States in 2002 was 12.2% of the total number of employed persons 16 years and over (BLS 2003). More specifically, Hispanics involved in construction accounted for 18.8% (or 1.8 million) of the total employed population working in the U.S. construction industry (or 9.7 million).

2.3.3. Management Goals through Training

The importance of workers’ knowledge, skills, and capabilities is of primary importance among those construction companies which have come to the conclusion that it is not only about having enough workers to finish the work on time and under budget, but also it is about having the right people with the necessary skills to accomplish a complete and competitive goal.

The construction industry is facing a combination of various factors that may affect their goal achievement. The presence of workers from different cultures on the jobsite has created a growing gap between workers' skills and capabilities and the job requirements. This gap must be closed through training programs that lead to employment development.

Employers must prepare to meet the challenges represented by this knowledge gap. Providing a safe environment must be a primary goal, as it is critical to low employee turnover and high productivity.

The *Construction Industry Digest 2002*, provided by OSHA (1998) includes a chapter called "Safety and Health Management Systems" that contains four main sections: (1) Management Commitment and Employee Involvement, (2) Work Site Analysis, (3) Hazard Prevention and Control, and (4) Safety and Health Training. The fourth factor is an especially essential component of an effective safety program. Through such programs, companies are able to identify the safety and health responsibilities of both management and employees at the site. Training depends on the size and complexity of the work site, potential hazards, and worker characteristics.

One of the main objectives of a company's management is to train supervisors to understand the key role they play in work site safety and to enable them to carry out their safety and health responsibilities effectively (OSHA 1998).

2.4. Summary of Available Training Material for Hispanic Construction Workers

It is clear that training programs must be developed and offered based on current and future needs. Available material focused on the Hispanic population of the United States is becoming more and more popular and requested more often. More than 10 million Hispanic Americans speak little or no English. Organizations such as OSHA have special concerns for non-English speaking workers. In October 2001, this agency formed a task force to inspect the issue of rising Hispanic fatalities, and what employers should do to address the problem (OSHA 2001).

According to the OSHA Trade News Release (2003), more than \$2.2 million in new funding is allocated for outreach to Spanish and other non-English-speaking workers in President Bush's Fiscal Year 2004 budget for OSHA. This is the first time OSHA's budget will include additional funding for Hispanic outreach (OSHA 2003).

The American Society for Training and Development (ASTD) is the world's leading association for workplace learning and performance. Ongoing ASTD initiatives, such as its state of the industry report, show that training expenditures dropped from 2.0% of payroll in 2000 to 1.9% of payroll in 2001 (Thompson et al. 2002). Training expenditures per employee rose 8% to \$761, with 78% receiving training and an average of 23.7 hours (Thompson et al. 2002).

OSHA is forming alliances with Hispanic leadership and community-based organizations and offering an ever-increasing number of publications and fact sheets in Spanish. OSHA

will continue to expand ongoing Hispanic outreach projects such as the community-based effort to disseminate safety and health information among immigrants in New York and New Jersey, the Construction Accident Reduction Emphasis (CARE) program in Florida, an alliance with a Latino community group in Georgia to encourage workers to report hazards, safety and health courses and small business training taught in Spanish in the Southwest, and bilingual compliance assistance specialists and inspectors available to assist Spanish-speaking workers and employers in several local offices (OSHA).

In addition, a new website written in Spanish is helping OSHA reach out to non-English speaking workers and employers. The web page initially is featuring basic documents such as worker and employer rights and responsibilities, resource materials and other information of special interest to Spanish-speaking audiences. In addition, OSHA's new program, Alliances, enables organizations committed to workplace safety and health to collaborate with OSHA to prevent injuries and illnesses of Hispanics in the workplace.

The National Institute for Occupational Safety and Health mission is to prevent work-related illness, injury, and death. NIOSH conducts a wide range of research, training, and technical assistance programs to identify and reduce hazardous working conditions. Recognizing the vital importance of education in the occupational safety and health (OS&H) field, NIOSH supports academic programs that are designed to enhance the knowledge of the professional and paraprofessional workforce in this field.

NIOSH in Spanish, another source of available material, includes Spanish-language versions of several NIOSH workplace safety and health documents relevant to industries and occupations in which large numbers of Spanish-speaking workers are employed. It also describes in Spanish how workers and employers can contact NIOSH and access basic services, such as health hazard evaluations.

2.4.1. Training Programs

a. English as a Second Language (ESL)

The levels of knowledge of English at the work site vary depending on the diversity of the workers and supervisors. In construction, speaking the language is not strictly required, which may be an advantage for those who do not speak English at the beginning. However, not knowing the language represents an adverse safety issue.

As a first search for ESL material, several journals were reviewed in order to understand to what extent of research this topic has been addressed in the past. The following keywords were used in searching the journals:

- Communication
- Language barriers
- Cross-cultural aspects
- Hispanics

Journals published by the American Society of Civil Engineers (ASCE) contained little information on ESL topics. An article titled “Differences in nonverbal communication styles between cultures: The Latino-Anglo perspective” appeared in the *Journal of Leadership and Management in Engineering* in 2001 (Cruz 2001). This article focuses on the importance of studying one's own culture as a way of becoming aware of cultural differences and the awareness of these differences can be extremely important to anyone who wants to be effective in a diverse work environment (Cruz 2001). The *Journal of Management in Engineering* published an article in 2002 titled “Perception of construction professionals concerning important skills of effective project leaders” (Oduami 2002). In this article, contractors ranked communication as the most important skill required in construction. The *Journal of Professional Issues in Engineering Education and Practice* published an article in 2002 titled “Developing cross-cultural communication skills.” This article discusses how engineers have traditionally focused on hard-skill knowledge acquisition, but the increasingly multicultural work practices of professional engineers now demand better soft-skill proficiency, such as foreign language ability, communication confidence, and cross-cultural experience (Gilleard and Gilleard 2002).

The researchers' second step of reviewing ESL material included a search of other organizations on the internet. The search criteria included finding information about basic topics necessary for Hispanic construction workers whose communication skills are minimal, course durations, and availability of such courses in Iowa. Several websites contained information on ESL courses, with different levels, and different topics. Some of these were construction related and others were focused on general topics.

b. Supervisory training program

The work expectations of the supervisor have been changing to meet the needs that characterize most workplaces and practices with the new skills required to lead effectively in the rapidly changing workplace. The supervisor's role has changed for several reasons. For instance, technological advancements and cultural diversity issues have become more important to construction companies.

The Associated General Contractors of America (AGC), through one of its subsidiaries, the Iowa Association for Construction Training (IACT), provides a Supervisory Training Program (STP) for construction foremen and superintendents. STP is published by Wil McKnight Associates (2001) and courses are offered by AGC chapters, other construction organizations, and companies nationwide. For example, the IACT offers training programs using the *Stepping Up to Supervisor* materials, which consists of three parts: a Spanish-version book, an English-version book, and a Workshop Leader's Guide in English.

Some of the topics taught in these programs include the following: meeting the challenge of stepping up to a supervisory position, fitting your basic fundamentals into your style, dealing with special situations, as well as sample forms, checklists, and reference information (McKnight 2001).

All these materials are aimed to meet the needs of the construction industry. The STP focuses on the educating the employee about the knowledge and skills that every supervisor must

have to be an effective manager of people, time, equipment and materials. AGC has also created a wide variety of innovative and effective programs to support training programs for craft workers. Information on AGC's craft training programs and services is available through the AGC's training and educational services and also through the National Center for Construction Education and Research.

2.5. Description of Cultural Differences between American and Hispanic Cultures Embedded in the Course Contents

In order for training course developers and trainers to achieve positive outcomes, they must pay more attention to the development, delivery, and evaluation of diversity training initiatives. Developers of training courses for Hispanics must take into consideration cultural differences with respect to the mainstream American culture. In addition, as the U.S. construction labor force becomes more diverse, successful leaders will owe some of their success to the experience of working in multicultural environments. The goal of this description is to help trainers respond to possible challenges posed by training a more diverse workforce. Some of the skills for trainers to develop include the capability to demonstrate respect and understanding, to communicate effectively, and to work collaboratively with people from a Hispanic background. Special effort must be made to help all employees learn new skills to overcome the group differences. This will increase worker effectiveness and help avoid the risk of creating threatening stereotypes.

It is important to understand what is meant by "culture" for this model. According to Geert Hofstede, culture is the collective programming of the mind that distinguishes the members of one group or category of people from another (Hofstede 1983). More specifically, this author defines culture as the part of our conditioning that we share with other members of our nation, region, or ethnic group but not with members of other nations, regions, or groups. In Hofstede's model, there are four main dimensions for describing cultural differences: (1) large or small power distance, (2) individualism versus collectivism, (3) masculinity versus femininity, and (4) strong or weak uncertainty avoidance (Hofstede 1983). The fundamental issues identified by Hofstede are expressed here for each of the four dimensions and a graphical comparison between the U.S. and Mexican societies is shown in Figures 2.4–2.7. These numbers were extracted from a study done by Hofstede that compared aspects of national character across countries, assigning an index value from 1 to 100. For the development of this course, Mexico has been used as the country to be compared with the United States. Mexicans are the largest (58.5%) Hispanic group in the United States.

Power distance refers to how society deals with the fact that people are unequal. In organizations, the level of power is related to the degree of centralization of authority and the degree of autocratic leadership. Hofstede established some relationship among these four dimensions such as power distance and collectivism (1983). Collectivist countries always show large power distances, but individualist countries do not always show small power distances. Poor countries tend to be collectivist with larger power distances, and we find that many Hispanic construction workers are from these poorer countries.

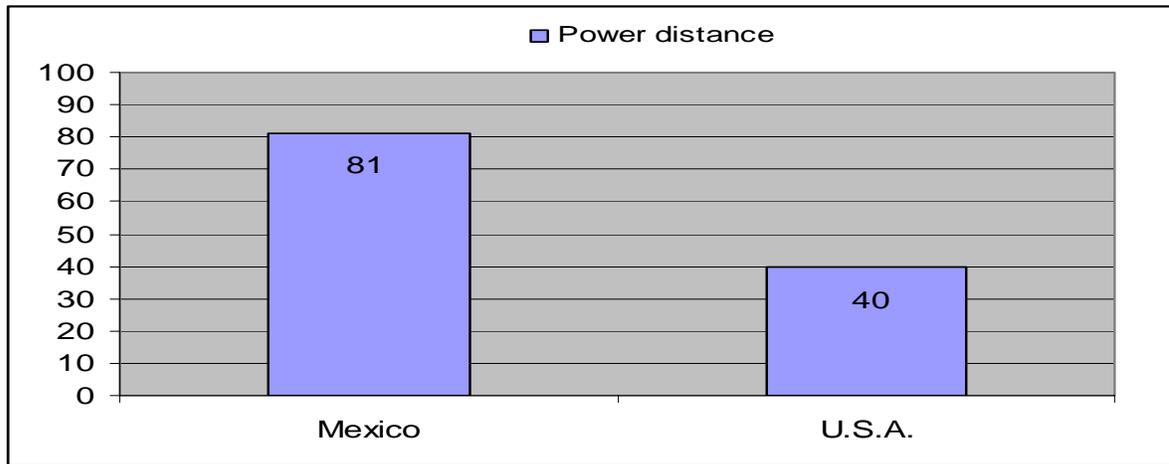


Figure 2.4. Comparison between Mexico and United States according to power distance

Individualism versus collectivism involves the relationship between an individual and his or her fellow individuals. There are two categories: (1) societies in which ties between individuals are very loose, that is, everybody looks after his or her on self interests; and (2) societies in which the ties between individuals are very tight, that is, everybody looks after his or her group's interests. Hispanic societies fall in the second category, where friendships prevail over tasks and loyalty is very valuable among group members and between bosses and subordinates.

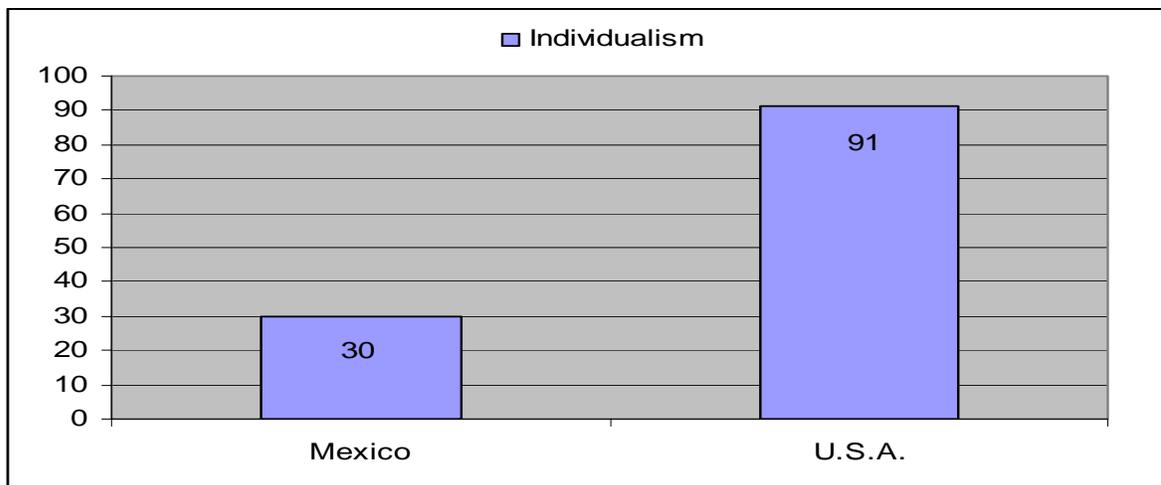


Figure 2.5. Comparison between Mexico and United States according to individualism

Masculinity versus femininity is related to the division of roles between the sexes in society. Hofstede (1983) affirmed that all human societies have to deal with the fact that one half of mankind is female and the other half is male. Human societies have associated certain roles to men only, or to women only. This is part of a socialization process, rather than biological sex role. Latin countries such as Venezuela and Mexico are considered to be quite masculine biased. Figure 2.6 shows how the masculinity of Mexican society compares to the masculinity of American society.

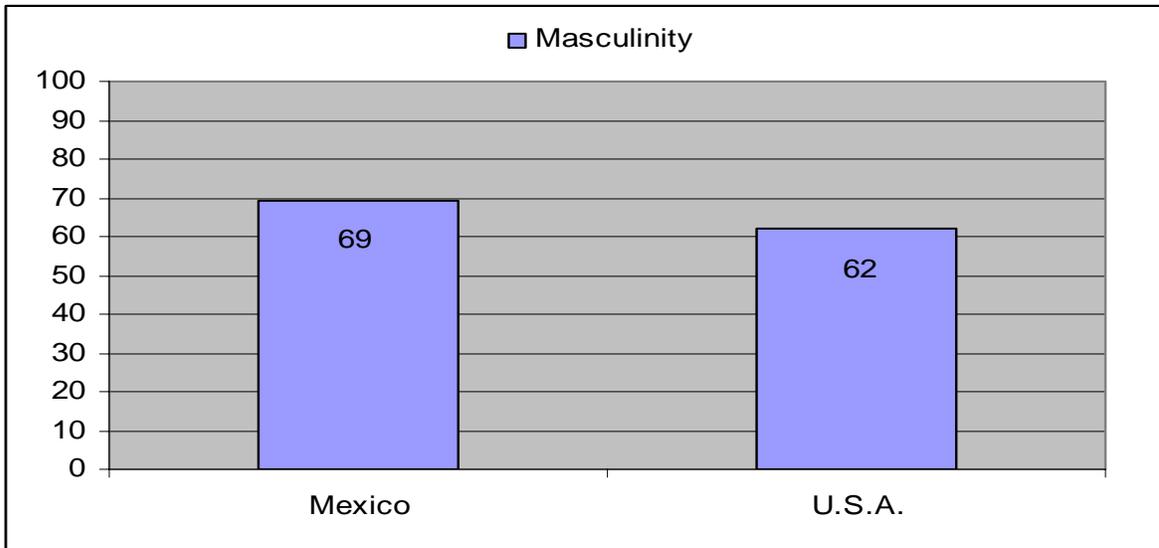


Figure 2.6. Comparison between Mexico and United States according to masculinity

Uncertainty avoidance indicates to what extent a culture can program a member to sense different, unknown, or surprising situations. The two ends of this dimension are related to how strong or weak members accept or avoid uncertainties. Groups with weak uncertainty avoidance tend to accept the fact that future is unknown and therefore accept each day as it comes. On the other hand, other societies tend to reduce uncertainty in the future by creating security and avoiding risk. In this dimension, there exists a clear correlation between power distance and uncertainty avoidance. According to Hofstede, Hispanic societies show strong uncertainty avoidance with a large power distance, whereas in American society and other countries with large populations with Anglo-European roots, an opposite correlation was found, that is, small power distance and weak uncertainty avoidance. Figure 2.7 compares uncertainty avoidance scores between the United States and Mexico.

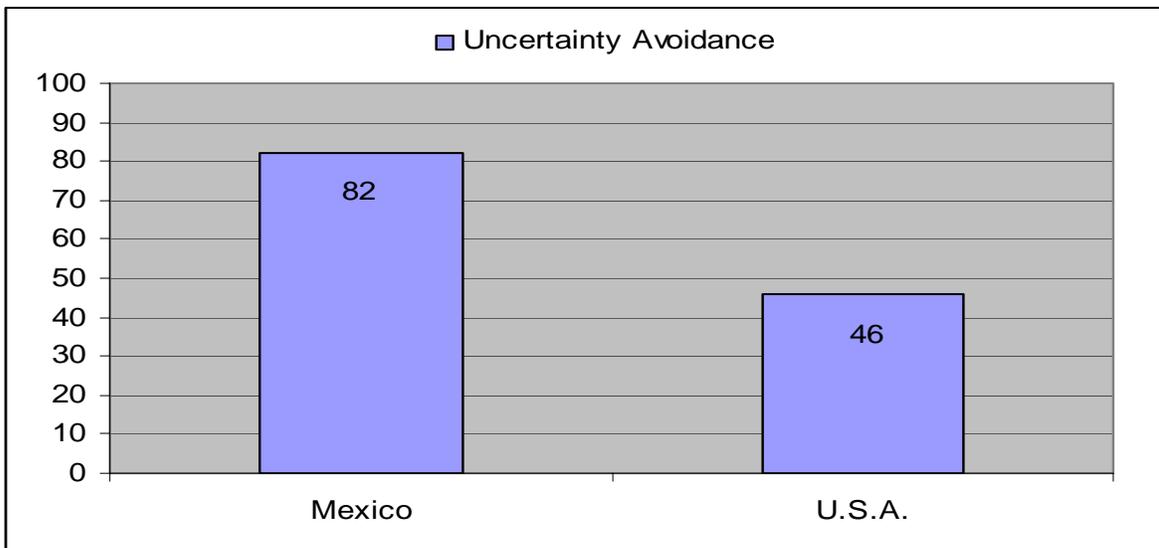


Figure 2.7. Comparison between Mexico and United States according to uncertainty avoidance

Table 2.3 describes some examples of national cultural values that will help trainers better understand the impact of cultural differences on the jobsite. According to the Hofstede's findings on both the Mexican and American cultures (1983), it is concluded that in the workplace, Mexicans, as subordinates, expect to be told what to do, see hierarchy as an existential inequality, and consider their boss as a benevolent autocrat. Also, because of their collectivism, they see relationships more important than tasks.

Most of these cultural values and differences between the Mexican and American cultures are embedded throughout the course contents of the ESL Survival Course and *Stepping Up to Supervisor Course for Hispanic Construction Workers* training courses as presented in Chapter 5.

2.6. Concluding Remarks

It was found that extensive literature exists on topics related to improving construction safety and other areas such as productivity and quality through training programs. However, it appears that there is a gap related to achieving an appropriate safety culture among Hispanic craft workers, which in the long turn will reduce the risks this population faces in the workplace. The AGC provides the majority of the information and material on training programs. Other organizations such as OSHA and ASTD also offer these types of education programs but there is still a need for material on supervisory training programs and particularly, for Hispanic construction craft workers. This will be covered in Chapter 4.

Several organizations exist that offer ESL courses through the internet, with several levels of difficulty according to the contents of each level and with durations of several hours and costs that may be prohibitive to Hispanic construction workers. ESL courses containing basic instructional materials may help workers who do not speak English, particularly, Spanish-speaking construction workers, attain the knowledge necessary to work safely on the jobsite.

Developing tailored training programs can be an effective approach to engage employees in any company's goals. The lack of effective training programs and qualified developers and instructors may result in the widening of the gap for Spanish-speaking construction craft workers and promoted supervisors. Translating training programs into Spanish is seen as the first step to bridging the gap. The main objective is to teach Hispanic craft workers in Spanish how to make themselves readily understood as they communicate day-to-day in an English-language environment, such as the work site, and therefore meeting the requirements to advance to a better position.

Table 2.3. Comparison of general aspects between Mexican and American cultures according to Hofstede

Aspect	Mexican	American
Work/leisure	Works to live Leisure considered essential for full life Money is for enjoying life	Lives to work Leisure seen as a reward for hard work Money often end in itself
Direction/delegation	Traditional managers Autocratic Younger managers starting to delegate responsibilities Subordinates accustomed to being assigned tasks, not authority	Managers delegate responsibilities and authority Executives seek responsibilities and accepts accountability
Theory vs. practice	Basically theoretical mind Practical implementation often difficult	Basically pragmatic mind Action-oriented and problem solving approaches
Control	Not fully accepted Sensitive to being checked on	Universally accepted and practiced
Staffing	Family and friends favored because of trustworthiness Promotions based on loyalty to superior	Relatives usually barred Favoritism not acceptable Promotion based on performance
Loyalty	Mostly loyal to superior Beginnings of self-loyalty	Mainly self-loyalty Performance motivated by ambition
Competition	Avoids personal competition Favors harmony at work	Enjoys proving oneself in competitive situations
Time	Deadlines flexible	Deadlines and commitments are firm
Planning	Short-term due to uncertain environments	Long-term due to stable environments

3. RESEARCH METHODOLOGY

3.1. Introduction

Current data on Hispanics was required to fulfill the first objectives of this research project. Therefore, both the availability and the quality of such data must be addressed. Reliable data must be obtained in order to draft recommendations that will serve as a basis for targeted actions at different levels of training programs. Data were gathered in different ways. First, data were collected from several organizations such as OSHA and the BLS from their websites. Second, a questionnaire was designed and conducted in order to collect data from Hispanic construction workers in Iowa. Finally, the data were analyzed in order to select the most critical facts in developing an effective solution for both the construction companies and Hispanic craft workers. This research focuses on the Hispanic population in the United States, with a more detailed study on Hispanics working for American construction companies in Iowa.

The methodology used for this research project on Hispanic construction workers is shown in Figure 3.1. It consists of four parts: (1) a literature review on the construction industry and Hispanics in the state of Iowa; (2) questionnaire design, data collection, and data analysis, evaluation, and results; (3) training courses: *ESL Survival Course* and *Stepping Up to Supervisor for Hispanic Construction Workers*; and (4) conclusions and recommendations.

The literature review on the construction industry and Hispanics in the state of Iowa was addressed in Chapter 2.

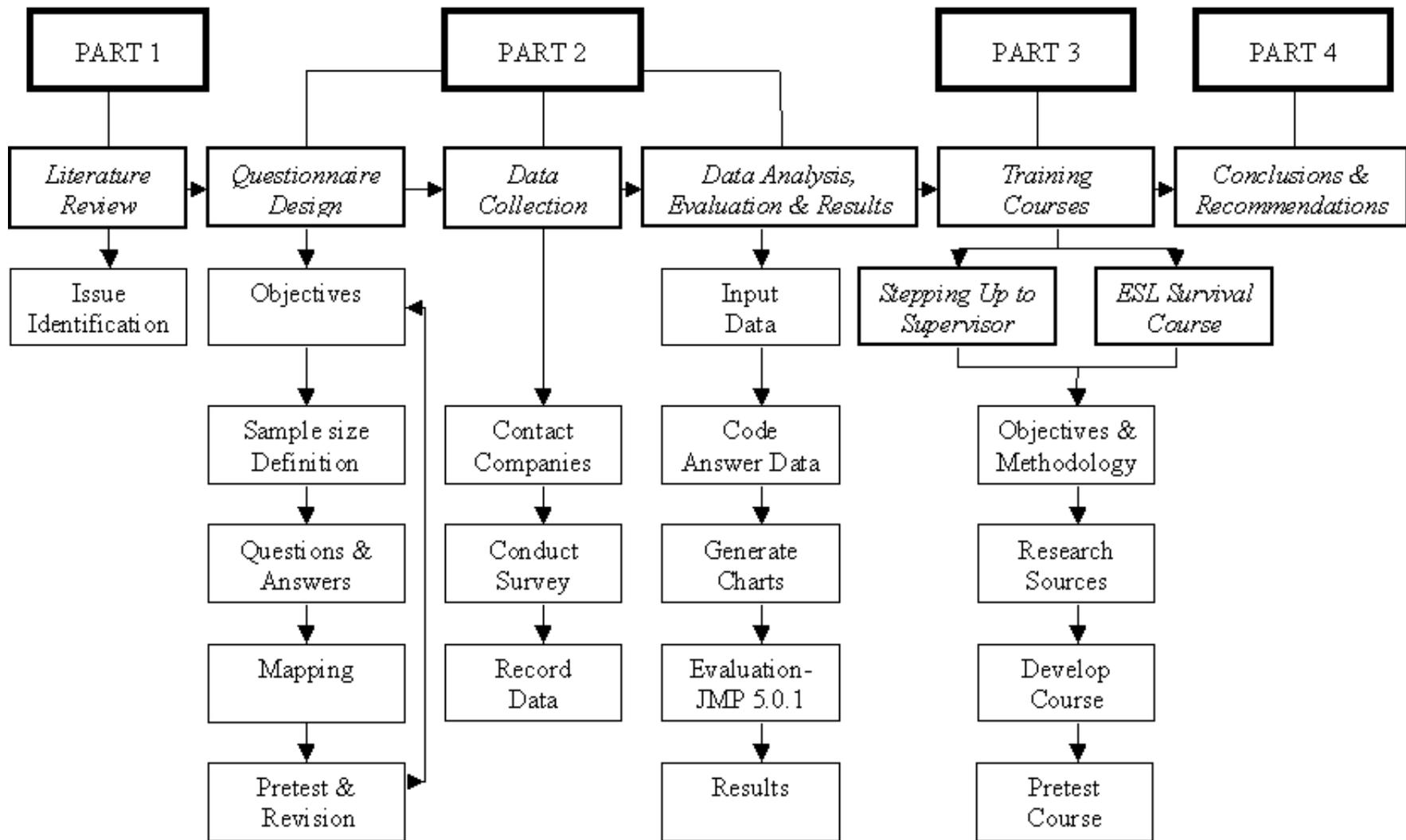


Figure 3.1. Research methodology

3.2. Questionnaire Design, Data Collection, and Data Analysis, Evaluation, and Results

A face-to-face survey was deemed the most efficient and reliable way to collect data from Hispanic construction craft workers. Thus, after the literature review, Part 1, was conducted on the construction industry and Hispanics in the state of Iowa, the research process continued with Part 2. This part consisted of three stages: (1) questionnaire design, (2) data collection, and (3) data analysis, evaluation, and results.

The goal of the questionnaire was to provide data necessary to bridge the gap between American supervisors and Hispanic construction workers by identifying the problems created by blending the two cultures into the workplace. After identifying the problems, suitable and effective training courses could be developed to encourage Hispanic construction workers to be active and productively engaged participants in the refinement and accomplishment of American construction companies' goal of a safe environment.

The following fifteen objectives were defined for the design of the questionnaire:

1. Determine general and specific types of training programs currently offered by construction companies in the United States to Hispanic workers.
2. Determine the level of adequacy of Hispanic workforce training with regard to courses taken, course duration, and degree of difficulty.
3. Identify how Hispanics feel about the usefulness of the courses.
4. Identify Hispanic and American cultural differences and their implications for the workplace.
5. Determine patterns of needs, interests, and areas of training for Hispanic construction workers according to the current level of skills and working conditions.
6. Prioritize those areas of improvement for the implementation of ESL and technical training courses for Hispanic construction workers.
7. Determine the factors and problems (e.g. language barrier, experience) that adversely affect the performance, quality, and safety conditions of Hispanic construction workers.
8. Determine the level of interest as expressed by Hispanic workers in relation to improving and learning new skills such as construction equipment operation.
9. Prioritize the type of equipment they would prefer to learn to operate.
10. Determine the level of satisfaction of Hispanic workers as it relates to their opportunities to learn new skills, safety conditions, and type of tasks they perform.

11. Verify the need to have key employees on the work site to overcome the language barrier.
12. Determine accident rates and types of accidents incurred by Hispanics in construction.
13. Gather background, personal, and demographic information on Hispanic construction workers.
14. Obtain mobility index (idea of how long they stay in a particular job) of Hispanic workers.
15. Identify personal expectations and goals towards the future of Hispanics.

Having defined the objectives of the questionnaire, the sample size was defined by using the literature review summarized in Chapter 2. It was determined that at least one hundred and fifty respondents were necessary to obtain enough data to draw and evaluate significant conclusions, and generate recommendations. Several factors influenced the sample size, such as how quickly the results were needed, what type of survey to do, and the availability of workers as well as the disposition of the project supervisors at the time of the interview. More specifically, the sample size was calculated according to the number of Hispanics involved in the construction industry in Iowa obtained from statistics provided by the BLS and U.S. Census Bureau.

Hence, a convenience sample was decided upon according to the literature review on how to conduct surveys (Fink 1998) due to respondents' willingness and availability to complete the survey. Thus, in order to control sampling errors, a minimum of one hundred and fifty workers was chosen as the sample size.

Once these factors were taken into account, quantitative and qualitative measurements were determined as well as the order and survey length. This step was mainly based on the specific objectives of the survey. Initially, the questionnaire consisted of 20 questions arranged in four categories of information as follows: (1) ESL background, (2) management course information, (3) safety aspects, and (4) personal information.

This first questionnaire was pre-tested on three different work sites, with nine respondents. Corrections and modifications were made by several experts such as the survey director and associate of the Center for Survey Statistics and Methodology and other Iowa State University faculty.

Finally, the questionnaire was completed. It consisted of thirty-five questions, with the same four categories established before the pretest. Appendix A contains the questionnaire in its

final format and with its main objective, which was used as introductory information before the surveys took place.

Data collection, as the second stage of Part 2, was carried out by using face-to-face interviews with construction workers on the jobsites. Several construction companies in Iowa were willing to collaborate and ten of them were contacted prior to conducting the interviews. Research team members, called project contacts, explained the nature of the survey, and occasionally requested permission in advance to enter the jobsite.

A variety of project types were selected. Most of the construction projects chosen as data sources were located in the Des Moines area, Ames, Burlington, Council Bluffs, and cities in which the presence of Hispanic workers was sufficient to conduct the survey, all of them working on IDOT projects. Of the 150 surveys initially planned, 97 of them were actually conducted, thus obtaining a response rate of 65%. However, the decision to stop at 97 interviews was made on the fact that similar answers were being obtained as seen from the comparisons of the results at 60, 80, and 97 interviews as can be observed in Figure 3.2.

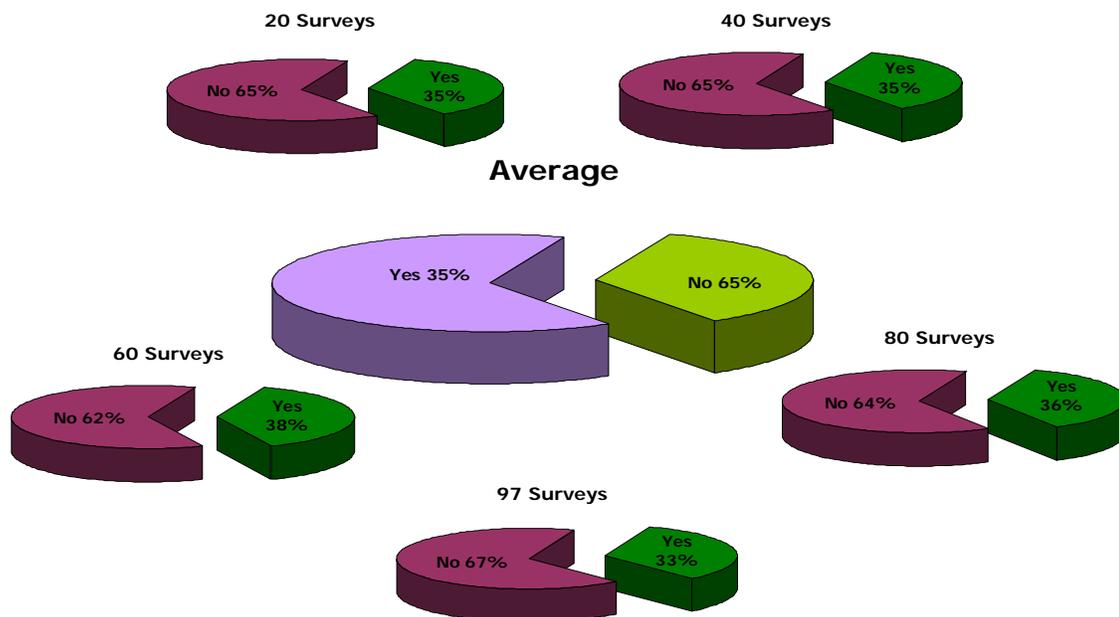


Figure 3.2. Comparison of results for question 1, “Have you ever taken a course to help you learn English?”

To conduct this survey, appropriate personnel with bilingual skills in Spanish and English and highly experienced with Hispanic construction labor force were used as surveyors.

As a last stage of the Part 2, data analysis, evaluation, and results were obtained and used for the selection and development of two effective and unique training courses. In this part, factors such as the length of the questionnaire, the number of completed surveys, and the data analysis software to be used had to be considered. Each objective in the questionnaire was achieved by asking the adequate question as it related to it. Appendix A contains a complete mapping of objectives as they relate to the corresponding questions.

Microsoft Excel was used to store respondents' information. Thus, survey responses were input, coded, and kept confidential in a customized database. Totals and respective percentages were calculated and charts were generated for each of the 35 questions.

Data analysis continued with the evaluation of the generated charts. Variability and similarities were extracted from the bar charts obtained for each question. Establishment of relationships indicated patterns that, in turn, would lead to significant conclusions for research project recommendations.

Given the number of respondents, the data was exported to statistical software called Jump 5.0.1, which served as a means of evaluation. Making use of both bar charts and statistical results, questions were selected according to the research objectives.

The graphs developed out of the questions are contained in Appendix B. Of the fifteen questionnaire objectives defined in Part 2, five objectives (1, 5, 7, 10, and 15) were used for developing the *Stepping Up to Supervisor Course for Hispanic Construction Workers* (SUTS), and other three (2, 6, and 8) were used for the *ESL Survival Course*. Table 3.1 contains the corresponding questions for each course in order to narrow the answers down to the specific training needs of Hispanic workers and American construction companies on the jobsite.

Figures 3.2 through 3.4 reflect the needs of Hispanic workers to take ESL courses that are short enough and construction focused. 65% of the workers said they had not taken courses to help them learn the language, 57% expressed that duration was a concern since their courses were more than 40 hours. Learning construction-focused terminology was "very important," according to 55%, and "important" 28% said. Therefore, efforts in developing the *ESL Survival Course* were made to accommodate these specific needs of the Hispanic workers.

Table 3.1. Objectives and questionnaire used for training course development

Objective no.	Objective	Questions	
		SUTS	ESL
1	Determine general and specific types of training programs currently offered by construction companies in the United States to Hispanic workers.	19c	19c
2	Determine the level of adequacy of Hispanic workforce training as it relates to courses taken, course duration, and degree of difficulty.		1a, 1b, 4, 5
5	Establish patterns of needs, interests, and areas of training for Hispanic construction workers according to their current level of skills, working conditions, and safety environment.	7, 8, 9, 13, 19d	
6	Prioritize those areas of improvement for the implementation of ESL and technical training courses for Hispanic construction workers.		10a, b, c, d, e, f, 33
7	Determine all factors (e.g., language barriers) that adversely affect the performance, quality and safety conditions of Hispanic construction workers.	23a, b, 24a, b	
8	Determine the level of interest as expressed by Hispanic workers in relation to improving and learning new skills such as construction equipment operation.		11
10	Determine the level of satisfaction of Hispanic workers as it relates to their opportunities to learn new skills, safety conditions, and type of tasks they perform.	17a	
15	Identify personal expectations and goals toward the future of Hispanics.	32, 35	

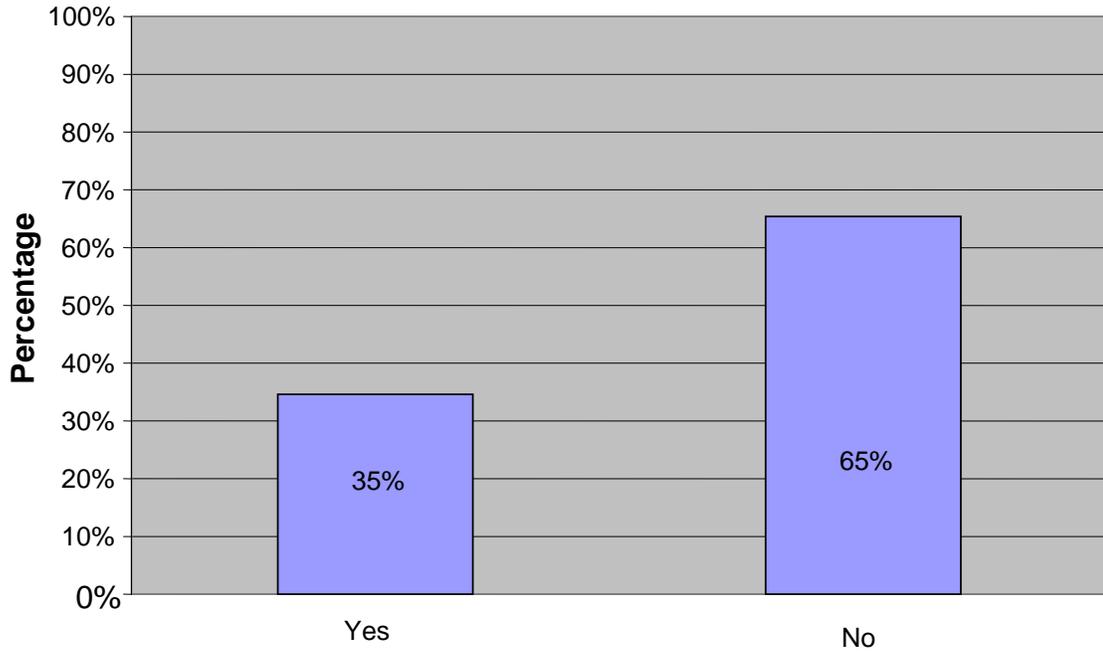


Figure 3.2 Percentage of workers who have taken ESL courses in the past

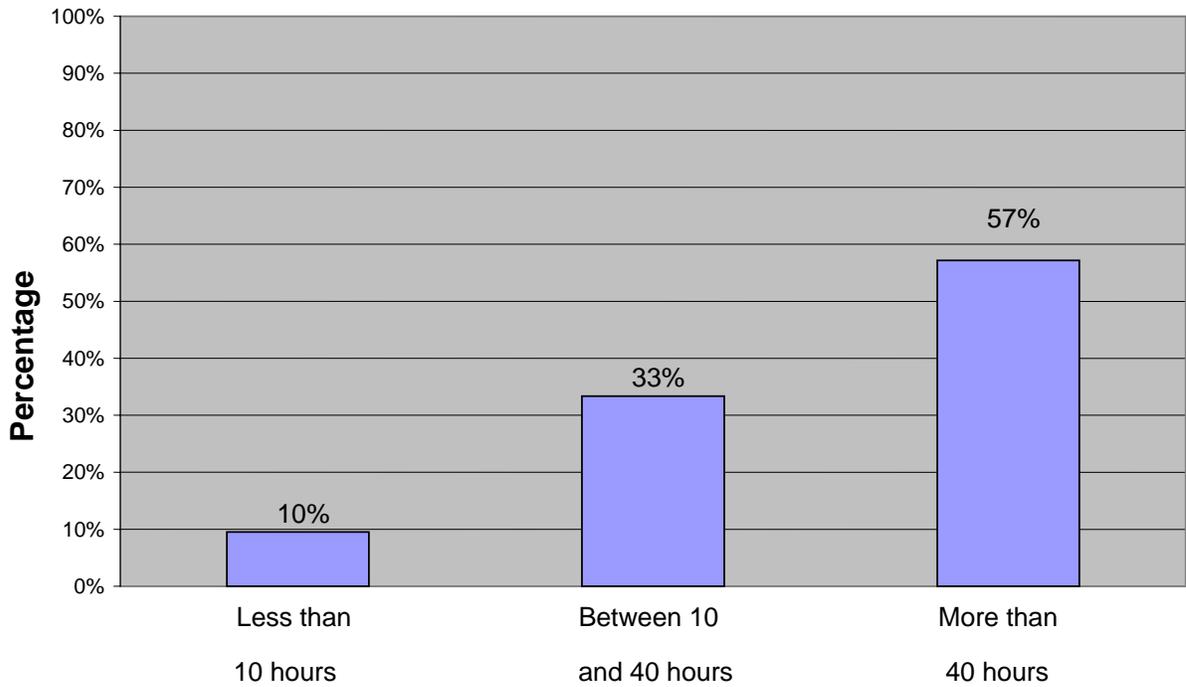


Figure 3.3. Duration of ESL courses workers have taken in the past

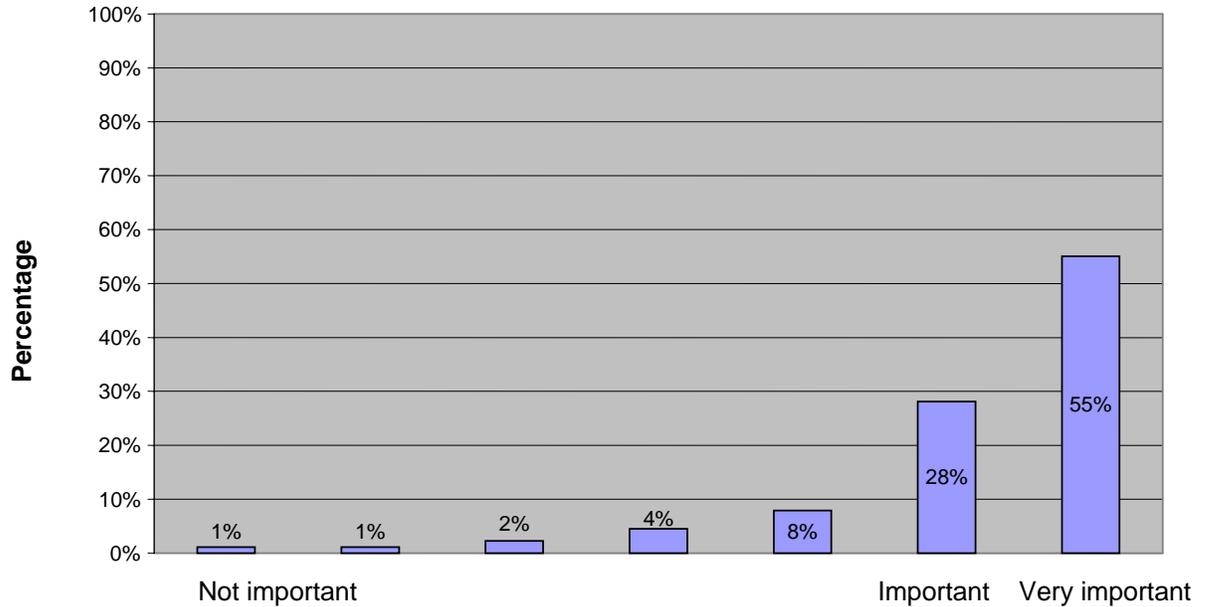


Figure 3.4. Importance of being trained in construction-related terminology

A construction craft worker or a supervisor is expected to be fluent in English, as this is one of the initial requirements for advancement opportunities within an American construction company. The analysis of these ESL and training related charts led to four influencing factors as follows: (1) a lack of adequate training, (2) the existence of the required construction experience, (3) the desire for advancement opportunities, and (4) the desire for taking training courses such as the *Stepping Up to Supervisor Course for Hispanic Construction Workers*.

It is vital to note the importance that advancement opportunities hold for a Hispanic construction worker. Figure 3.5 shows that 77% of workers answered that it was very important and 10% said it was important to have advancement opportunities. If this is so, training to help Hispanic construction workers achieve advancement should become a priority.

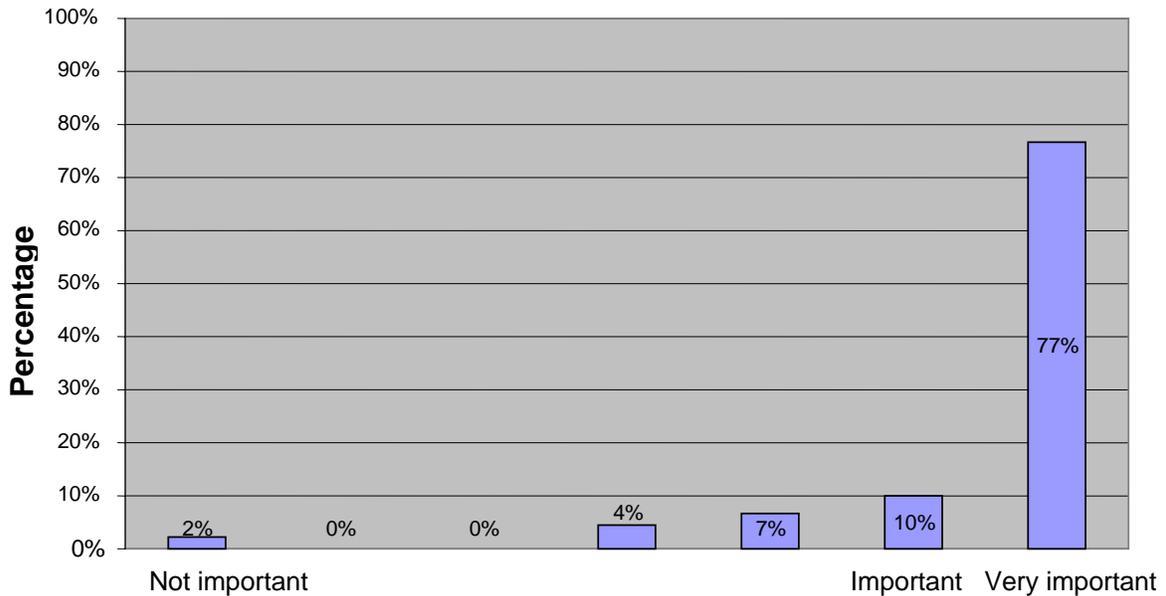


Figure 3.5. Importance of having advancement opportunities

The format, the duration, and the contents of training courses are all important aspects of a well-designed training course, regardless of the target audience. In the case of Hispanic workers surveyed, 79% expressed the desire and need to be trained in both English and Spanish as seen in Figure 3.6. Those surveyed felt that if they are trained in English they have trouble learning, and if they are taught in Spanish, they do not learn English. Therefore, they prefer to be trained in both languages. Training in both languages forces the courses to be taught by a bilingual instructor with construction experience to explain relevant concepts not only related to the language itself but to the work as well.

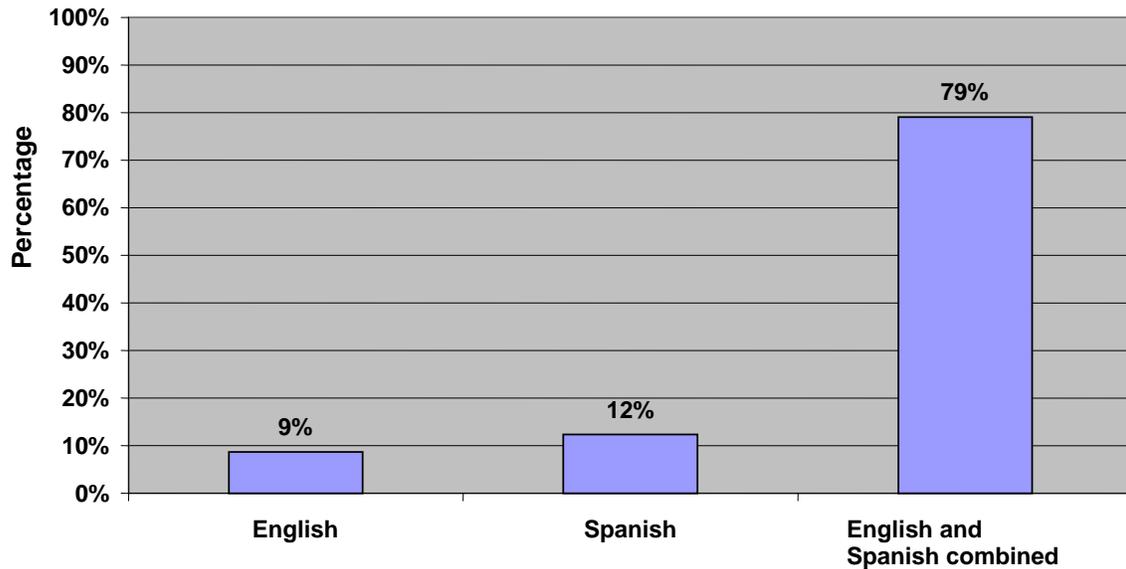


Figure 3.6. Language preference for training

The role that experience plays is an important when managers decide to promote a construction craft worker to a supervisory position. The construction experience Hispanic craft workers had prior to coming to the United States is seen in Figure 3.7. Of these workers, 40% had between one and three years of experience in their native countries, and only 15% had more than seven years of experience. Some of the areas these workers had experience in were carpentry, masonry, and concrete among others.

In terms of construction experience in the United States, Figure 3.8 shows that about 58% of Hispanics have already had more than four years of experience working for American companies. Carpentry was the most common trade found among Hispanics at 61%, followed by concrete work with 20% and construction labor with 15% of the total.

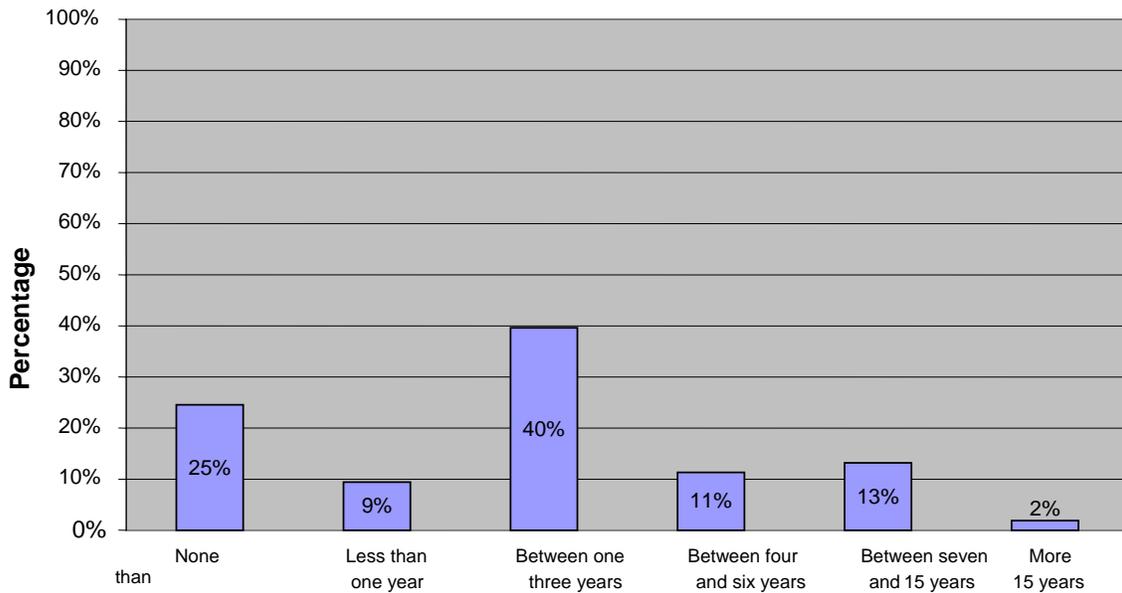


Figure 3.7. Experience in construction prior to coming to the United States

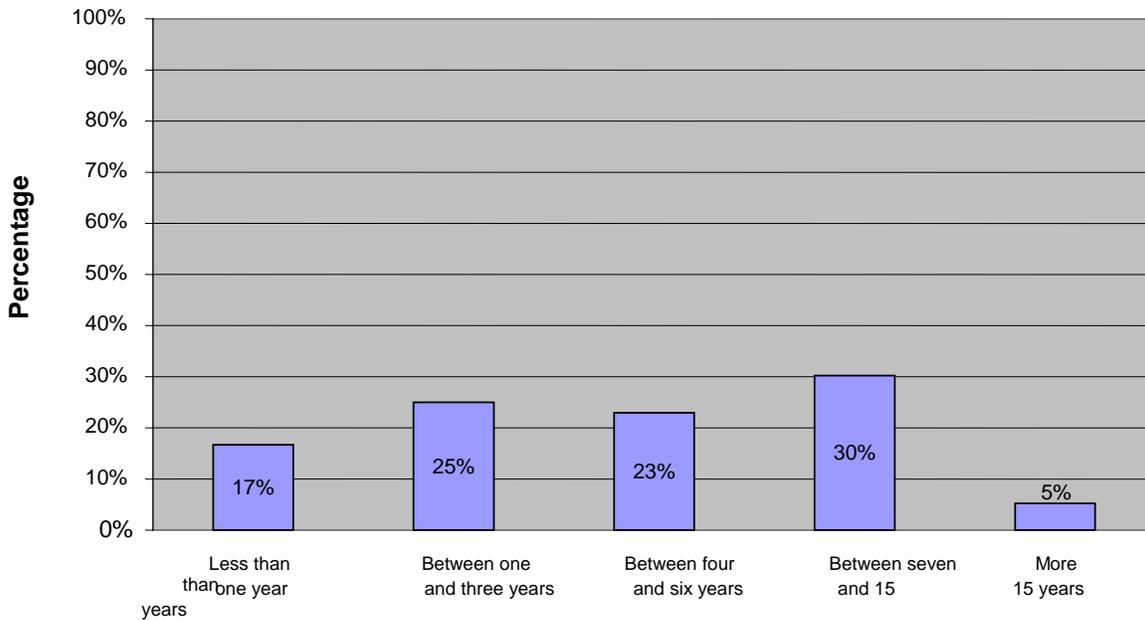


Figure 3.8. Experience in construction in the United States

Finally, it was also necessary to measure the desire of these workers to grow and step up to a supervisory position. When workers were asked whether or not they would like to take a course to be promoted to supervisor, a significant 79% of them answered positively as depicted in Figure 3.9. Within the context of this research, a supervisory position is

understood as a leadership position such as foreman, crew leader, or supervisor, depending upon the company's needs and the worker's capabilities.

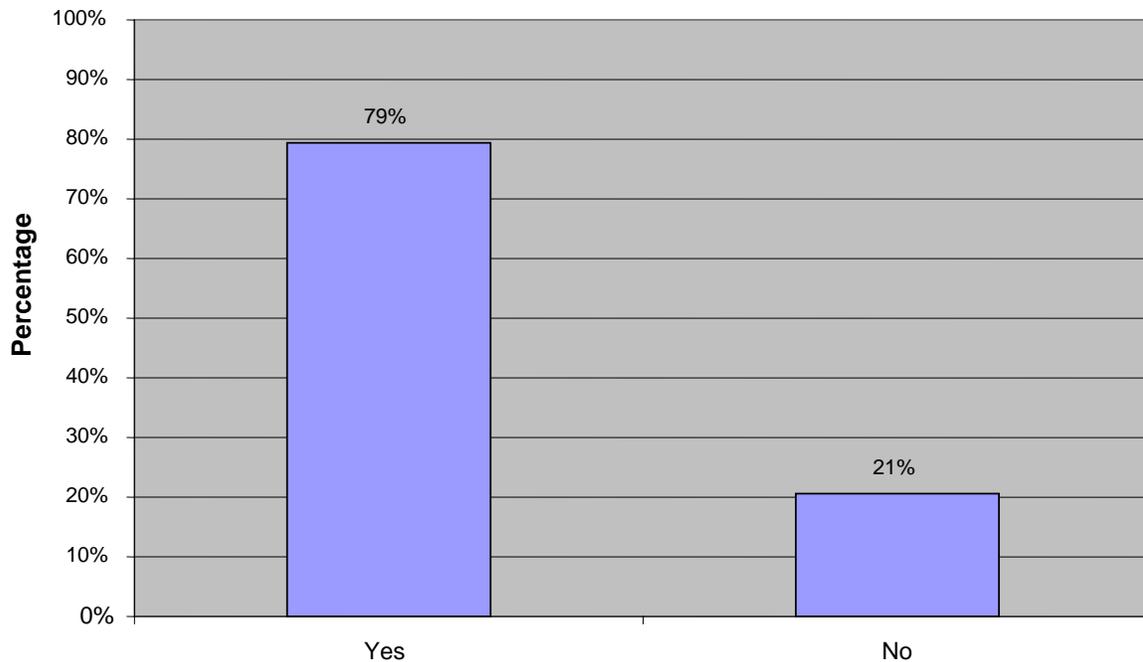


Figure 3.9. Would you like to take a course to be promoted to supervisor?

3.3. Training Courses

3.3.1. English as a Second Language Survival Course

The focus of this course is on its simplicity. It is not a college course, but instead a highly interactive, basic course on only what-you-need-to-know including construction-related vocabulary, tool names, equipment, and simple directive language phrases that will facilitate basic communication.

The development of the *ESL Survival Course* was based on basic vocabulary used in construction. The level of this course, as its name indicates, is for construction workers with a low level of English. The survey findings related to ESL courses led developers to structuring the course such that it contains two types of instructional materials: a booklet and a visual presentation. The booklet provided to trainees consists of a list of words that is sorted alphabetically and organized by categories. These categories include general vocabulary (e.g., alphabet, vowels, numbers, hand tools), inputs (e.g., materials, workforce, equipment), safety (e.g., safety equipment, safety signs), and various (e.g., productivity, quality, survival phrases). The visual presentation contains pictures of the word and its meanings in English and Spanish. Chapter 4 presents the table of contents of the course by category.

After several trial runs of the *ESL Survival Course*, a methodology was implemented. A word is supposed to be read by the trainees after they have visualized the picture symbolizing the word's meaning. Once this word has been visualized and read, trainees should repeat the word after the instructor has clearly pronounced it to them. This process may be repeated several times until trainees feel comfortable with the pronunciation and meanings of the word. Flashcards are used to facilitate learning and retain knowledge and pronunciation of the word. This course is designed to be taught in 8-to-10 hour sessions.

Instructors are to implement a cultural dimension that gives workers a sense of comfortable confidence that goes beyond just pronouncing the word correctly. In addition to providing "survival" words, the course includes "survival phrases" which will facilitate communication between the Hispanic worker and the American supervisor.

3.3.2. Stepping Up to Supervisor Course for Hispanic Construction Workers

Becoming a supervisor or leader requires a different set of skills to move from actually doing the job to the role of delegating the work to others. The work expectations of the supervisor have been changing to meet the needs that characterize most workplaces. New skills are required to lead effectively in rapidly changing workplaces.

As a first stage of the training course development, an identification of job needs or problems is required. Therefore, survey findings were used in deciding what kind of material would be appropriate for Hispanic construction workers. As part of this identification, prospective supervisors must be alerted to the requirements of the position.

Strategic decisions were made when developing the action plan, methodology, and contents of the course. In addition to making use of existing references on this topic, the researcher adopted information on cultural differences between the American and Mexican cultures obtained from a research study in order to provide a more detailed idea of how the course contents were selectively oriented to both cultures. This will especially help those who will be delivering the course in the future. Findings showed that culture and, more specifically, lack of communication, are the major problems involved in construction projects.

Finally, after performing a task analysis and identifying and collecting information, the design of the curriculum was carried out. A detailed course outline was prepared and evaluated. Several steps took place in this stage of Part 4 as follows: development of lesson plans and instructional materials, evaluation of training materials, consideration of learning styles typical of Hispanic culture, selection of visual materials, integration of instructional techniques, development of monitoring instruments, and suggestion of additional reading materials to be used as a post-training process.

3.4. Concluding Remarks

It is clear from the literature review, the design of the questionnaire, the data collection, and the data analysis and evaluation, that courses for training Hispanics with the objectives of increasing efficiency and production to minimize misunderstanding and helping them prepare to become productive workers and supervisors are necessary. At this point, the research process has lead to reliable data from Hispanic construction craft, which leads the research team to the creation and development of such courses—namely, the *ESL Survival Course* and the *Stepping Up to Supervisor Course for Hispanic Construction Workers*.

4. TRAINING COURSE DEVELOPMENT

4.1. Introduction

The challenges of the American-Hispanic cultural blending in the workplace require close review of training approaches by organizations. The large numbers of Hispanics present in the U.S. construction labor force creates substantial issues for developing training material. Communication barriers, involving culture and language issues, are a growing problem at the typical jobsite.

Providing a continuous learning environment for employees is one of the best methods for ensuring the achievement of company production goals. This is particularly important in the construction industry, in which contractors should not let its diverse workforce fall short of benefiting from the implementation of proper training programs.

Based on available data and the results and recommendations obtained from the surveys conducted from May to October 2003, the research team developed the two training courses mentioned in Chapter 3. These courses are intended for both Hispanic construction craft workers who need to develop language skills focused on construction and those with the willingness and skills that meet the requirements to advance to a supervisory position within an American construction company.

Some of the Outreach Training Program Guidelines from OSHA's outreach training program have been incorporated in the design of these courses.

4.2. Systematic Approach for Training Course Development

A systematic approach to diversity training is necessary for the development of the proposed courses. Goldstein (1993) forces training developers to consider why training is needed, what should be covered in training, and how training outcomes should be measured. This approach was adapted and simplified for research purposes as shown in Figure 4.1.

The first stage was described in Chapters 2 and 3 of this report. The courses included in this report, *ESL Survival Course* and *Stepping Up to Supervisor Course for Hispanic Construction Workers*, address a combination of current Hispanic workforce issues and survey findings from Hispanic craft workers in Iowa working for American construction companies. Therefore, the intent of these courses is to provide instructional material and content that is based on research findings that will help the Hispanic worker improve his or her English skills and also make effective and productive decisions when promoted to supervisory positions such as a crew leader, foreman, or supervisor.

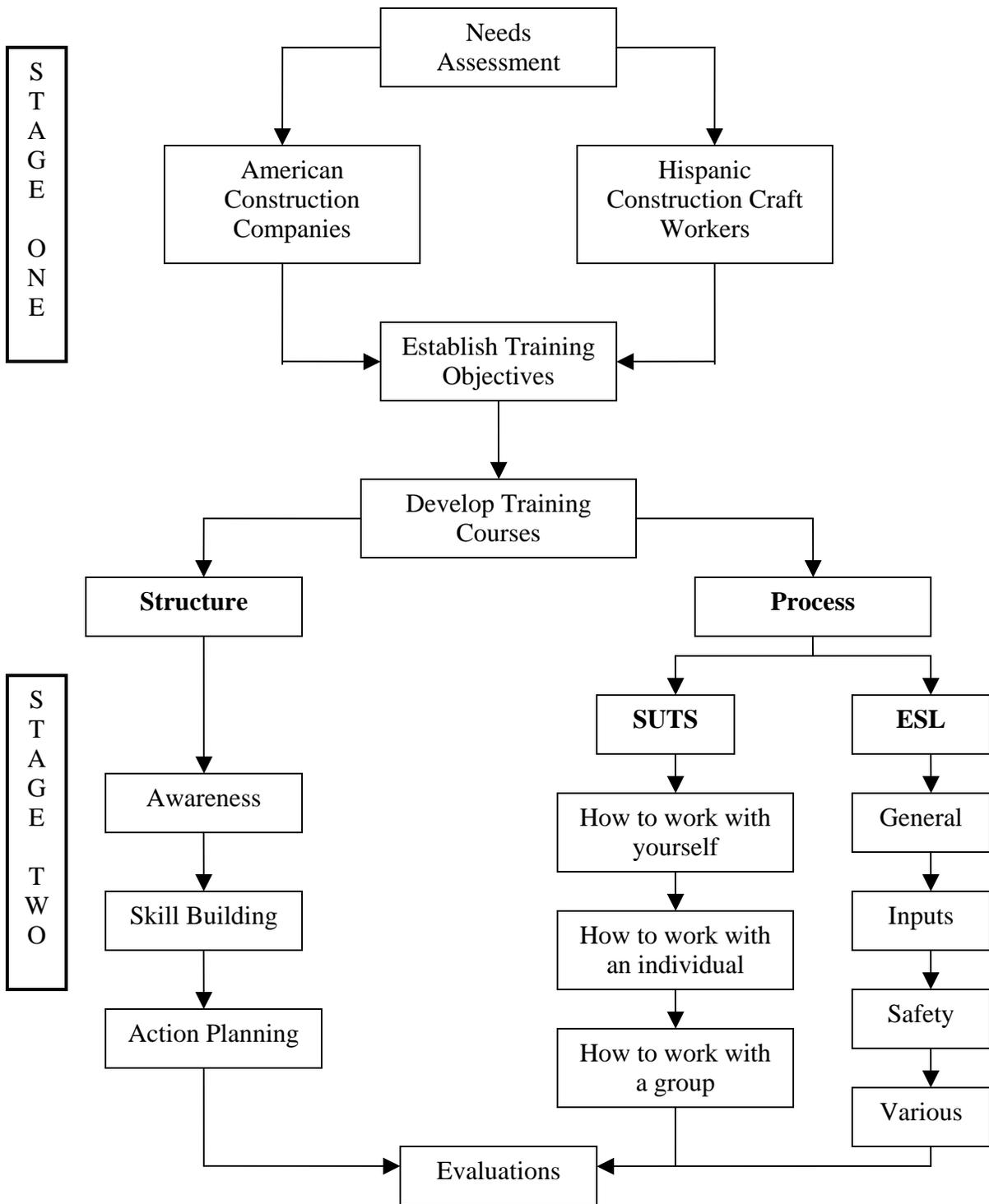


Figure 4.1. Approach of training course development

Figure 4.1 indicates that once the needs assessment is complete, training course development can begin. For this process, the courses were structured around three main steps that play a critical role in the process of training individuals: (1) awareness, (2) skill building, and (3) action planning. Having structured the contents, a process of understanding these defined contents is the supplemental part of each of the two courses. In the *ESL Survival Course*, participants are provided with a booklet with all the material and a presentation is given by the instructor accordingly to the booklet sequence. The presentation contains four parts: (1) meaning in English, (2) meaning in Spanish, (3) pronunciation of the word in English, and (4) a photo of the word. Every word is included in the booklet provided to participants with the same four parts. The teaching sequence is as follows: (1) the word is shown to participants and read to them by the instructor in English; (2) participants repeat the word several times; (3) participants write the pronunciation of the word; and (4) comments are discussed. The *Stepping Up to Supervisor Course for Hispanic Construction Workers* contains three steps as follows: (1) how to work with yourself, (2) how to work with an individual, and (3) how to work with a group.

Each of these sequential steps is related to the structural components, some more than others, but the goal is to follow an effective combined path.

In addition, it is recommended for the first structural component, *awareness*, that multicultural training processes begin by informing participants of organizational facts, differences in the workplace, projected demographic changes, risks involved on the jobsite, and accident rates among others. This should lead to increased participants motivation, interest, and/or attention.

After being more aware of the actual working environment and possible changes, the attainment of knowledge and *skills building* for new adjustments, challenges, and behavioral changes can start (Kraiger 2002). It is very important to stress differences about cultural norms, attitudes, and values between American culture and Hispanic culture.

Since diversity is the unique emphasis provided by these courses, these courses should be developed and delivered by not only a qualified trainer, but by a person with a multicultural background as part of a long-term process.

During the *skills building* component, participants should also have opportunities to observe both appropriate and inappropriate behavior, have experience working with cultural issues and conflicts, and finally receive encouraging criticism to make needed adjustments. As an example, workplace situations are useful at this stage such as group discussions in which issues can be identified and improved. This identification of real-life scenarios becomes crucial in the case of Hispanics working in the United States. Some of these workers may have already faced situations where culture is the barrier, but others will not even understand what is going on due to the lack of language, or simply, to cultural differences.

These are the types of skills that must be delivered to Hispanic trainees. They need to understand why and how those situations may be encountered on the jobsite. Once they clearly understand the cultural facts, training materials aim to provide appropriate alternatives that can be applied after the training program is completed.

The last structural component is called *action planning*. It concludes the preceding *skills building* and *awareness* stages; without it, the training approach would be unsatisfactory. This stage is the result of the training process; therefore, trainers are to make sure that it has been successfully attained. During this stage, problem-solving and process-improvement activities are discussed and should be developed when delivering the training course.

In addition, trainees (for the second course, prospective Hispanic supervisors) are required to develop an action plan after they have identified the challenges, changes, and issues involved in this transition. A plan must be developed that concludes the new roles and responsibilities that advancing to supervisor entails.

The contents of these courses were chosen according to what Hispanic construction craft workers need to know with regard to stepping up to a supervisory position within an American construction company. More specifically, these contents were given a Heavy/Highway type of emphasis because the majority of the survey findings were obtained from this field of the construction sector.

Description of cultural differences between American and Hispanic cultures embedded in the course contents was described in Chapter 2 as part of the literature review.

5. TRAINING COURSE CONTENTS

5.1. English as a Second Language Survival Course

The objective of this course is to provide basic construction vocabulary to help Hispanic construction workers improve their English skills necessary to create basic communication with English-speaking workers on the jobsite.

The following include the contents of the course by topic and subtopic:

- General
 - Alphabet
 - Vowels
 - Numbers
 - Hand tools

- Inputs
 - Materials
 - Work force
 - Equipment

- Safety
 - Safety equipment
 - Safety signs

- Various
 - Productivity
 - Quality
 - Miscellaneous

Examples of the material used during the course are provided in Figures 5.1 and following pages. The complete ESL Survival Course is provided in Appendix C.

Example	Ejemplo
Bricklayer 1	Albañil / Instalador de ladrillos
Se oye como: 3	2
 4	_____

Workforce	Mano de Obra
Se oye como: _____	
Bricklayer Se oye como: _____	Albañil / Instalador de ladrillos
	_____

Boss Se oye como: _____	Jefe
	_____

Carpenter Se oye como: _____	Carpintero
	_____

Drywall Installer Se oye como: _____	Plafonero
	_____

Electrician Se oye como: _____	Electricista
	_____

Engineer Se oye como: _____	Ingeniero
	_____

Foreman Se oye como: _____	Capataz
	_____

Helper Se oye como: _____	Ayudante
	_____

Figure 5.1. Examples from ESL Survival Course

Alphabet

Abecedario

Se oye como: _____

Agreggate

Agregado

Se oye como: _____



Asphalt

Asfalto

Se oye como: _____



Backhoe

Retroexcavadora

Se oye como: _____



Bag

Saco

Se oye como: _____



Barrier

Barrera

Se oye como: _____



Carpenter

Carpintero

Se oye como: _____



Dig

Excavar / escarbar

Se oye como: _____

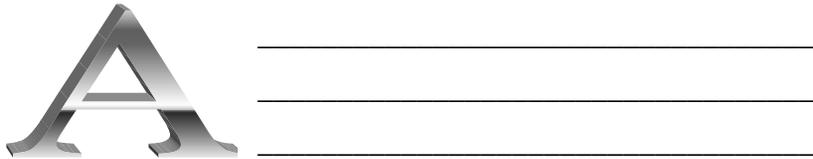


Vowels

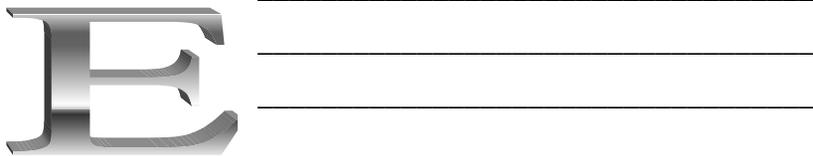
Las Vocales

Se oye como: _____

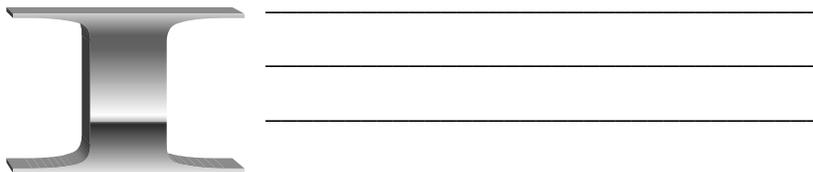
A
Se oye como: _____



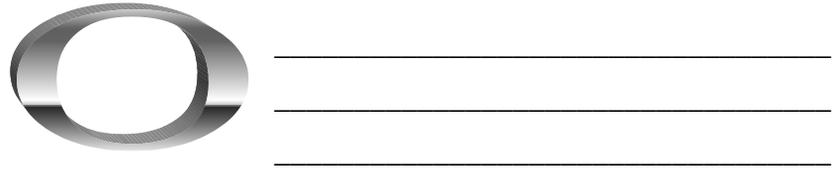
E
Se oye como: _____



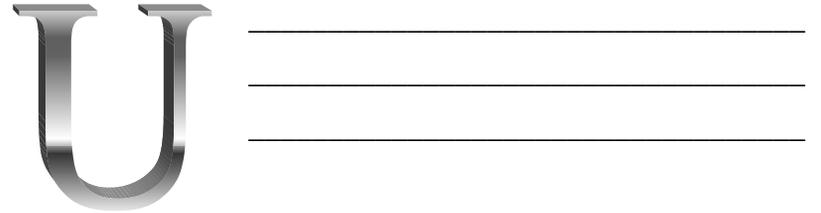
I
Se oye como: _____



O
Se oye como: _____



U
Se oye como: _____



Numbers

Los Números

Se oye como: _____

One Uno
Se oye como: _____

1

Two Dos
Se oye como: _____

2

Three Tres
Se oye como: _____

3

Four Cuatro
Se oye como: _____

4

Five Cinco
Se oye como: _____

5

Six Seis
Se oye como: _____

6

Seven Siete
Se oye como: _____

7

Eight Ocho
Se oye como: _____

8

Nine Nueve
Se oye como: _____

9

Hand tools

Herramientas

Se oye como: _____

Axe

Acha

Se oye como: _____



Bender

Doblador

Se oye como: _____



Broom

Escoba

Se oye como: _____



Bucket

Cubeta

Se oye como: _____



Cutter

Cortador

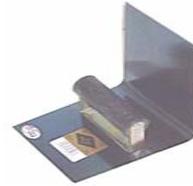
Se oye como: _____



Edger

Bordeadoras

Se oye como: _____



Float

Llana

Se oye como: _____



Groover

Ranurador

Se oye como: _____



Safety Signs

Señales de Seguridad

Se oye como: _____

Authorized

Autorizado



Solo Personal Autorizado
Se oye como: _____

Do Not

No



No entre

Se oye como: _____

Before

Antes de



Empleados tienen que lavarse las manos antes de retornar a trabajar
Se oye como: _____

Ear Protection

Protección para oídos



Usar proteccion de oídos en esta área
Se oye como: _____

Clean up

Limpiar



Prevenga accidentes, limpie los derramamientos
Se oye como: _____

Entrance

Entrada



Entrada solo para empleados
Se oye como: _____

Danger

Peligro



Area en construcción
Se oye como: _____

Handrail

Pasamanos



Use el Pasamanos
Se oye como: _____

Quality

Calidad

Se oye como: _____

Adequate tools

Herramientas adecuadas

Se oye como: _____



What can affect quality? ¿Qué puede afectar la calidad?

Se oye como: _____

Quality is everyone's responsibility!!!

Calidad es Responsabilidad de todos!!!

Se oye como: _____

Defect

Defecto / Rechazo

Se oye como: _____



Evaluation

Evaluación

Se oye como: _____



Inspection

Inspección

Se oye como: _____

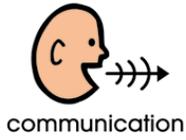


III. Survival Phrases

1. Please repeat
Por favor dígame otra vez

2. In other words, you are telling me to...
En otras palabras, me estás diciendo...

3. What you mean is...
Lo que quieres decir es...



4. Sorry, would say that again?
Disculpa, puedes repetir eso otra vez?

Continued,

4. So, what you are saying is...
Entonces, lo que estás diciendo es...

5. What do you mean by...
¿Qué es lo que quieres decir con...?

6. Ok, let me see if I understand you...
Ok, déjame ver si te entiendo...

5.2. Stepping Up to Supervisor Course for Hispanic Construction Workers

The goal of this training course is to provide an effective tool to help the promoted Hispanic craft worker prepare for his/her new supervisory position, manage new responsibilities during the transitory period, and finally become a successful supervisor always looking for opportunities for improvement and working in a safe environment.

The following are the contents of the course by topic and subtopic:

- Introduction
 - It is different to be a supervisor
 - The supervisor's role
 - Facing the challenge
 - How to handle new responsibilities
 - Recommendations on how to be a successful supervisor

- Part I: How to work with yourself
 - Leadership
 - Attitude
 - Motivation
 - Productivity
 - How to deal with stress and anxiety
 - Decision making
 - Problem solving

- Part II: How to work with an individual
 - Factors influencing individuals
 - Giving workers your opinion about their performance
 - How to instruct your workers
 - How to evaluate your workers
 - Setting goals
 - Disciplinary measures
 - Terminations

- Part III: How to work with a group
 - Selecting and managing your crew
 - Taking advantage of your crew members' skills
 - Involving others in the decision making process
 - Dealing with complaints
 - Putting together an effective work team
 - Work site meetings
 - Crew performance

- Part IV: Key points
 - Weekly and daily schedules
 - Getting the resources you need

- Assuring quality
 - Enforcing safety
 - Scheduling overtime
 - Supervising friends
 - Common mistakes
- Evaluating yourself

Examples from the *Stepping Up to Supervisor Course for Hispanic Construction Workers* are provided in Figure 5.2 and the following pages. The complete course is provided in Appendix D.

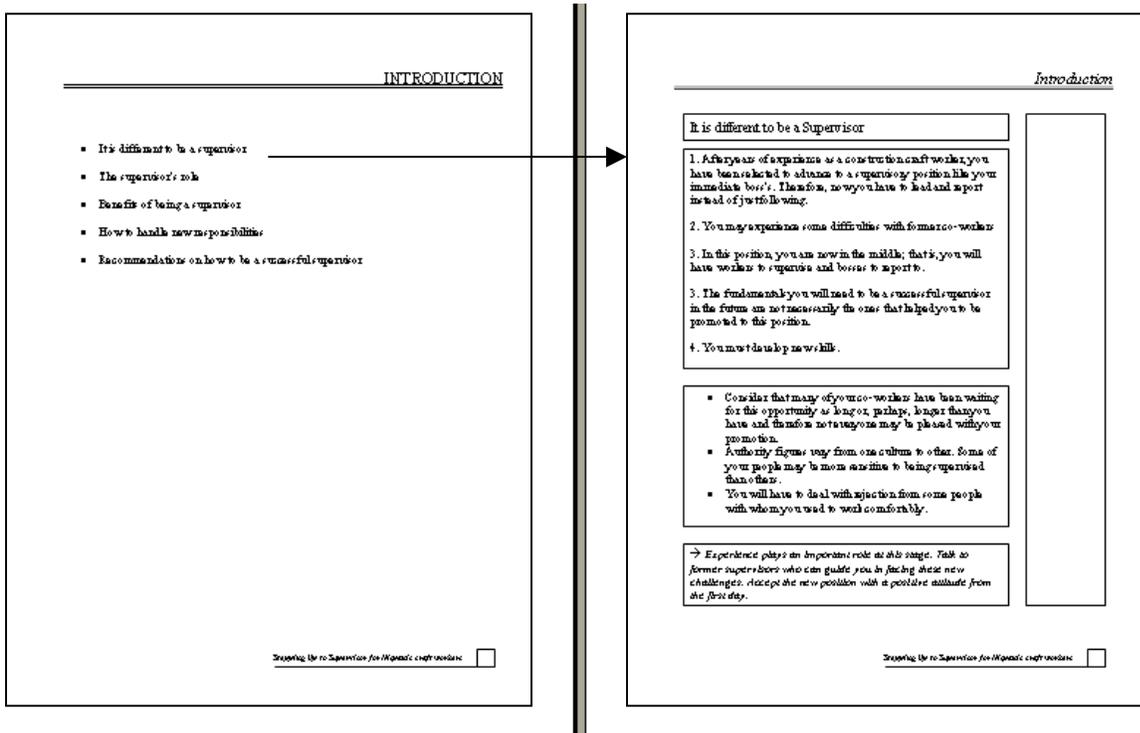


Figure 5.2. Examples from *Stepping Up to Supervisor Course for Hispanic Construction Workers*

It is different to be a Supervisor

1. After years of experience as a construction craft worker, you have been selected to advance to a supervisory position like your immediate boss's. Therefore, now you have to lead and report instead of just following.
2. You may experience some difficulties with former co-workers.
3. In this position, you are now in the middle; that is, you will have workers to supervise and bosses to report to.
3. The fundamentals you will need to be a successful supervisor in the future are not necessarily the ones that helped you to be promoted to this position.
4. You must develop new skills.

- Consider that many of your co-workers have been waiting for this opportunity as long or, perhaps, longer than you have and therefore not everyone may be pleased with your promotion.
- Authority figures vary from one culture to other. Some of your people may be more sensitive to being supervised than others.
- You will have to deal with rejection from some people with whom you used to work comfortably.

→ *Experience plays an important role at this stage. Talk to former supervisors who can guide you in facing these new challenges. Accept the new position with a positive attitude from the first day.*

Leadership

1. The first thing to work on is your attitude.
2. Understand what it means to possess and transmit a leader's authority.
3. An appropriate combination of politeness and firmness makes it easier for workers to follow your orders.
4. Generate a clear understanding of your responsibilities, particularly about implementing a teamwork spirit.
5. Develop confidence, trust, and support in your own ability to get tasks done, but at the same time be humble.

- Authority must be clearly understood because you are not in a position to succeed at the crew's expense, but to encourage success through teamwork.
- "There is a problem with..." This philosophy puts crew members in a defensive and negative mind-set. Always try to find a positive and polite way to ask for things. You should request, not demand.
- Avoid the trap of becoming a dictator: Develop a strong leader personality in a gentle but firm manner.

→ *Be always courageous*
Be aware that you want to find new improvement opportunities and safer work environments, which involve more risks, therefore act prudently and results will come positively.

Factors influencing individuals

1. An individual may be influenced by internal and/or external factors. You act as an external influence. Internal factors refer to the individual's abilities, values, needs, and interests, whereas external aspects are from those conditions surrounding the individual.
2. To work with the individuals of your group you need to know their expectations, give opportunities, evaluate performance, provide feedback, and offer reward or punishment.
3. Some individuals require different attention; remember that you will have to approach some individually to get full cooperation.

- Do not exceed his/her limits by making unreasonable demands.
- Keep your promises about rewards or punishments.
- Try to keep yourself up to date as far as knowledge and practice is concerned. Be available as much as possible, providing guidance and solving requests.
- Establish your relationship limits with each individual, build an honest relationship and do not ever ask for something illegal or that violates the individual's values.
- Do not ask anyone to do something that you would not be able and willing to do yourself

→ *Be aware of the impact that an individual can have on the group. Approach your people at the right time and in the right place.*

Tips:
Know people in your crew individually
- needs
- interests
- motivation

Managing your crew

1. Crew members can make your job more or less difficult. Selecting the right persons plays the first role in your success as a crew supervisor.
2. You need to staff your work group with skilled workers, but after *finding* these skilled applicants, it is your responsibility to choose *the most skilled ones for a task*. You must make sure that the *job requirements* properly *match* their skills.
3. Once you have chosen, worked with, and know your group members, experience and outstanding performance records will help you select the workers who are ready to be promoted.

- First, determine what you are seeking. Second, find candidates and assess their qualifications. Third, choose the ones that match the most
- Avoid over-qualified candidates. Consider qualities relevant to the job
- When promoting, remember that you have understood that new activities are to be performed and perhaps, not only good past performance records will be necessary to make the decision to promote them

→ *Get to know candidates as much as possible before including them in your crew.*
Get to know people's skills and character during actual job performance.

Tip:

Stick to relevant qualifications related to the upcoming job.

Weekly and daily schedules

1. Effective schedules require not only good planning but also good continuous updating efforts. In the past, you used to be told when things would need to get done. Now, you are in charge of scheduling daily and weekly activities.
2. Your experience should give you some expertise in the job flow. Detailed and updated schedules will help you get the job done on time. During the process, activity durations may change as well as their sequence. Look for those activities affected by the changes you make to your schedule. Make certain to update it!
3. Always set your list of activities for each day of work, with the required labor and materials. At the end of each week, prepare your weekly summary to see what needs to be adjusted for the next week's schedule.

- Do not ever get to the job without your daily activities. Rather, at the end of each day revise your list, check what has been completed during that day, and prepare for the next day. If changes occurred, make sure you adjust your upcoming activities.
- Maintain and document your job diary. Document as much as you see happen on the jobsite, such use of materials, individual and group performances, suppliers, equipment maintenance, subcontractors, and any information related to your responsibilities.

→ Remember that if you update your schedule in a daily basis, weekly schedules* will not contain as many conflicts at the end of the week. Your workers need to constantly hear about progress in a daily and weekly basis.

Tip:
Be prepared for things before they happen.

* Next page provides a Weekly Schedule Form

5.3. Training Course Effectiveness

It is a difficult task to measure the effectiveness of the courses. However, as a first approach, an evaluation was given to the participants of the ESL Survival Course on both times that was delivered last November 2003. The evaluations were made immediately at the end of the course. The evaluation tries to measure three important aspects of the course (1) the contents, (2) the usefulness, and (3) the instructor.

Figure 5.1 shows the course contents were described as very basic by 69% of the participants and normal by 31% of the workers.

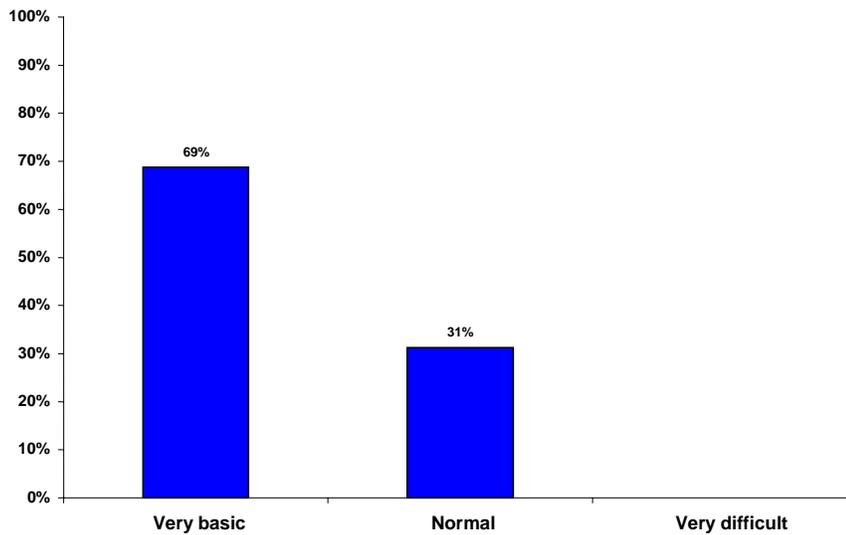


Figure 5.1. Course contents

Figure 5.2 expresses the opinion of 40% of the workers that the all the information provided is useful on the jobsite and 60% said that most of the material will be useful in the future. This is an indication that the course contents being basic and construction focused will help the worker better overcome the communication barrier.

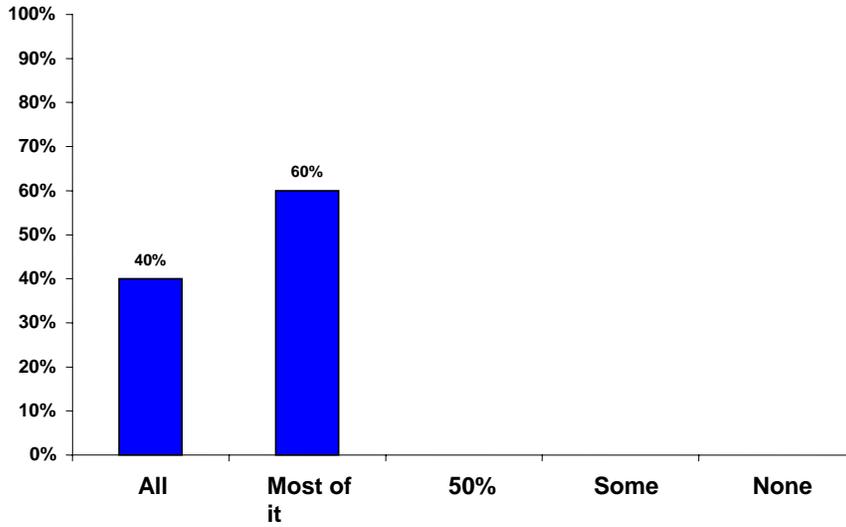


Figure 5.2. Usefulness of the course contents on the jobsite

Figure 5.3 shows that 88% of participants felt the course met their expectations in a scale of 1 to 7.

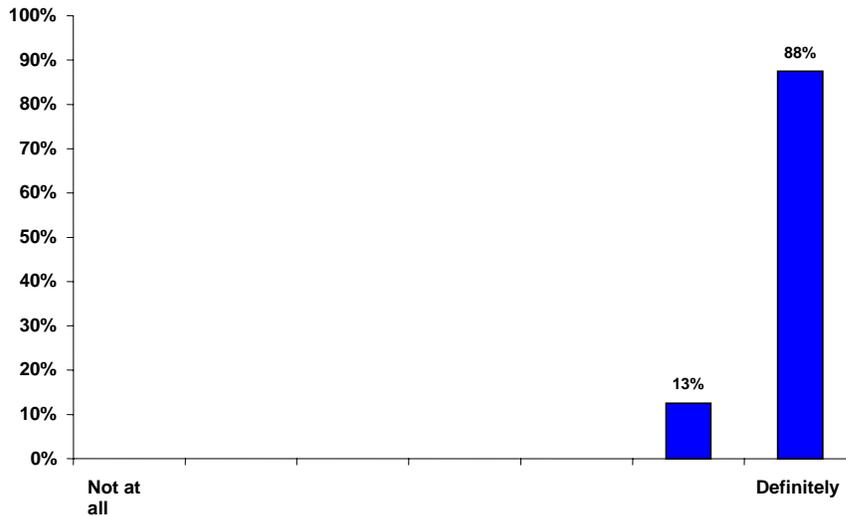


Figure 5.3. Was the course what you expected?

The evaluation consists of 15 questions; all the graphs are included in Appendix E.

6. CONCLUSIONS AND RECOMMENDATIONS

One of the objectives of the Hispanic workforce project was to develop an effective construction training program for Hispanic supervisors and craft workers so that construction companies can use this program to improve their relationships with this segment of their labor force in order to reduce the accident rates and increase productivity and quality of work. With these objectives in mind, two training courses were developed (1) *ESL Survival Course* and (2) *Stepping Up to Supervisor Course for Hispanic Construction Workers*, the latter for construction workers whose skills meet the requirements to be promoted to a supervisory position such as crew leader, foreman, or supervisor, and the former to develop the ability of the worker to communicate in the English language as it relates to construction.

As part of an introductory literature search, a summary of information related to the Hispanic population such as its influence in the U.S. construction labor force and work site accident rates was included. This population has become the nation's largest minority group in the United States and is expected to grow at a rate of 10 million every 10 years. Hispanics represent many nationalities, including Mexicans, Cubans, and Puerto Ricans, as well as 15 Central and South American countries. In addition, the U.S. Census Bureau has projected that by 2050 the U.S. Hispanic population will make up 25% of the total population.

The research methodology involved the collection of data from Hispanic construction workers in Iowa. Surveys were conducted in a one-to-one type of survey between the research team members and the Hispanic workers. Survey findings led to the conclusion that company's training and development programs for Hispanics were not effectively provided or, in most cases, not provided at all.

In order for these training courses to be effective, special emphasis in both training literature and diversity aspects such as cultural differences between the American and Hispanic populations as well as poor communication due to the lack of language was given. The lack of communication flow between Americans and Hispanics in the workplace has been proven to be the most common cause of accidents in the construction sector. This communication is less than adequate, and therefore Hispanics are exposed to higher risks.

According to statistics, the workplace continues to diversify, and therefore construction companies cannot ignore these trends and continue their businesses as usual. On the contrary, this large portion of the labor force has to be trained not only productively but adequately. Demographic changes, especially changes in the U.S. construction labor force, must be taken into account when designing training programs. Furthermore, demographics can also help employers better understand the beneficial differences that this diverse workforce can make when their work is recognized and included in the company's corporate objectives.

The goal of the *ESL Survival Course* is to help the Hispanic worker develop the ability to communicate in English as it relates to his/her work and to overcome the language barrier. The course is intended for people whose main problem on the jobsite is communicating with an

English-speaking supervisor. The course makes use of the method of words-and-pictures and repeatedly pronouncing the words until they are learned.

Important feedback from the *ESL Survival Course* participants was obtained through an evaluation at the end of the course. It is a difficult task to measure the effectiveness of the courses; however, as a first approach, an evaluation was given to the participants of the *ESL Survival Course* on both times that it was delivered in November 2003. The evaluation tries to measure three important aspects of the course: (1) contents, (2) usefulness, and (3) the instructor. Most of participants agreed that the contents, the focus on construction terminology and the workbooks were very useful; in addition they strongly recommend that the courses be taught in both English and Spanish, which calls for bilingual instructors.

The goal of the *Stepping up to Supervisor Course for Hispanic Construction Workers* was to organize a list of supervisory-related topics accordingly to the needs assessment obtained from the surveys. Specific objectives were focused on how to prepare Hispanics for the transition from worker to supervisor. Furthermore, culturally related recommendations on how to manage a supervisory position within an American construction company were included in each topic. A systematic approach was used in developing the courses: the *structure* and the *process*. For the structural component, it is strongly recommended to first increase awareness, especially with Hispanics coming from other countries where safety culture is significantly different, second to build new communication and management skills, so that they can interact more effectively with both their bosses and their subordinates, considering an understanding of cultural differences to be an advantage rather than an obstacle, and finally to put in practice an action plan to become a successful leader.

Leadership appears to be as one of the most important characteristics of a successful supervisor. Several recommendations on how to manage that authority position were specifically based on the Hispanic culture.

Once the new supervisors have realized the challenge and evaluated themselves, they are then ready to interact with their workers. Important recommendations on how to handle difficult and unexpected situations must be applied carefully. Hispanic supervisors must understand clearly how to manage friendships with former co-workers. The transitory stage may not allow the new supervisor to understand the difference; therefore, prior preparation as to how to supervise friends must start from the very beginning.

Some other factors such as motivation, productivity improvement, decision making, and problem solving among others, were also studied from a cultural perspective. In training, concepts can be achieved through appropriate materials, but if trainees are also provided with experience and practical cases, then the results of such a program will be more complete and effectively achieved.

When delivering this training course, developers as well as trainers must keep in mind that Hispanics will get more out of the training if they are actively involved. A combination of the course contents and real-life practices should go together to obtain satisfactory results. It is also

recommended that both courses be delivered by people who possess multicultural experience in the construction sector and more specifically with the Hispanic and American cultures.

Finally, further research on American construction supervisors will be needed. A new phase of the Hispanic workforce project, Phase II, could include the supplementary data to be obtained from English-speaking supervisors who wish and find themselves in the need for promoting those Hispanic employees whose skills meet their expectations to higher positions such as a supervisor. In other words, the surveys conducted up to this point, showed the information necessary to select the focus of a training course for Hispanic construction craft workers.

The opinion about these courses from American supervisors has not yet been verified. By using and combining the results of this research effort, future correlations may be accurately established and eventually used for the process of delivering the proposed training courses.

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Appendix A

Questionnaire for Hispanic Construction Workers

Questionnaire for Hispanic Construction Workers

Conducted by: Iowa State University

Date: _____

Department of Civil, Construction, and Environmental Engineering

Anonymity: Your answers to the following questions will be completely anonymous and the results will be held strictly confidential and will be used for statistical purposes only and not linked to the respondent.

General Objective

The general objective of this survey is to bridge the gap between American supervisors and Hispanic construction workers, by defining the fundamental needs created by blending the cultures in the workplace. The assessment of the needs will help develop suitable and effective ESL (English as a Second Language) and other training courses that will encourage Hispanic construction workers to be active and productively engaged participants in the refinement and accomplishment of American construction companies' goals under a safe environment.

Specific Objectives

1. To determine the types of ESL training programs currently offered by construction companies in the U.S. to Hispanic workers.
2. To determine the level of adequacy of Hispanic workforce training
3. To identify the value of training programs to Hispanic workers
 - a. As it relates to how Hispanics feel about the usefulness of the courses.
4. To identify Hispanic and American cultural differences and their implications for the workplace.
5. To determine patterns of needs, interests, and areas of training for Hispanic construction workers according to the current level of skills and working conditions.
6. To prioritize those areas of improvement for the implementation of ESL and technical training courses for Hispanic construction workers.
7. To determine the factors and problems (e.g. language barrier, lack of experience) that adversely affect the performance, quality, and safety conditions of Hispanic construction workers.
8. To determine the level of interest as expressed by Hispanic workers in relation to improving and learning new skills such as construction equipment operation.
9. To prioritize the type of equipment they would prefer to learn to operate.
10. To determine the level of satisfaction of Hispanic workers as it relates to their opportunities to learn new skills, safety conditions, and type of tasks they perform.
11. To establish by documenting the need to have key employees on the job site to overcome the language barrier.
12. To determine accident rates and types of accidents incurred by Hispanics in construction.
13. To gather background, personal, and demographic information on Hispanic construction workers.
14. To obtain mobility index (idea of how long they stay in a particular job) of Hispanic workers.
15. To identify personal expectations and goals towards the future of Hispanics

Note: This questionnaire will take 15-20- minutes to complete.

Please circle one response for each question

Questions 1 thru 6 are related to English language training?

1. a. Have you ever taken a course to help you learn English?

1 = Yes 2 = No

b. If YES, how many total hours of training have you had? _____

c. If NO, would you like to take one?

1 = Yes 2 = No

(If you have never taken a class in English, SKIP TO QUESTION.7)

2. Was this English course related to construction?

1 = Yes 2 = No

3. How would you rate the following aspects of your English course?

	<u>Very</u> <u>poor</u>						<u>Very</u> <u>Good</u>
a. Contents	1	2	3	4	5	6	7
b. Instructor	1	2	3	4	5	6	7
c. Other: _____							

	<u>Very</u> <u>easy</u>						<u>Very</u> <u>difficult</u>
4. How would you rate the degree of difficulty?	1	2	3	4	5	6	7

	<u>Very</u> <u>Short</u>						<u>Very</u> <u>Long</u>
5. How would you rate the length of the course?	1	2	3	4	5	6	7

	<u>Not at</u> <u>All</u>						<u>Completely</u>
6. How well did your English courses met your needs expectations?	1	2	3	4	5	6	7

Questions 7 thru 14 ask you about future technical training needs.

7. Would you be interested in taking a technical training course related to your job?

1 = Yes 2 = No → IF NO, SKIP TO QUESTION.15

8. If YES, what would you like to learn?

9. Is this related to your occupation? (Trade)

Yes No

10. In future technical training courses, what degree of importance would you give to the following aspects:

	<u>Not</u> <u>Important</u>					<u>Very</u> <u>Important</u>			
a. On-the-job vocabulary?	1	2	3	4	5	6	7	N/A	
b. Equipment operation?	1	2	3	4	5	6	7	N/A	
c. Construction safety?	1	2	3	4	5	6	7	N/A	
d. Plan Reading?	1	2	3	4	5	6	7	N/A	
e. Tools?	1	2	3	4	5	6	7	N/A	
f. Measurements?	1	2	3	4	5	6	7	N/A	
g. Other: _____	1	2	3	4	5	6	7	N/A	

11. Would you like to learn to operate heavy equipment?

1 = Yes 2 = No → IF NO, SKIP TO QUESTION 13

12. Which of the following would you prefer to learn to operate? (circle all you want)

1 = Forklift 3 = Motorgrader 5 = Dump truck

2 = Backhoe 4 = Bulldozer 6 = Other _____

13. In which language would you prefer to take these technical courses?

1 = English 2 = Spanish 3 = English and Spanish combined

14. Where would you like these courses to take place?

1 = Job site 2 = Classroom 3 = Both 4 = Either one

Questions 15 thru 21 relate to your overall job site conditions

15. Is your supervisor?

1 = Non-Hispanic 2 = Hispanic 3 = Other

16. If your supervisor is Non-Hispanic, how familiar do you believe he/she is about Hispanics with regard the following:

	<u>Very Unfamiliar</u>					<u>Very Familiar</u>	
a. Culture differences	1	2	3	4	5	6	7
b. Manners	1	2	3	4	5	6	7
c. Work Ethic	1	2	3	4	5	6	7
d. Other:_____	1	2	3	4	5	6	7

17. How satisfied are you with each of the following at your current job?

	<u>Very Dissatisfied</u>					<u>Very Satisfied</u>	
a. your training opportunities to improve your skills or learn new skills	1	2	3	4	5	6	7
b. the safety conditions on the job site	1	2	3	4	5	6	7
c. the type of tasks you are asked to do	1	2	3	4	5	6	7
d. your ability to communicate in English	1	2	3	4	5	6	7

18. How often do you need a translator to communicate with your supervisor?

1 = Never 3 = Sometimes 5 = Always

2 = Seldom 4 = Often

19. How important would it be to you to ...

	<u>Not</u> <u>Important</u>					<u>Very</u> <u>Important</u>	
a. Improve your communication with your supervisor?	1	2	3	4	5	6	7
b. Improve your communication with your co-workers?	1	2	3	4	5	6	7
c. Receive training emphasizing only in construction?	1	2	3	4	5	6	7
d. Have advancement opportunities?	1	2	3	4	5	6	7

20. Have you had any construction related accidents?

1 = Yes

2 = No

21. What are the most common types of accidents you have seen or undergone in construction, if any?

Questions 22 thru 33 relate to your background and some personal information

22. How long have you been living in the U.S.?

___ years ___ months

23. How much construction experience did you have prior to coming to the U.S.?

___ years ___ months Trade: _____
___ years ___ months Trade: _____

24. How long have you been involved in construction in the U.S. and in what trade?

___ years ___ months Trade: _____
___ years ___ months Trade: _____

25. How long have you been employed by the company you are currently working for?

___ years ___ months

26. How many other construction companies have you worked for in the U.S.? ____

27. How long have you worked at jobs not related to construction?

___years ___ months

28. How old are you? _____ years old

29. What is the highest level of education you have completed?

1 = Elementary school 4 = High school

2 = Middle school 5 = College

3 = Technical school

30. Do you stay in Iowa after the construction season is over?

1 = Never 2 = Sometimes 3 = Always

31. Do you plan to stay in the U. S.?

1 = Yes 2 = No 3 = Perhaps

Why? _____

32. After having arrived in the U.S. and worked in construction, what are your main goals and expectations for the future?

33. What do you consider to be your main problem on the job site?

34. What is your country of birth? _____ State: _____

THANK YOU!

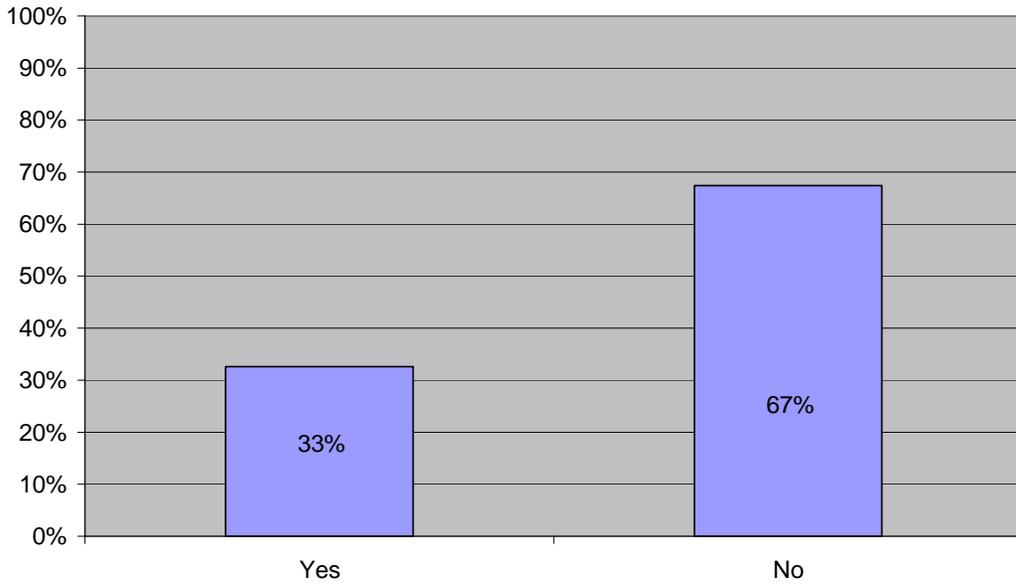
Mapping of Objectives

Objective No.	Question No.
1	2,3c,19c
2	1a,1b,4,5
3	3a,3b,6
4	15,16a,b,c
5	1c,5,7,8,9,13,14,19d
6	10a,b,c,d,e,f,33
7	17d,23a,b,24a,b,33
8	11
9	12
10	17a,b,c
11	18,19a,b
12	20,21
13	22,25,26,27,28,29,34
14	30,31
15	32, 35

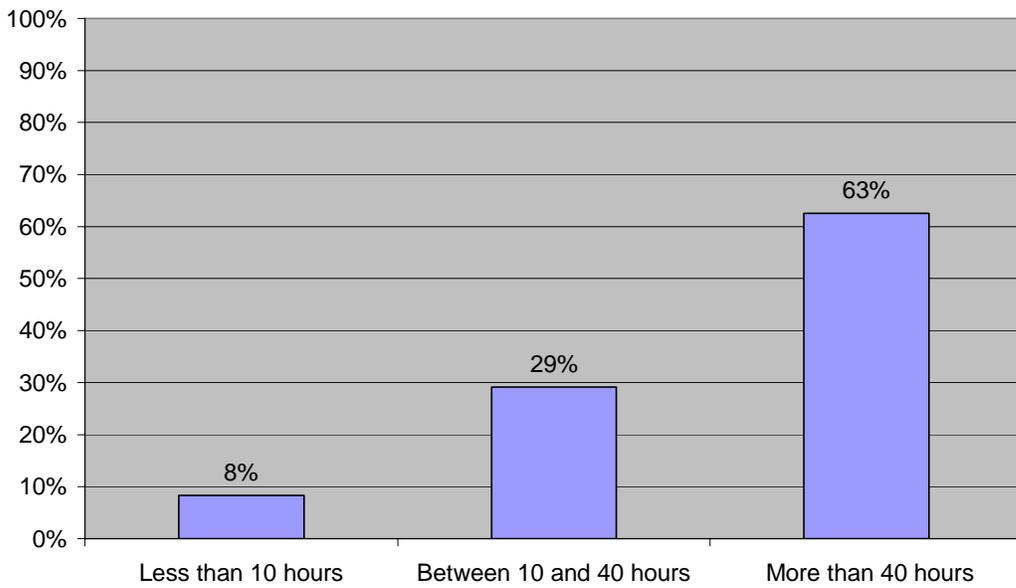
Appendix B

Results of Questionnaire for Hispanic Construction Workers

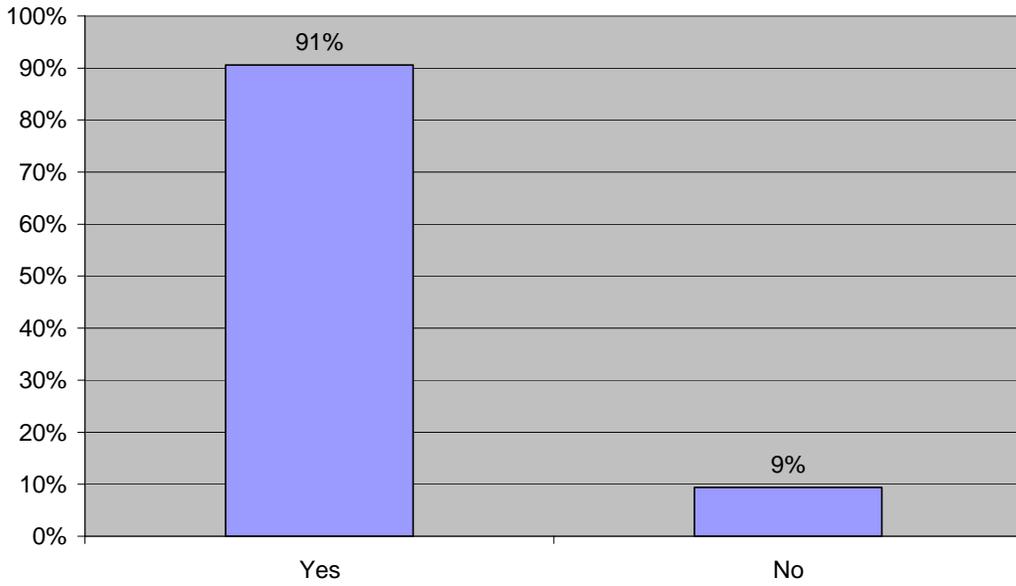
1a. Have you ever taken a course to help you learn English?



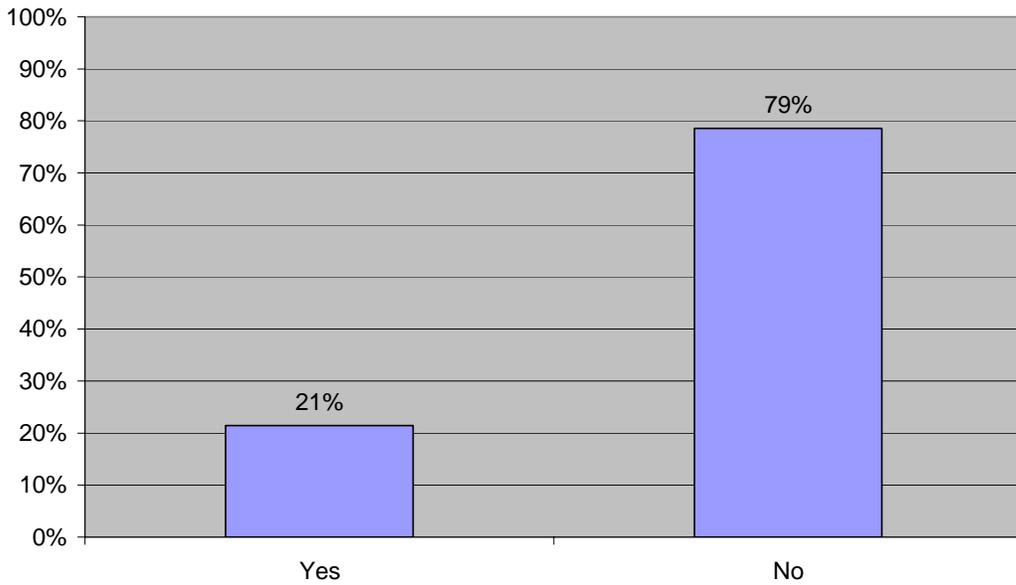
1b. How many total hours of training have you taken?



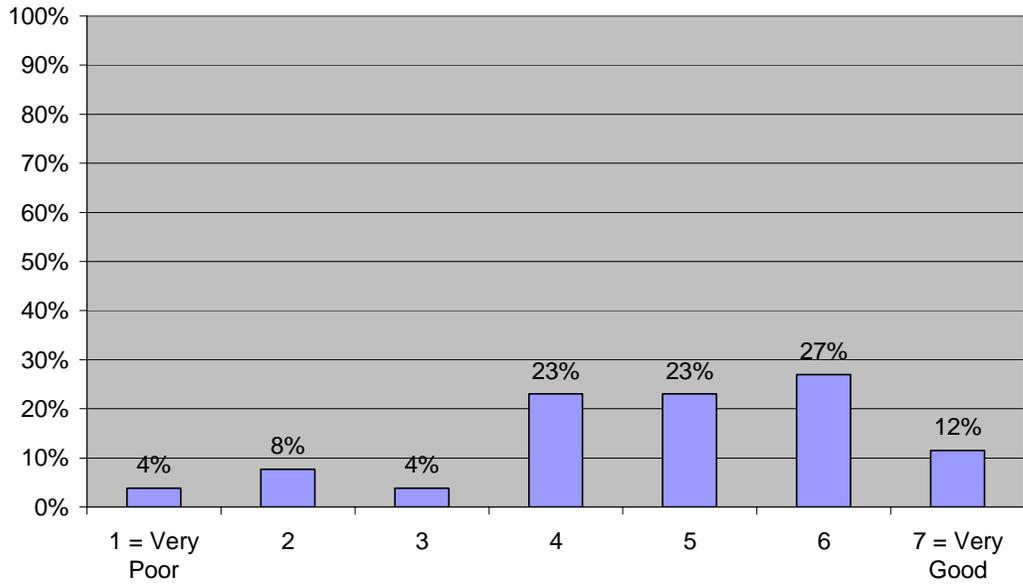
1c. Would you like to take a course to learn English?



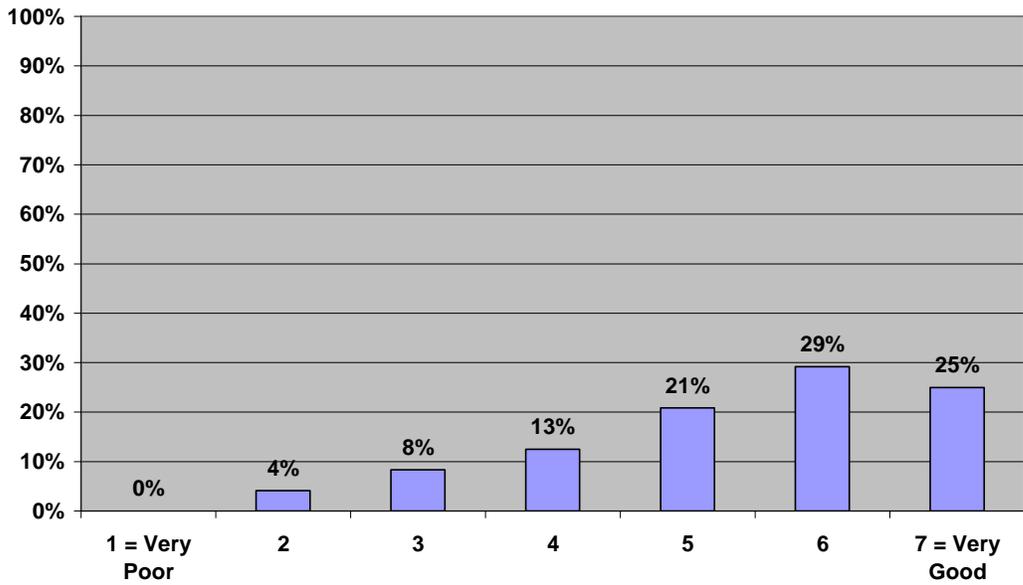
2. Was this English course related to construction?



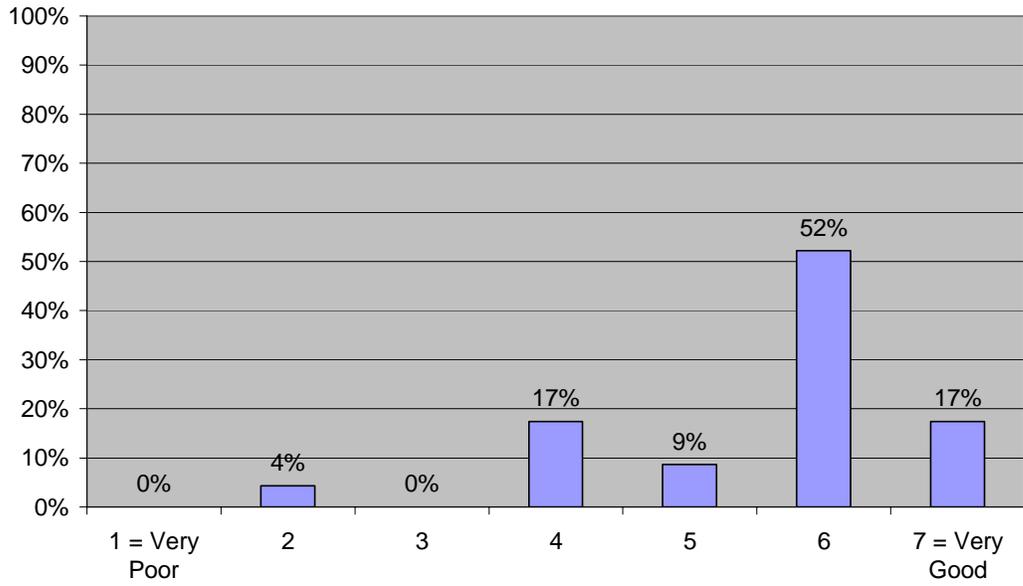
3a. How would you rate the contents for use on the job?



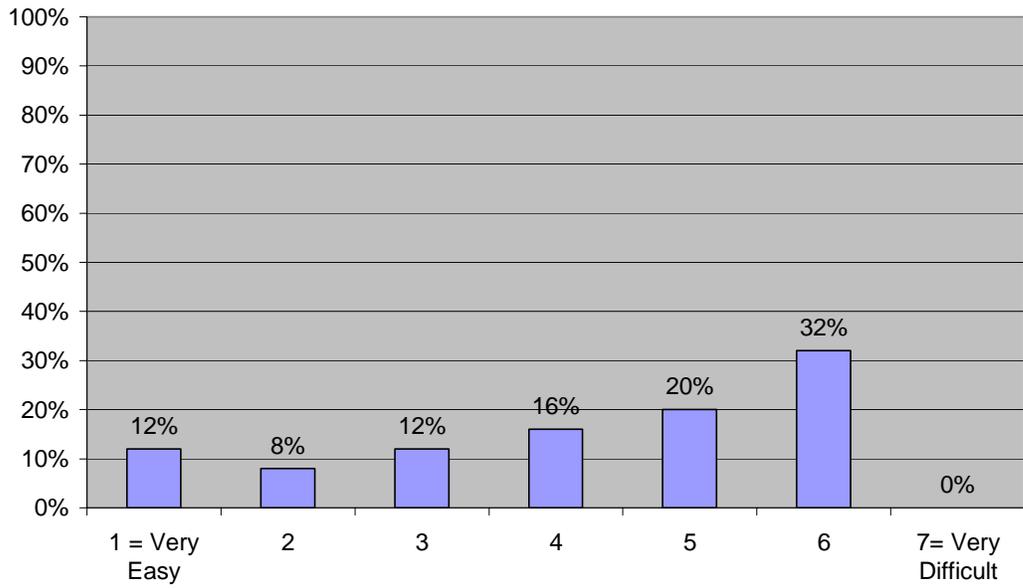
3b. How would you rate the contents for use in everyday life?



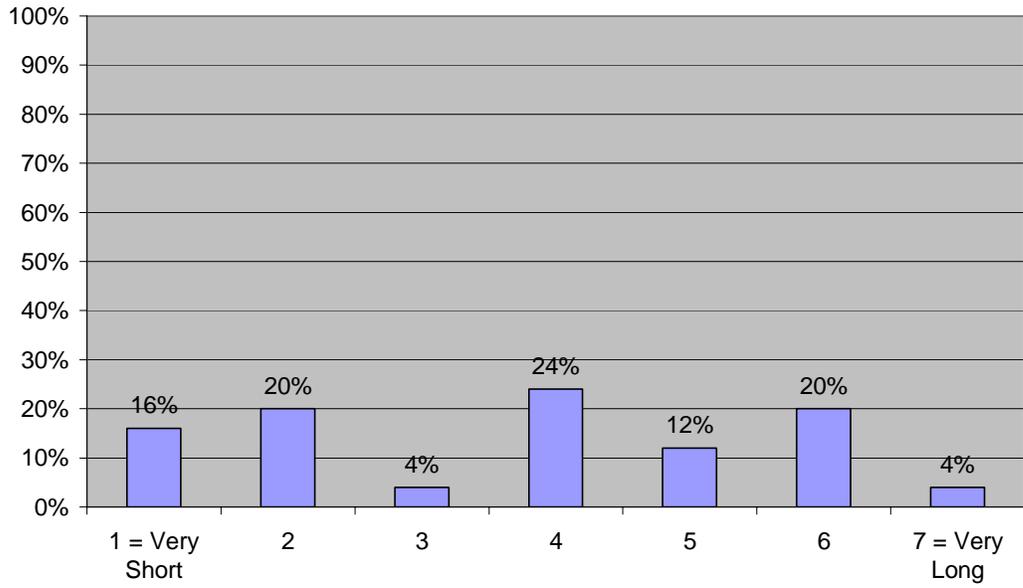
3c. How would you rate the instructor?



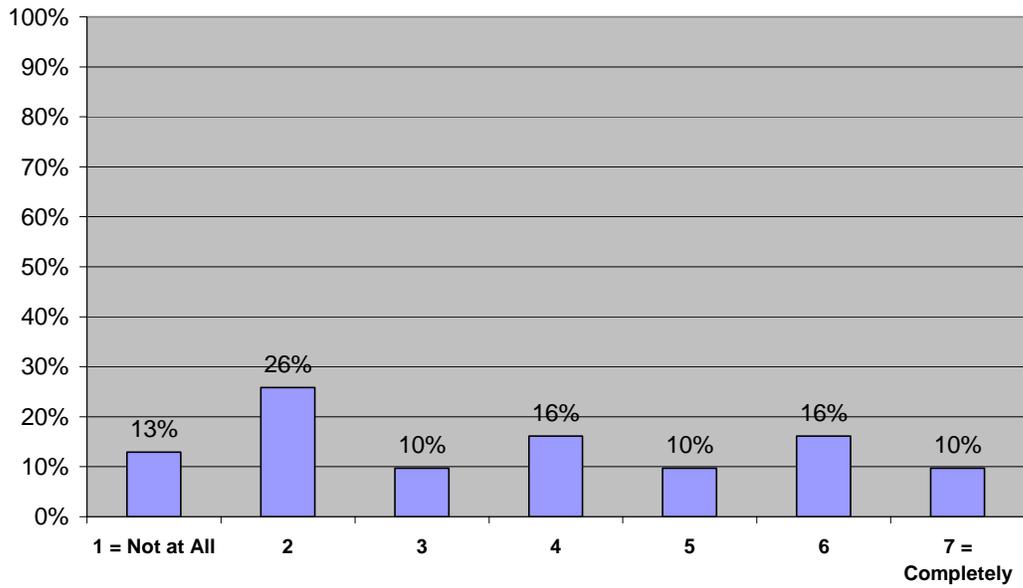
4. How would you rate the degree of difficulty?



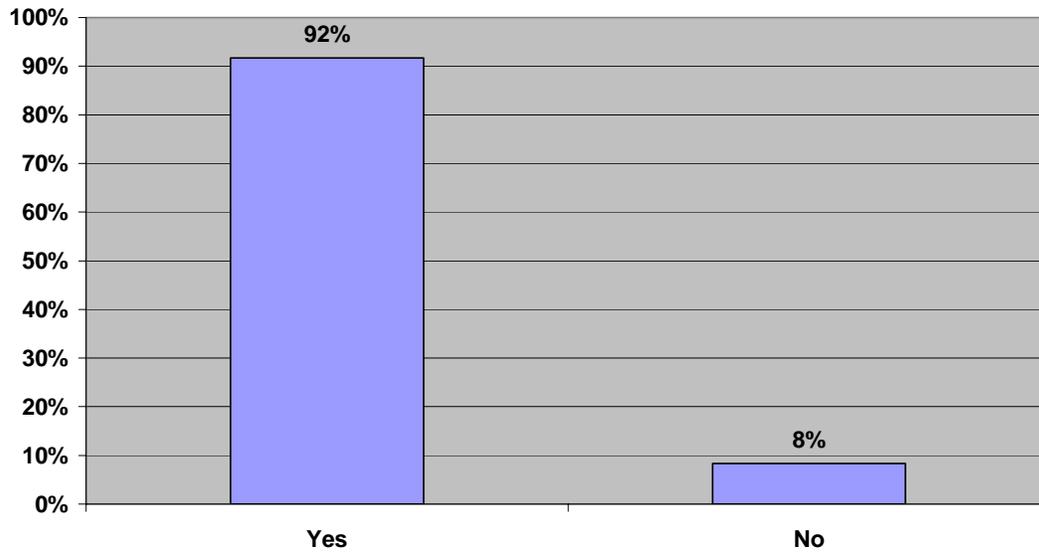
5. How would you rate the length of the course?



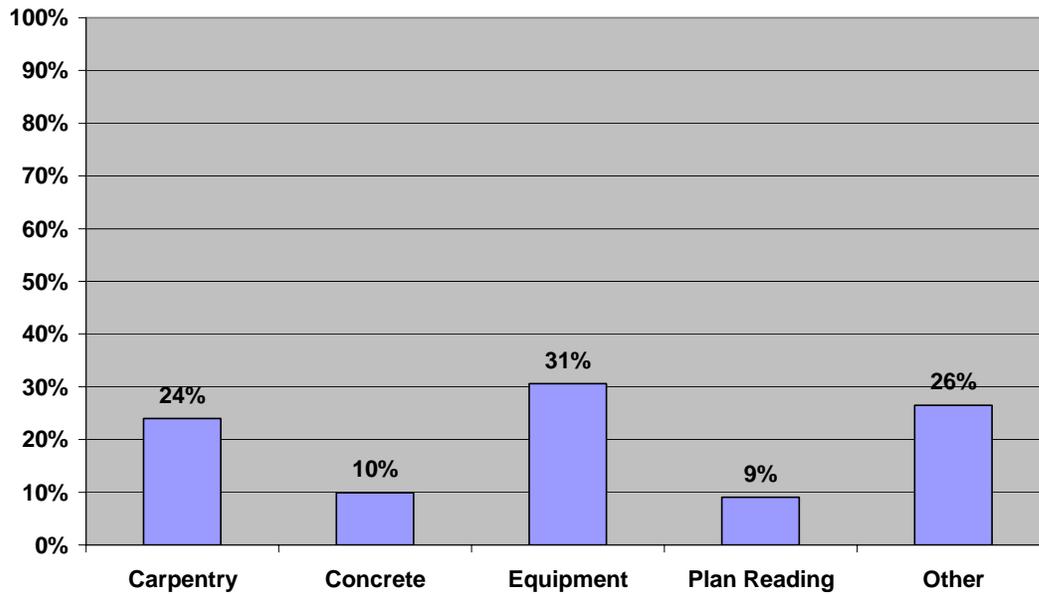
6. How well did your English courses meet your needs and expectations?



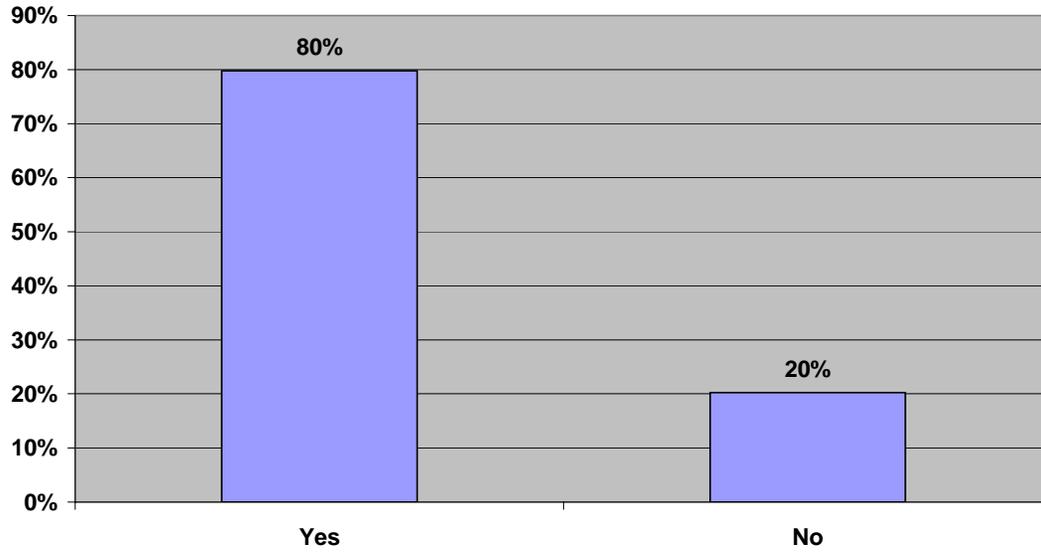
7. Would you be interested in taking a technical training course related to your job?



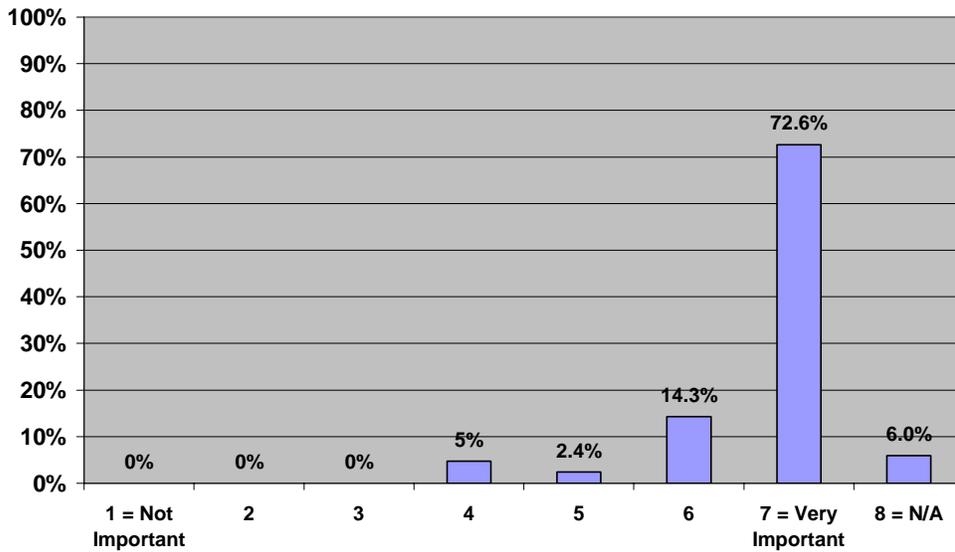
8. What would you like to learn?



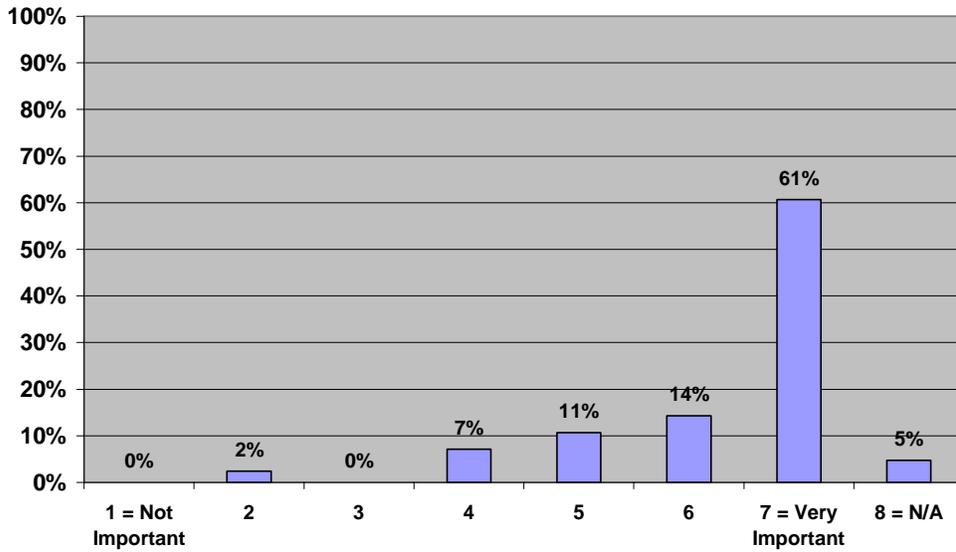
9. Are you learning interest related to your occupation?



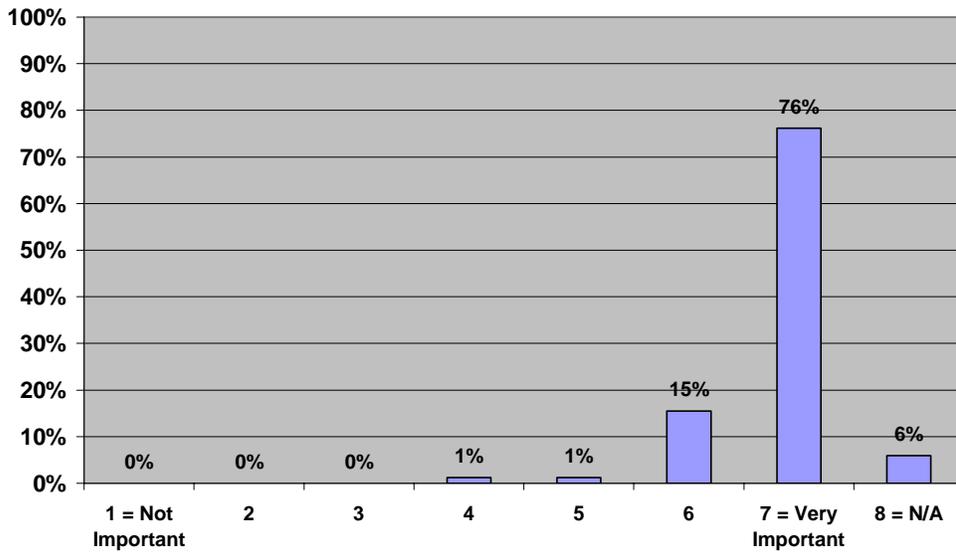
10a. In future technical training courses, what degree of importance would you give to On-the-job vocabulary?



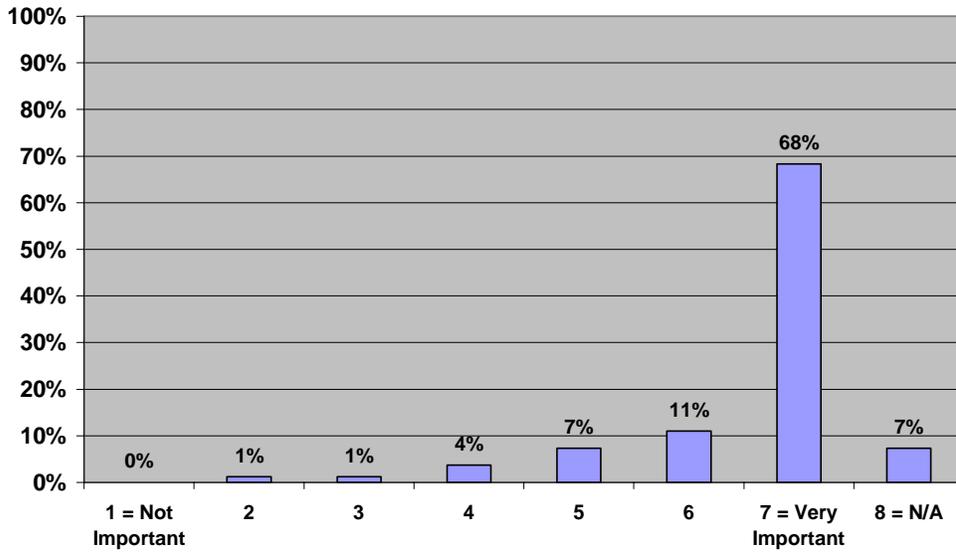
10b. In future technical training courses, what degree of importance would you give to Equipment operation?



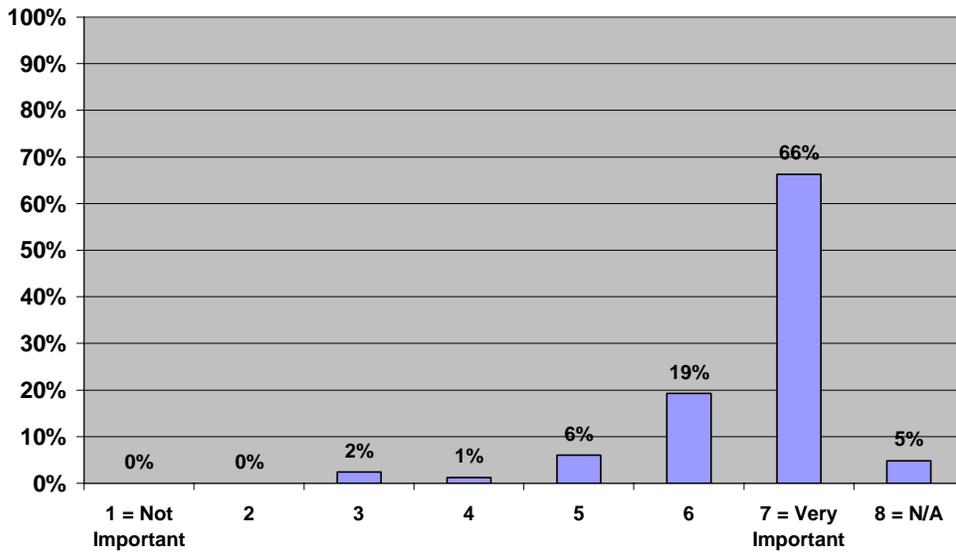
10c. In future technical training courses, what degree of importance would you give to Construction Safety?



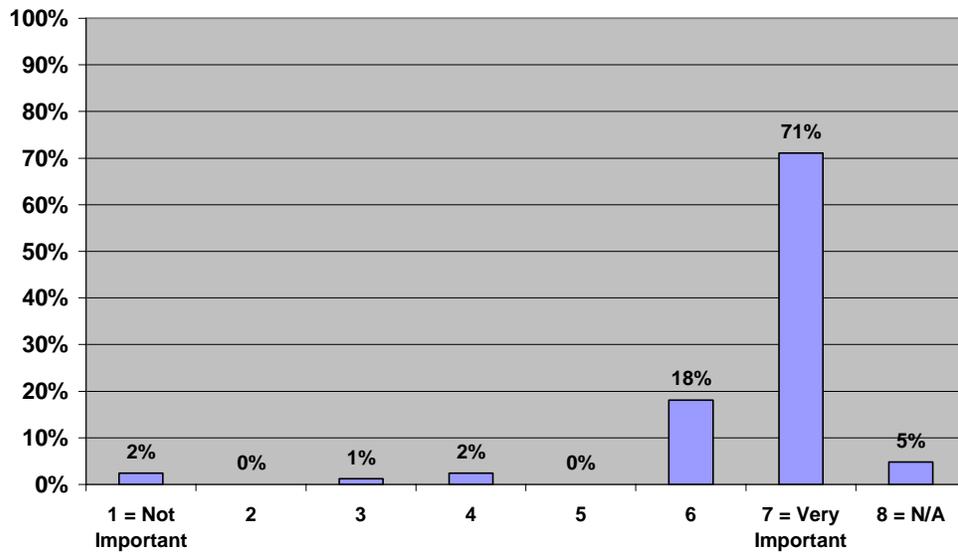
10d. In future technical training courses, what degree of importance would you give to Plan Reading?



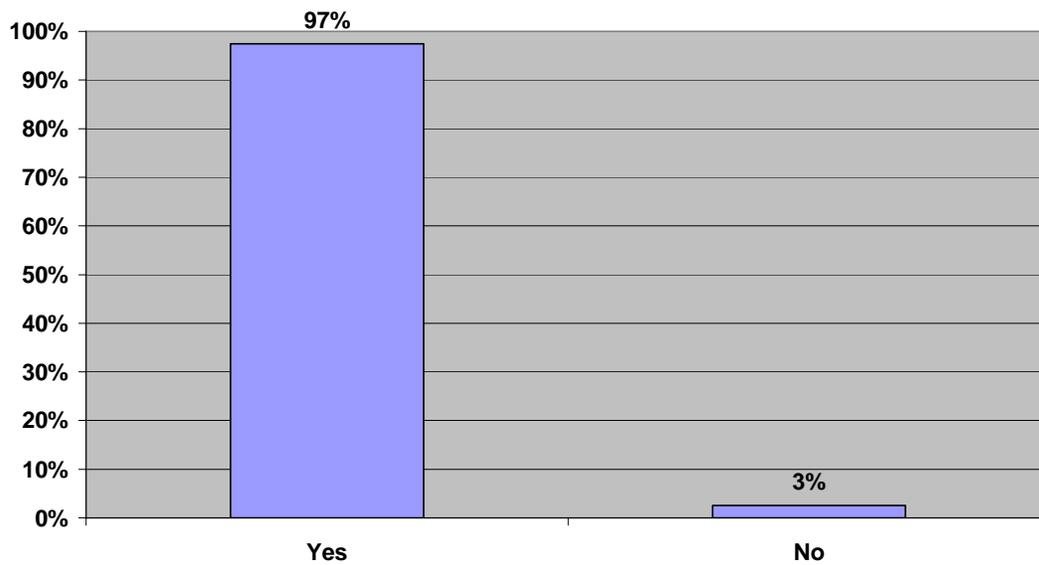
10a. In future technical training courses, what degree of importance would you give to Tools?



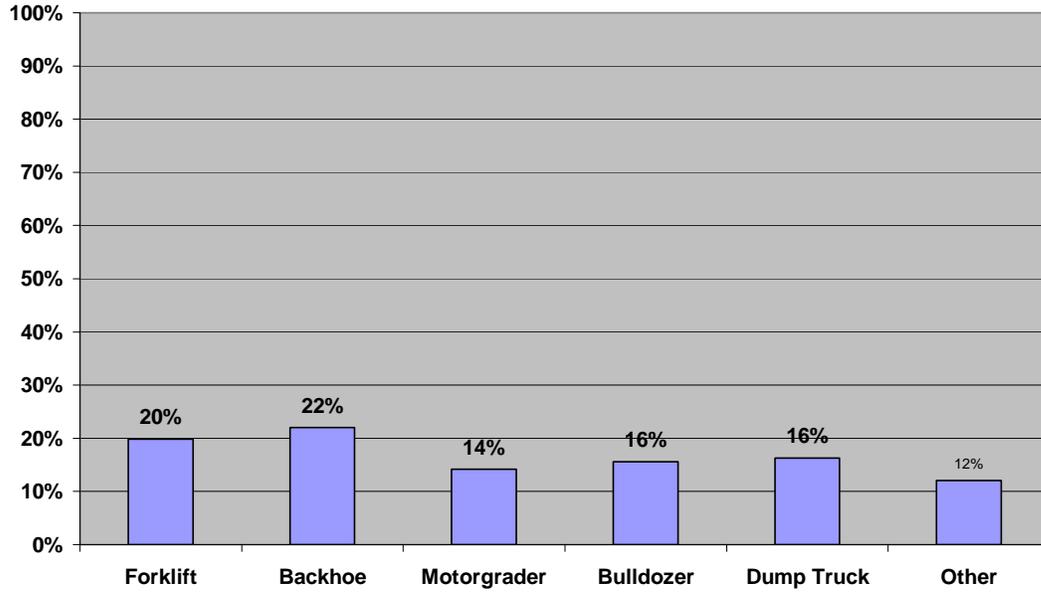
10a. In future technical training courses, what degree of importance would you give to Measurements?



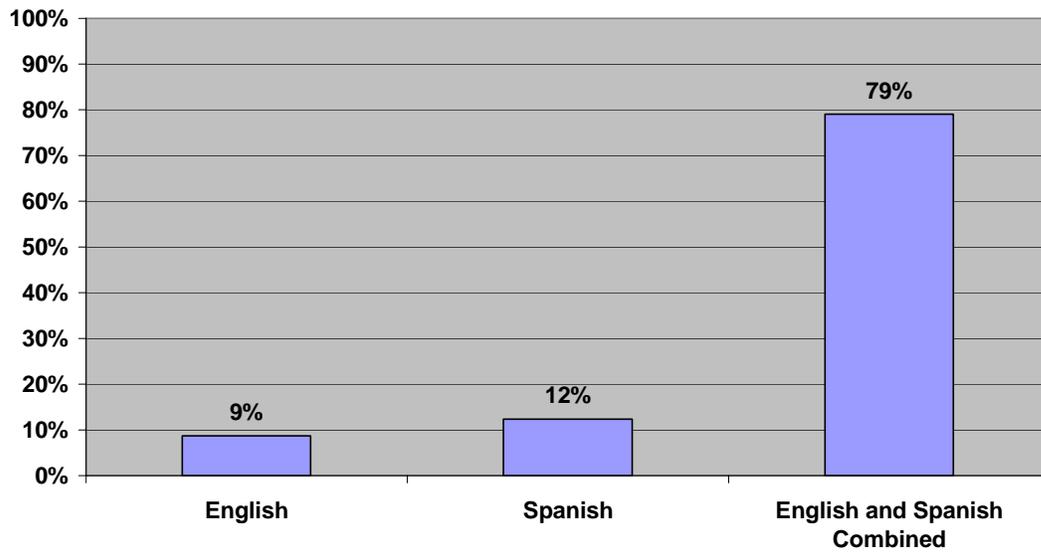
11. Would you like to learn to operate heavy equipment?



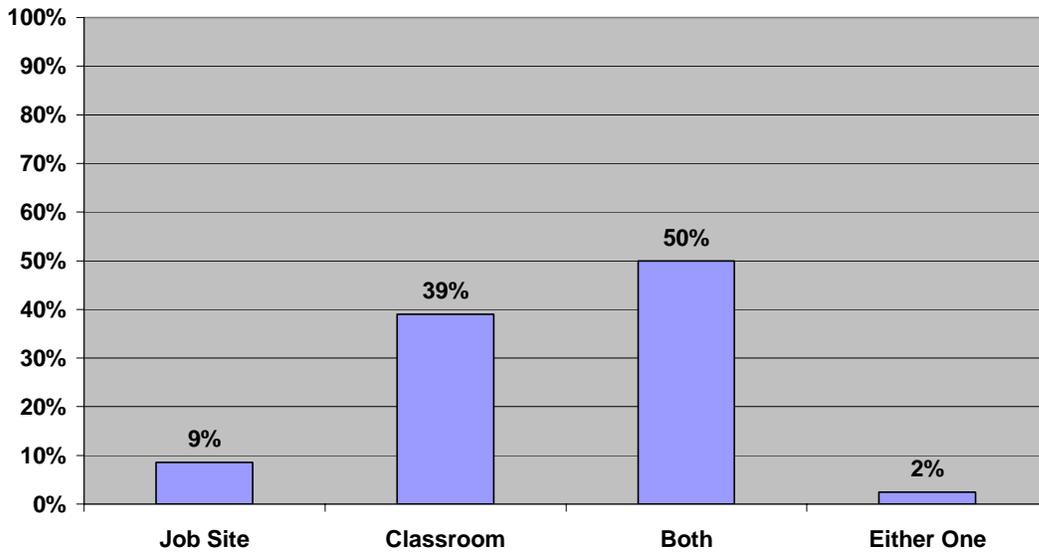
12. What kind of equipment would you prefer to learn to operate?



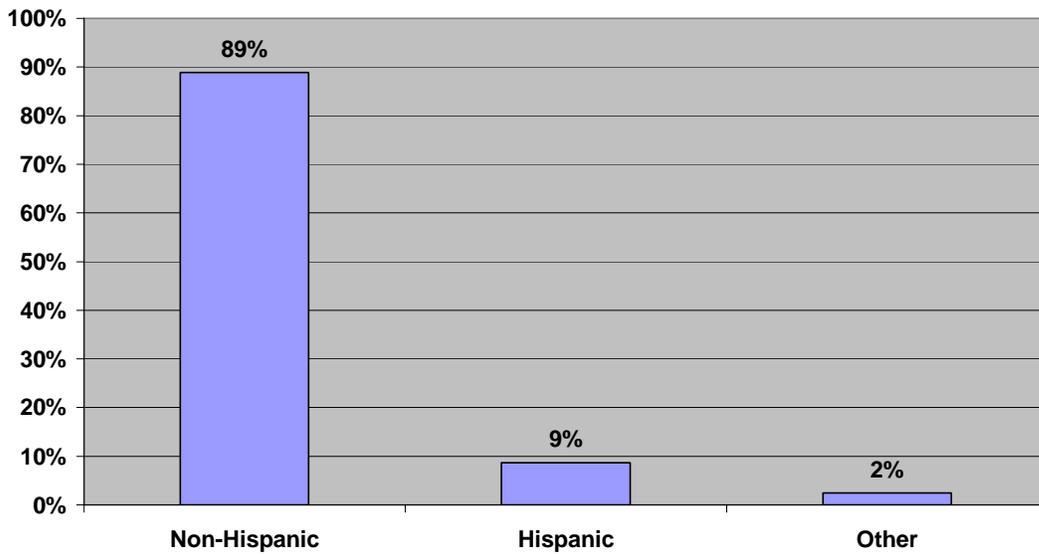
13. In which language would you prefer to take a technical course?



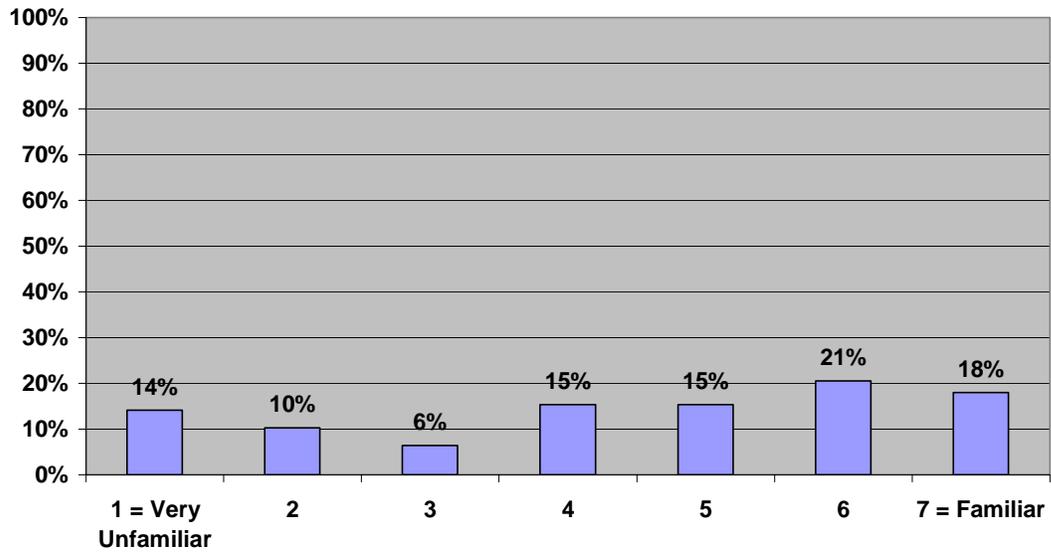
14. Where would you like these courses to take place?



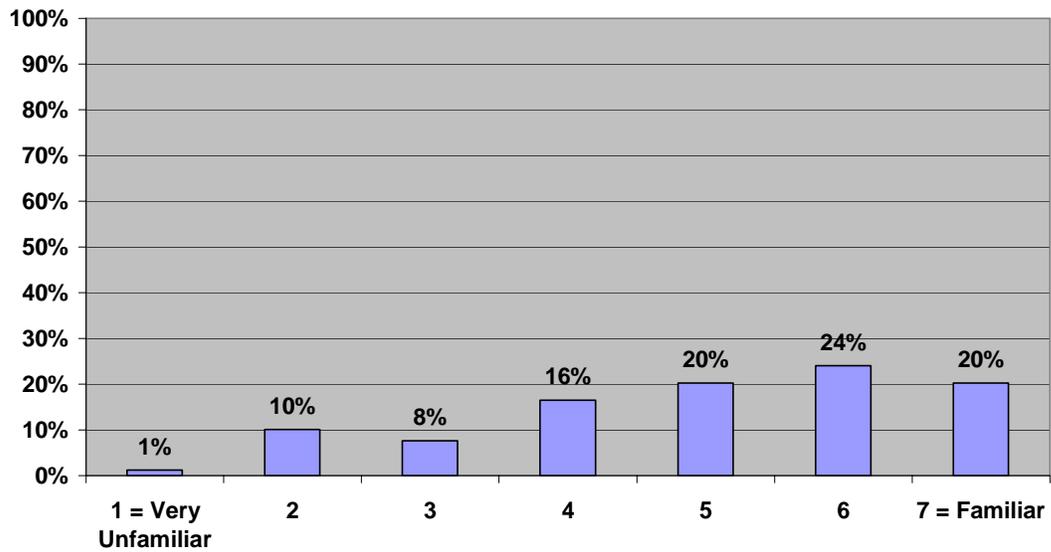
15. Is your supervisor?



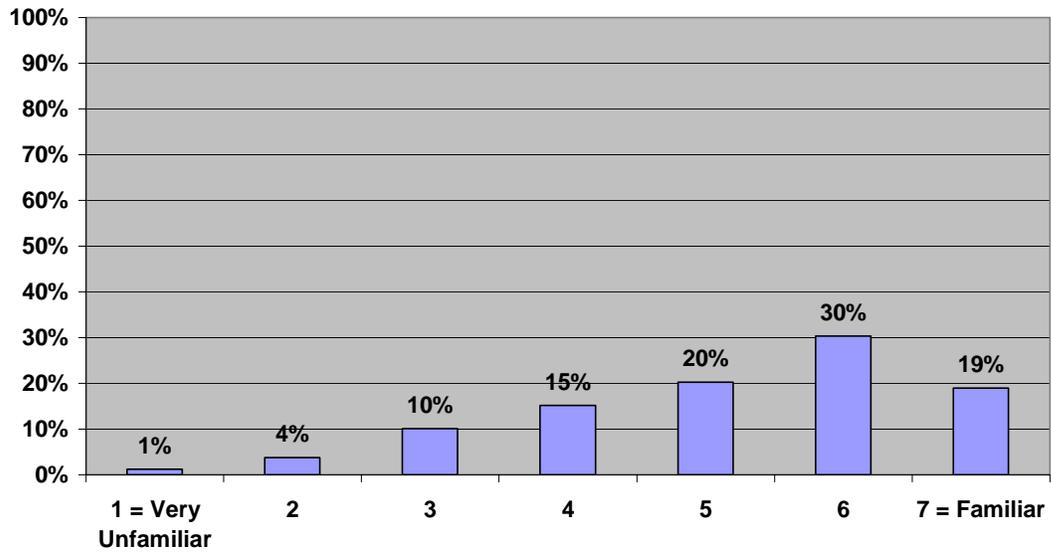
16a. Being your supervisor Non-Hispanic, how familiar do you believe he/she is with regard Culture differences?



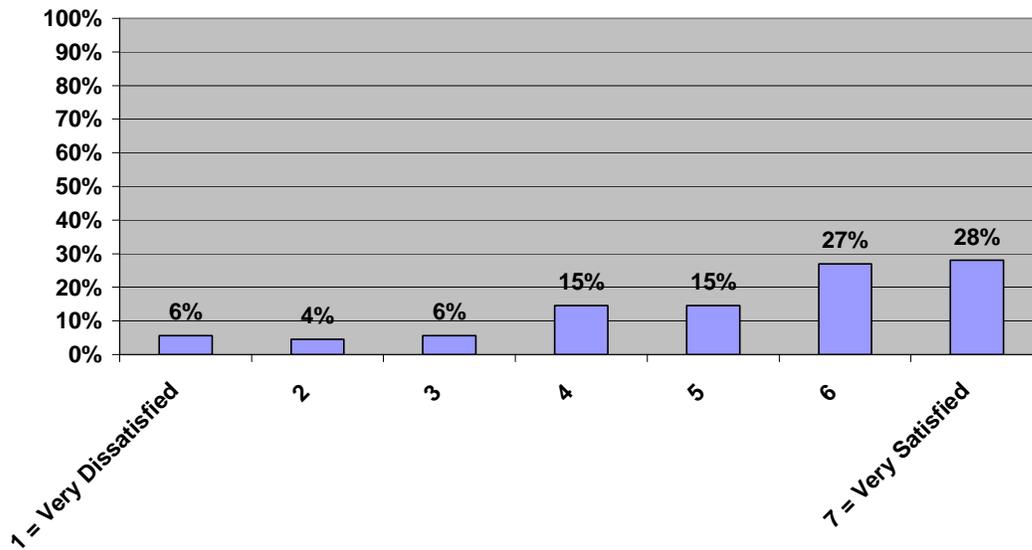
16b. Being your supervisor Non-Hispanic, how familiar do you believe he/she is with regard Manners?



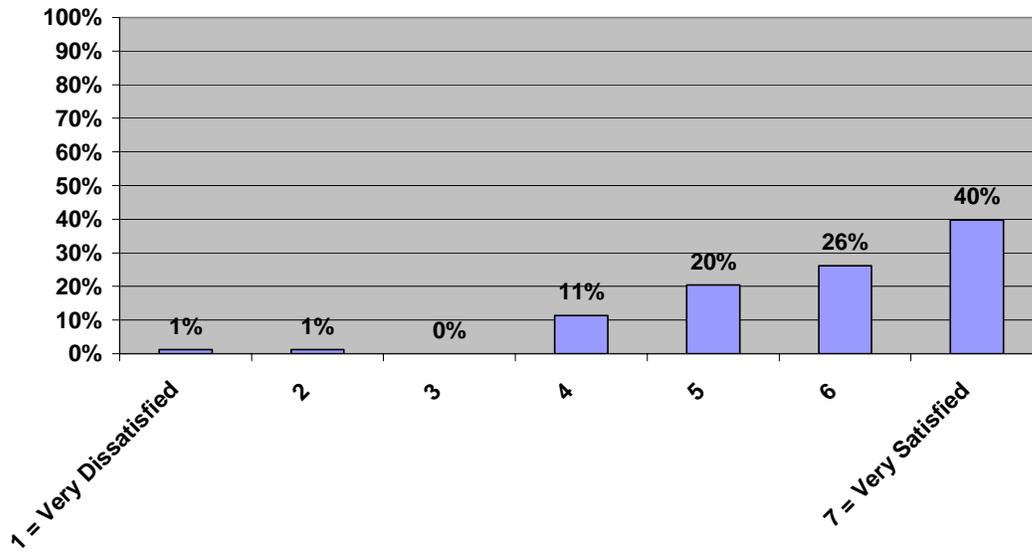
16c. Being your supervisor Non-Hispanic, how familiar do you believe he/she is with regard Work ethic?



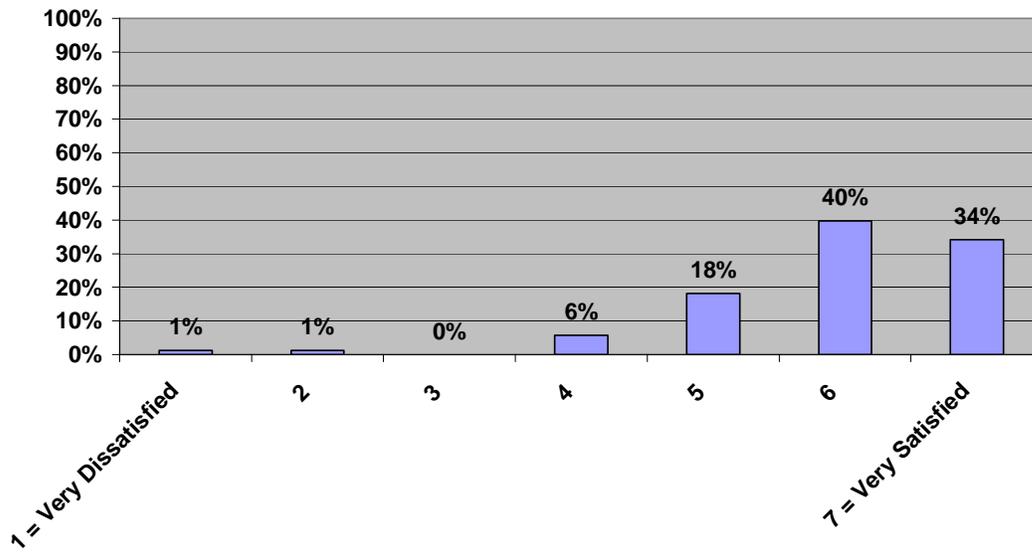
17a. How satisfied are you with your training opportunities to improve your skills or learn new skills?



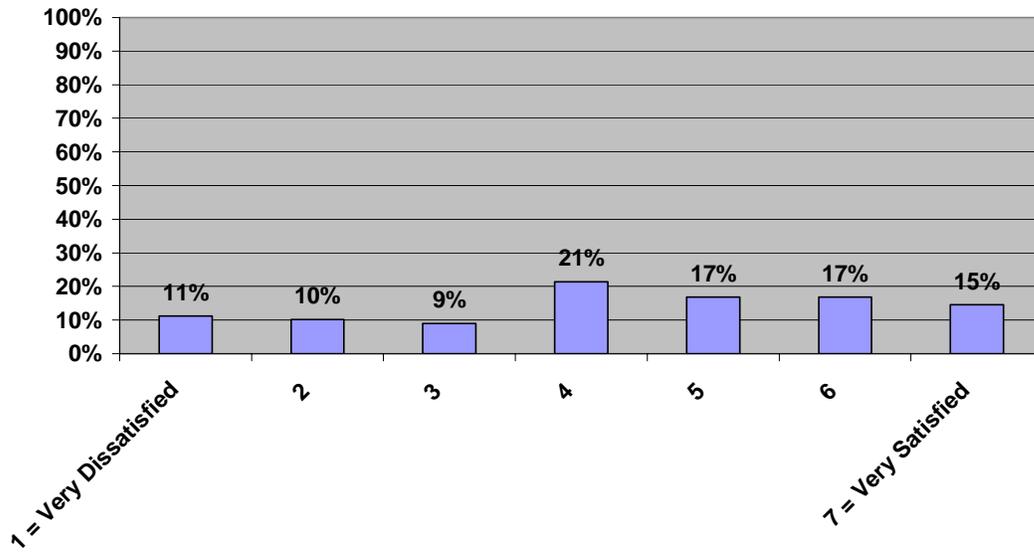
17b. How satisfied are you with the safety conditions on the job site?



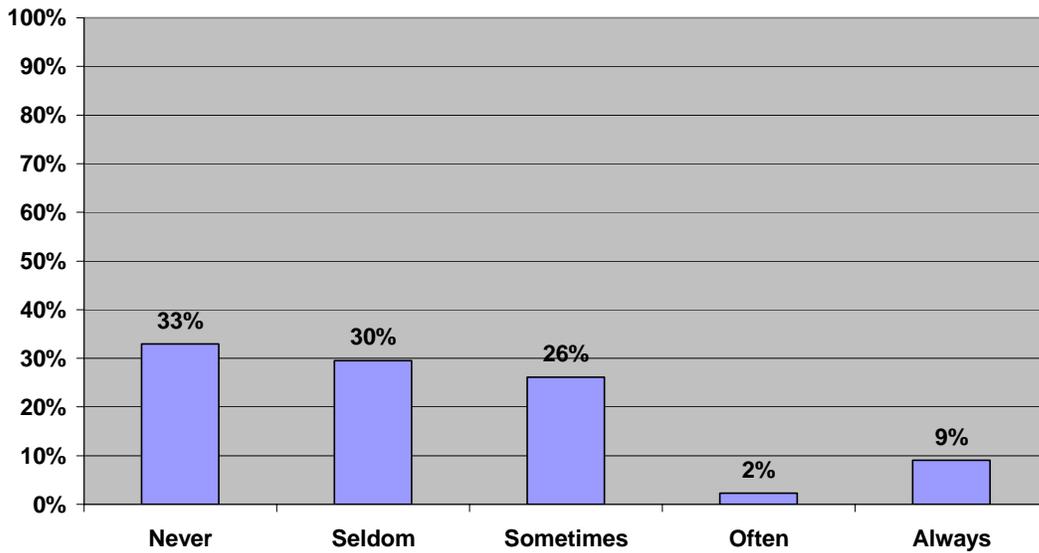
17c. How satisfied are you with the type of tasks you are asked to do?



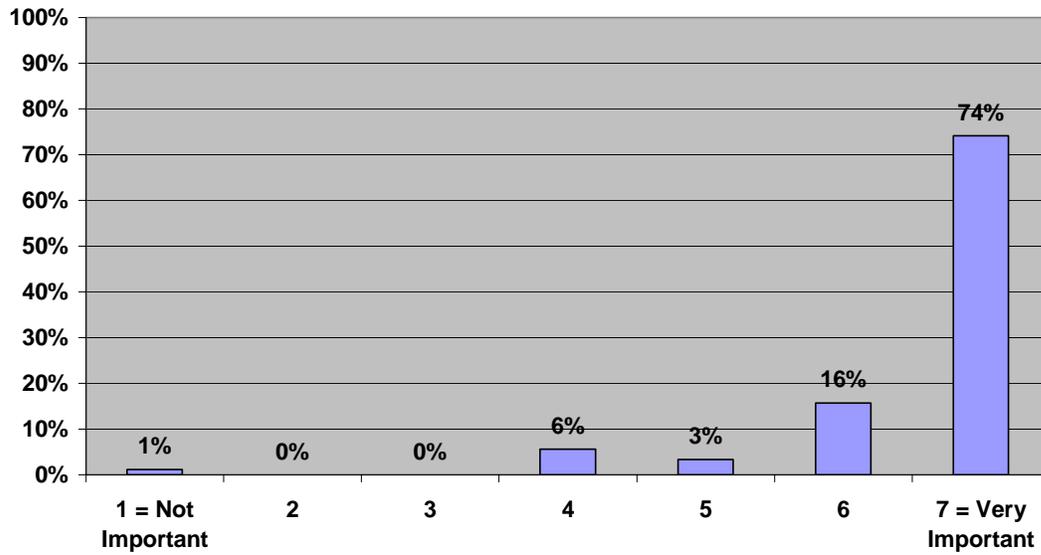
17c. How satisfied are you with the type of tasks you are asked to do?



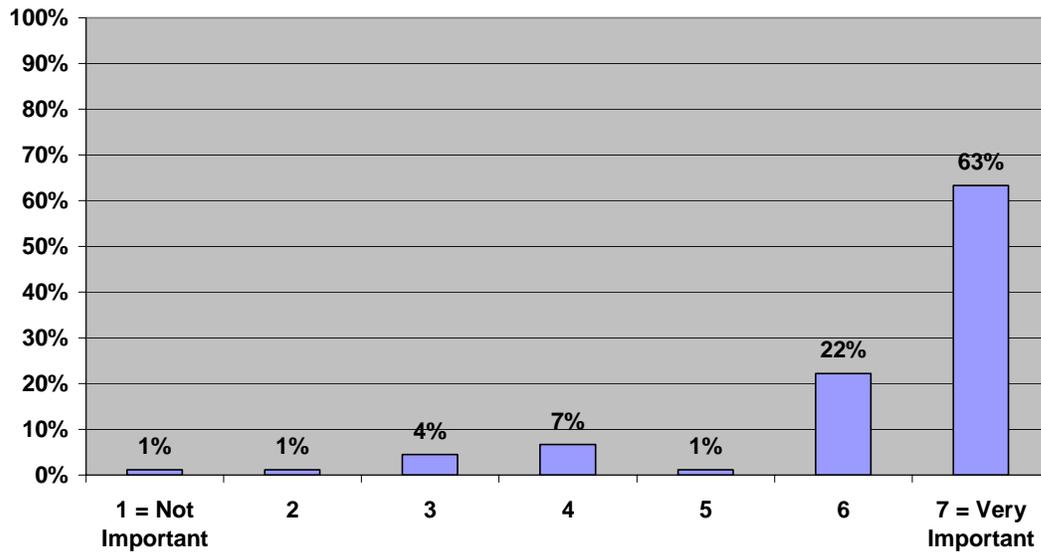
18. How often do you need a translator to communicate?



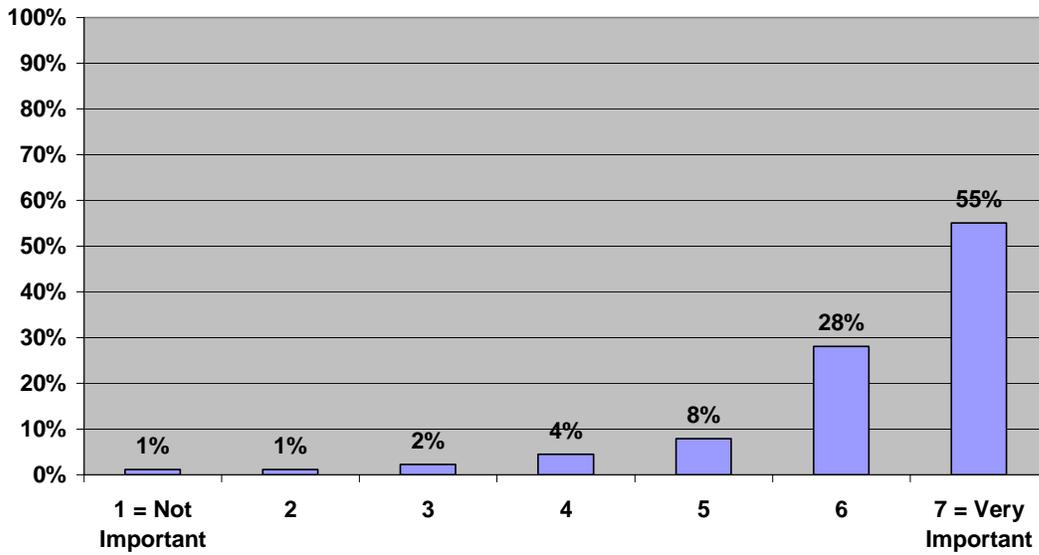
19a. How important would it be to you to improve your communication with your supervisor?



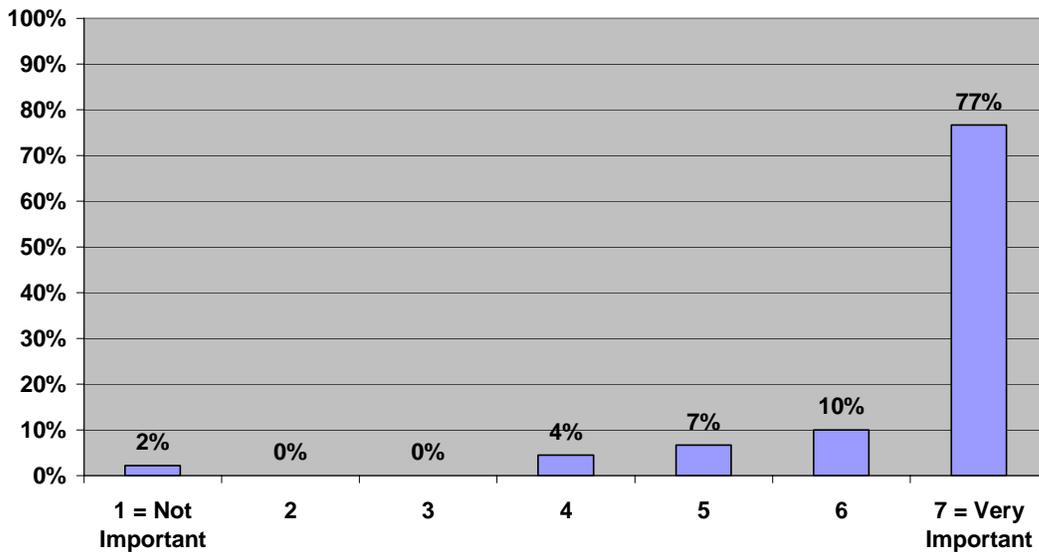
19b. How important would it be to you to improve your communication with your co-workers?



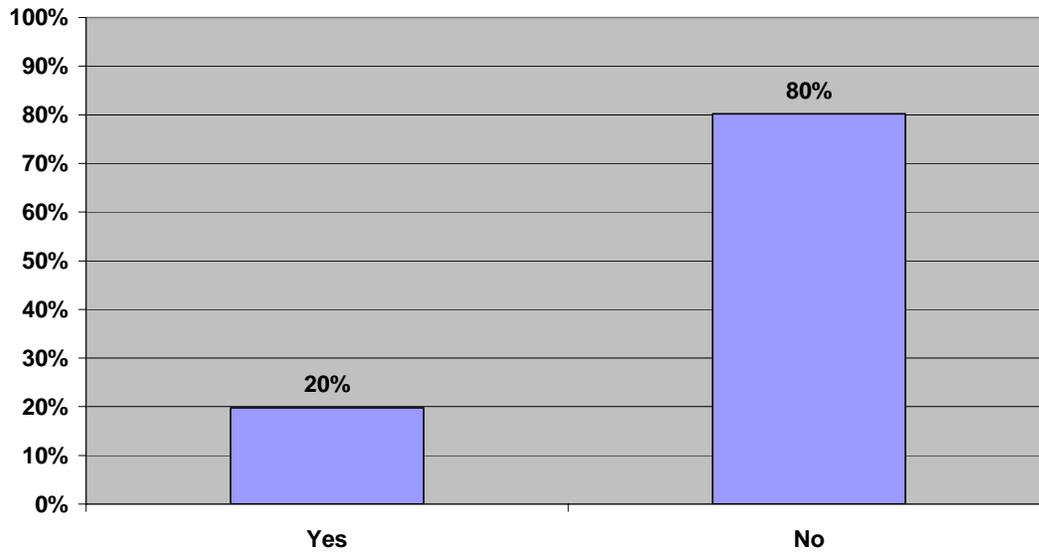
19c. How important would it be to you to receive training emphasizing only in construction?



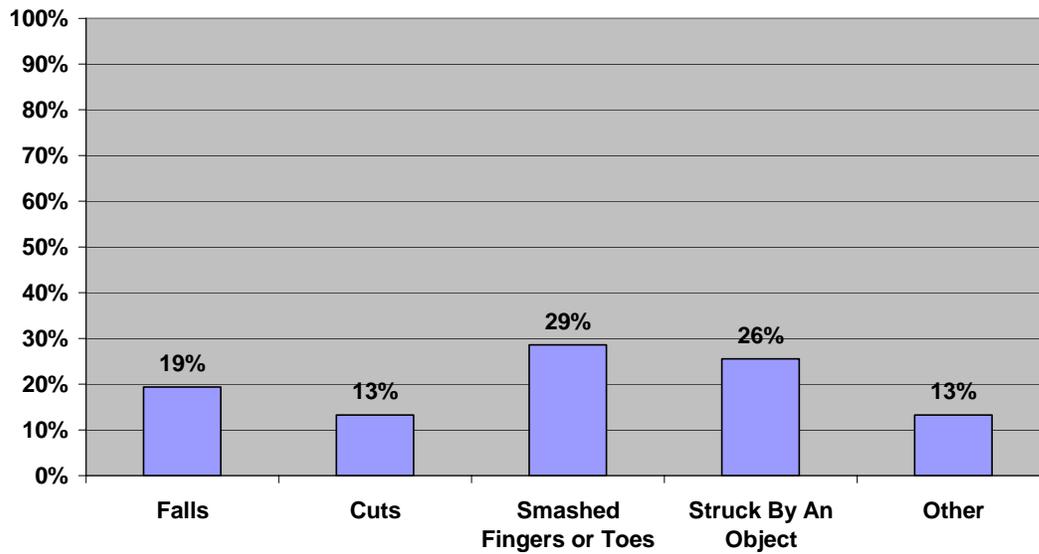
19d. How important would it be to you to have advancements opportunities?



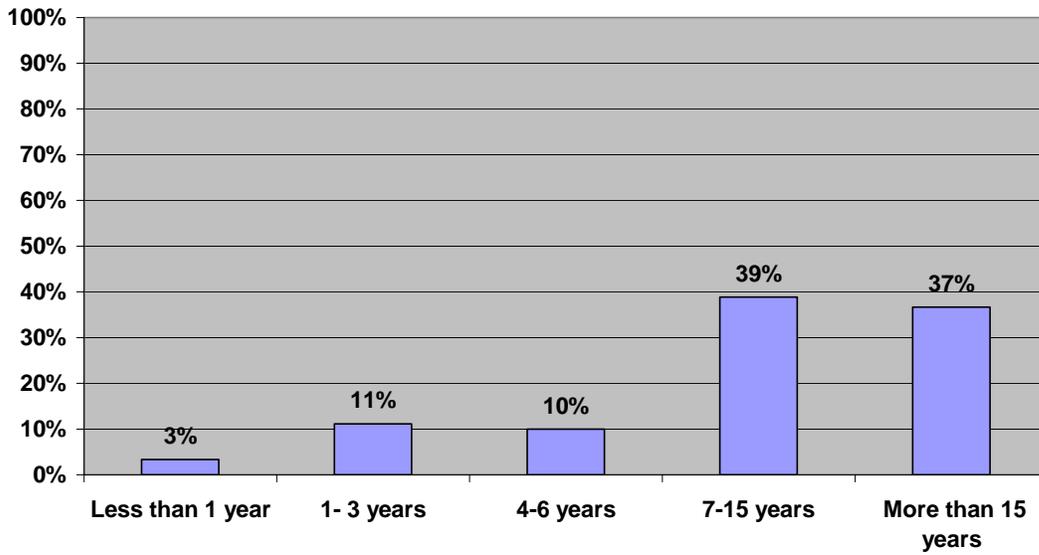
20. Have you had any construction related accidents?



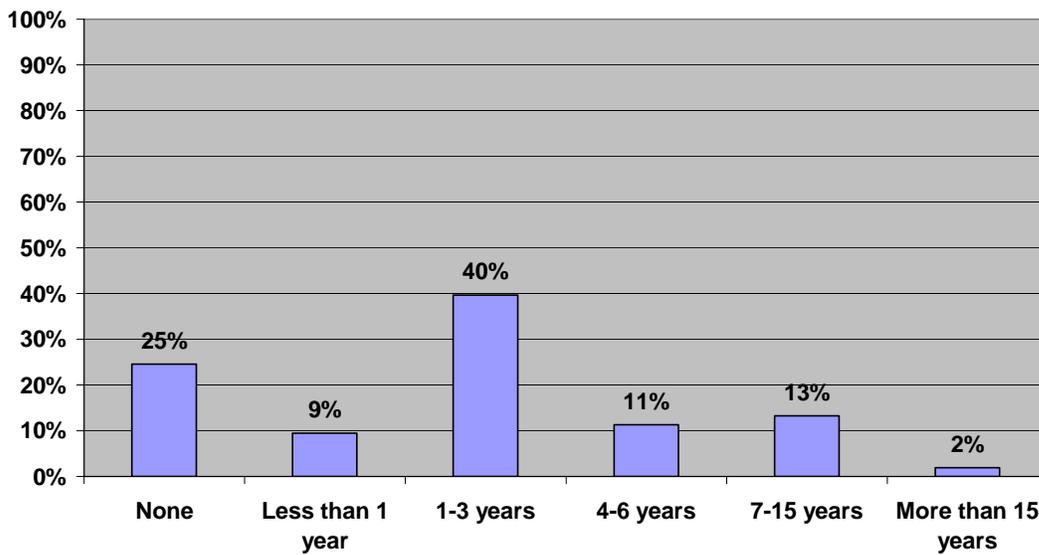
21. What are the most common types of accident you have seen in construction?



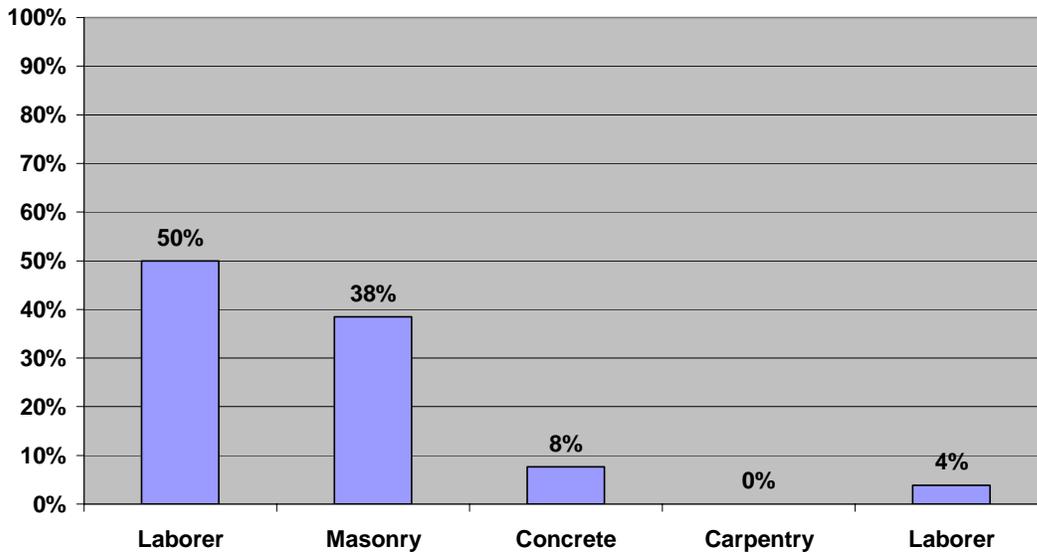
22. How long have you been living in the United States?



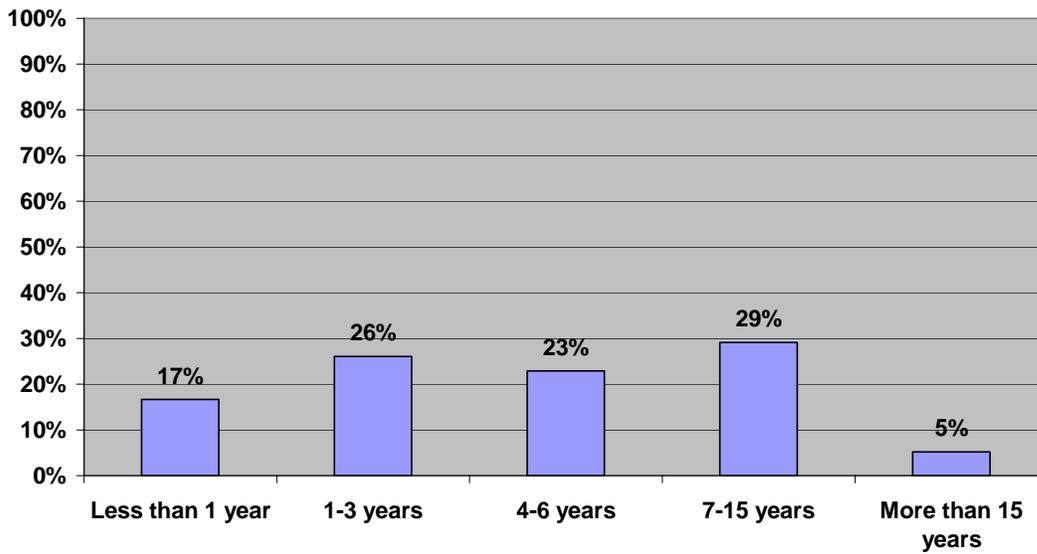
23a. How much experience in construction did you have prior to coming to the U.S.?



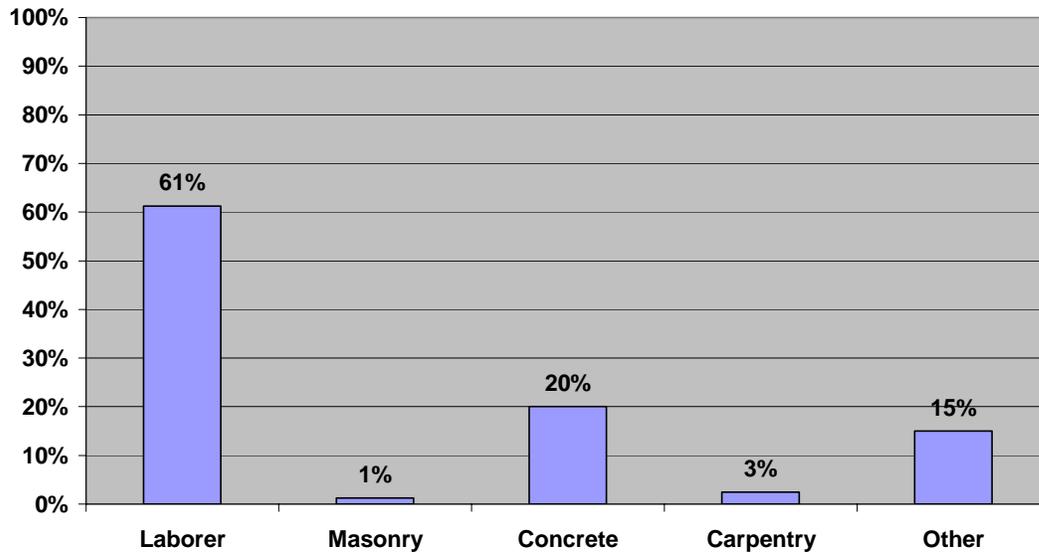
23b. In what trade did you work prior to coming to the U.S.?



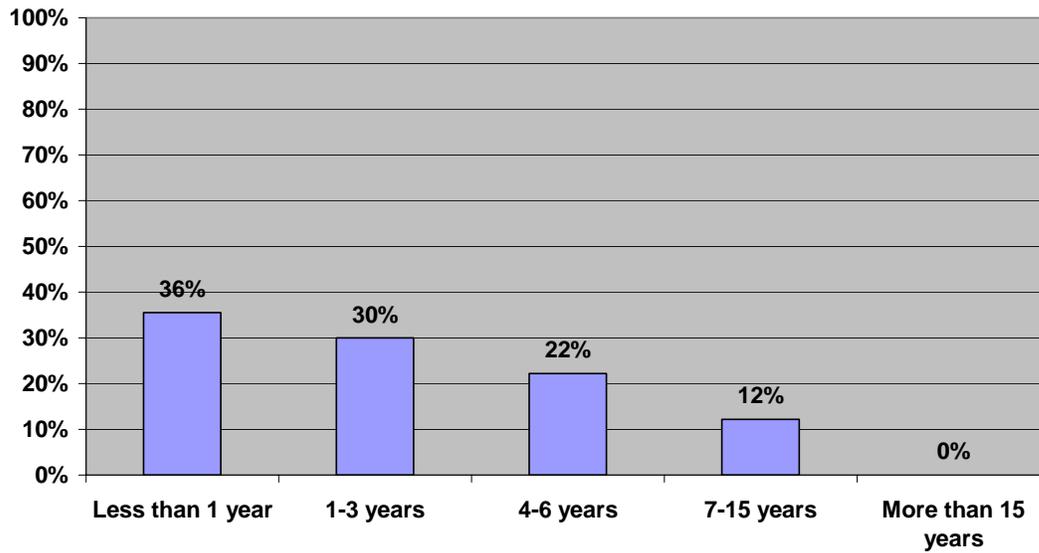
24a. How long have you been involved in construction in the U.S.?



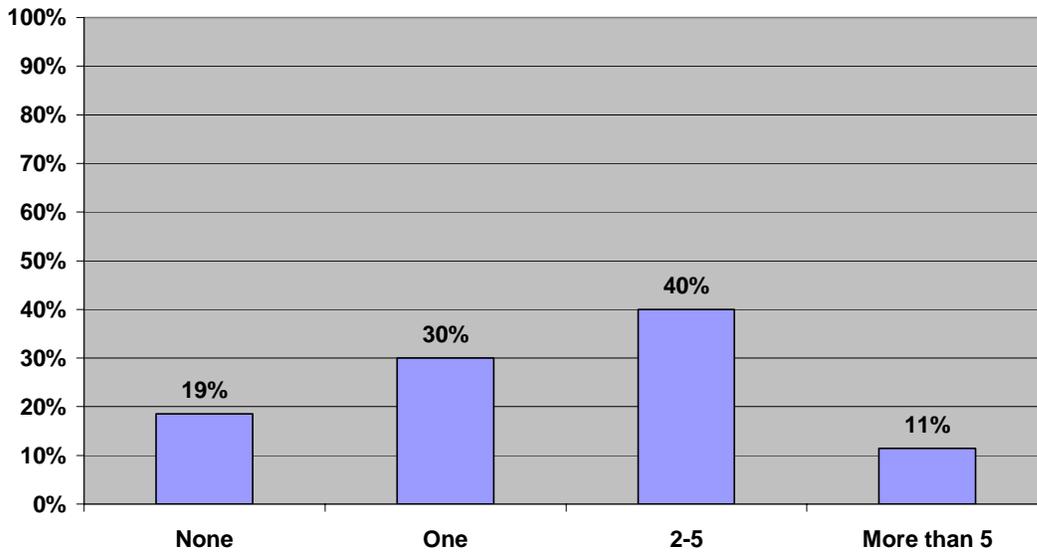
24b. In what trade have you been involved in construction in the U.S.?



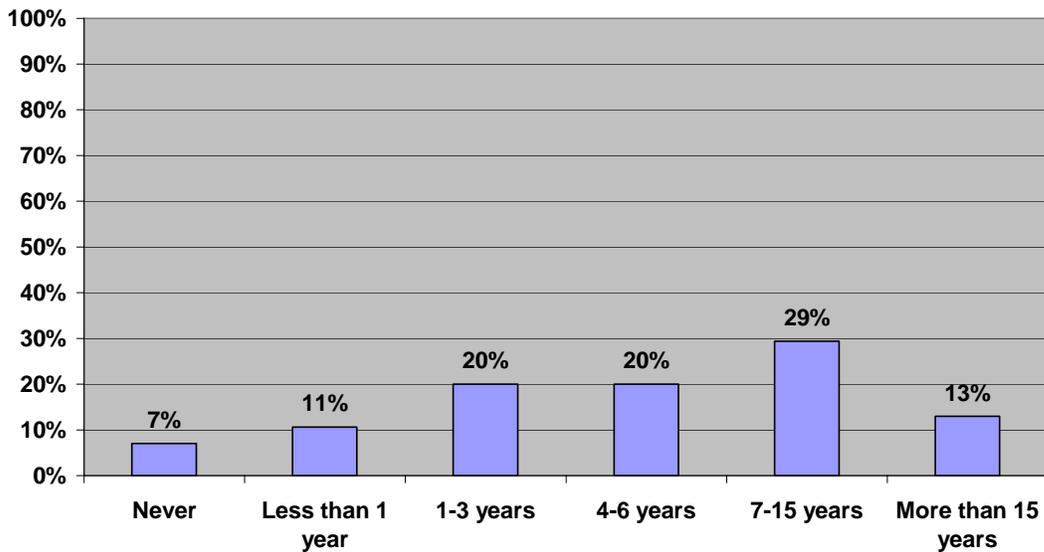
25. How long have you been employed by the company you are currently working for?



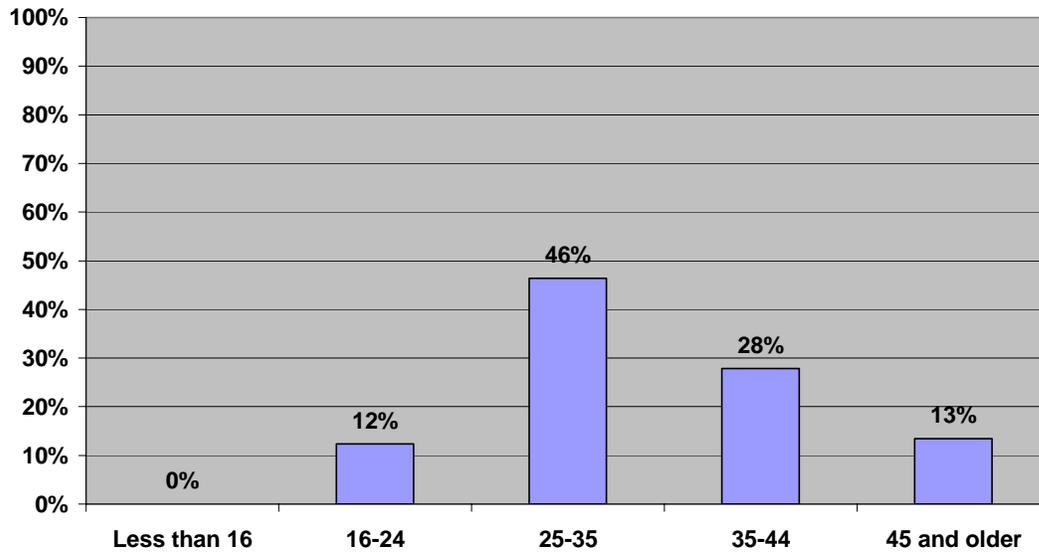
26. How many other construction companies have you worker for in the U.S.?



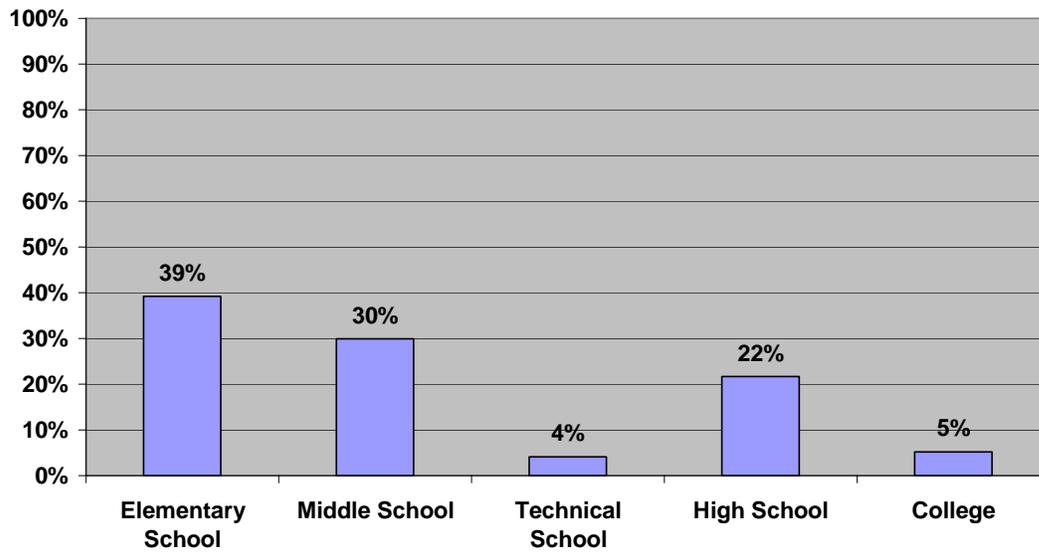
27. How long have you worked at jobs not related to construction?



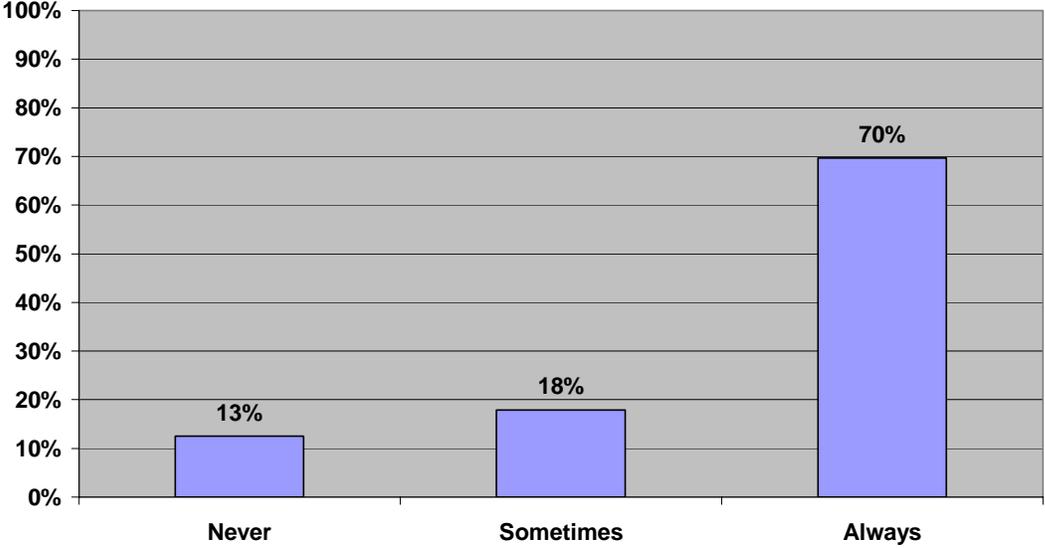
28. How old are you?



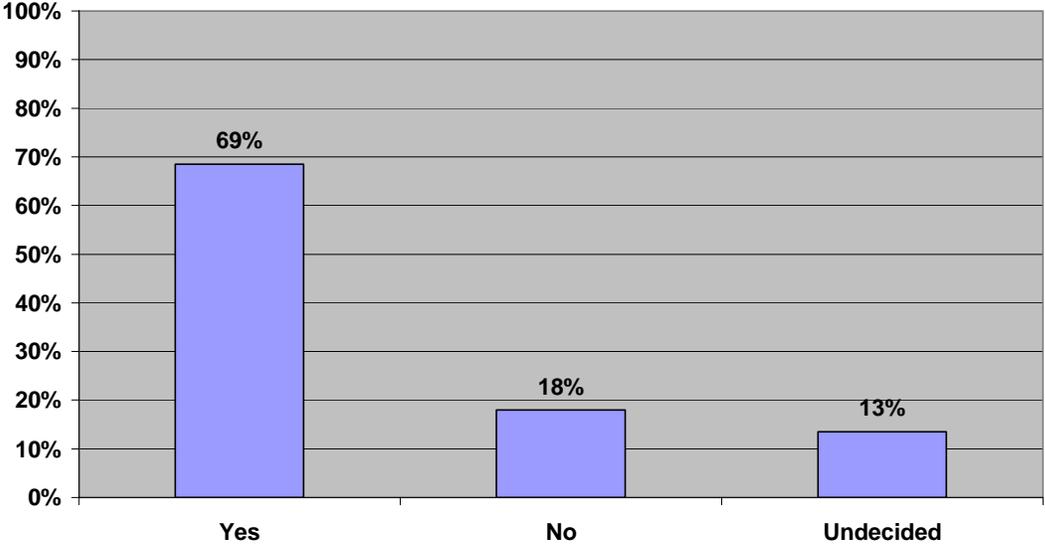
29. What is the highest level of education you have completed?



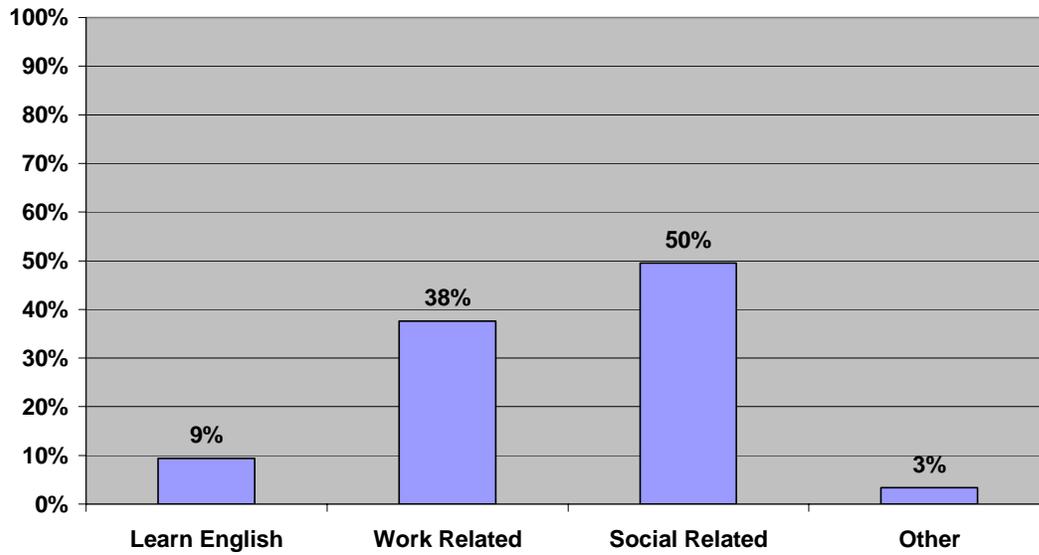
30. Do you stay in Iowa after the construction season is over?



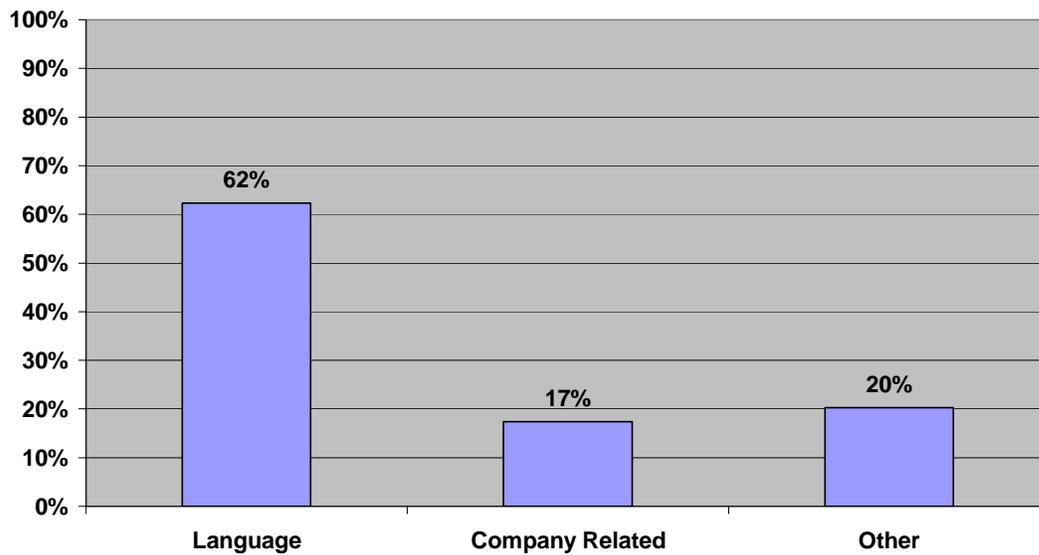
31. Do you plan to stay in the U.S.?



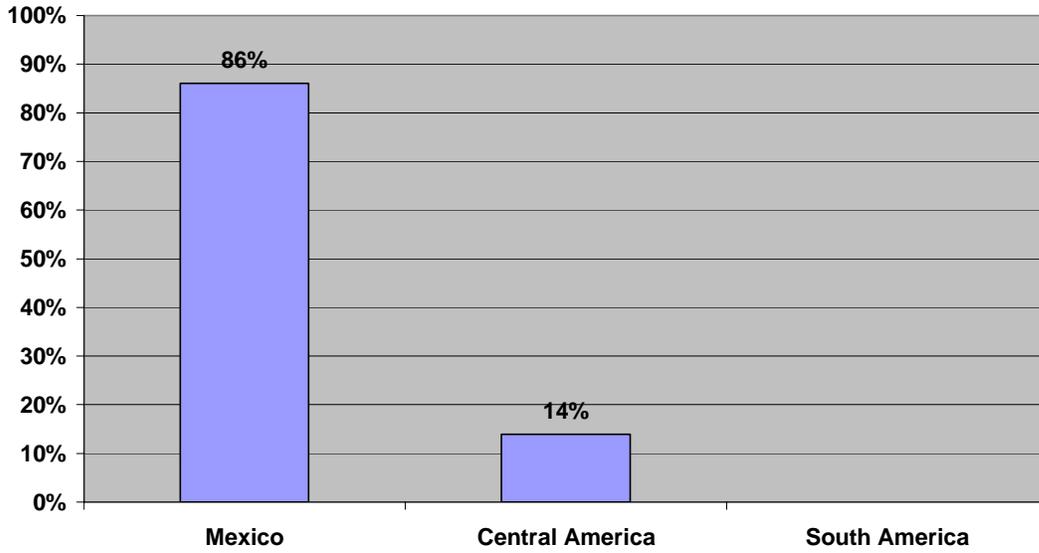
32. After having arrived in the U.S. and worked in construction, what are your main goals and expectations for the future?



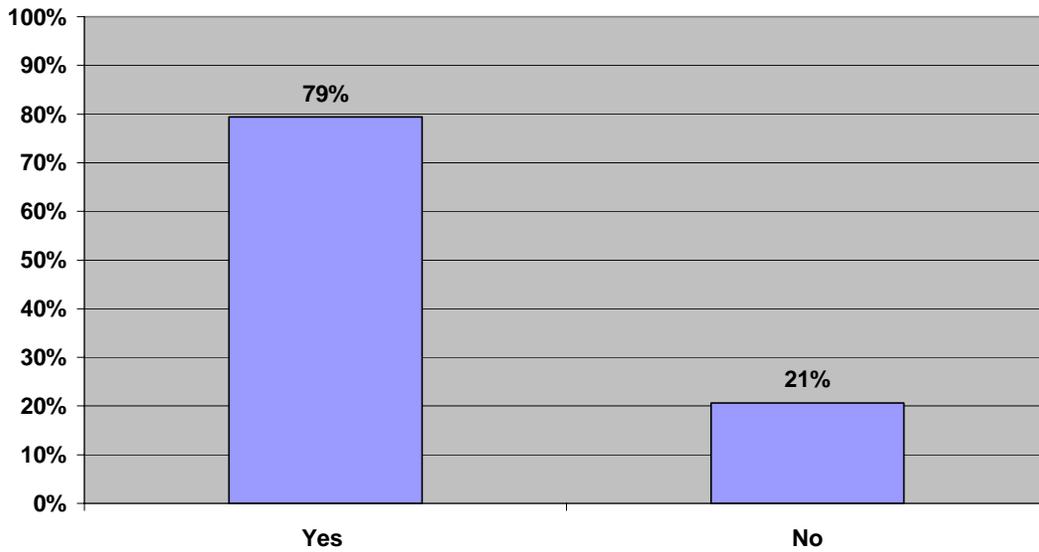
33. What do you consider to be your main problem?



34. What is your country of birth?



35. Would you like to take a course to be promoted to supervisor?



Appendix C

English as a Second Language Survival Course

Alphabet

Se oye como: _____

Abecedario

Agreggate

Se oye como: _____

Agregado



Asphalt

Se oye como: _____

Asfalto



Backhoe

Se oye como: _____

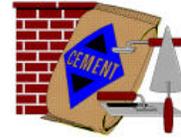
Retroexcavadora



Bag

Se oye como: _____

Saco



Barrier

Se oye como: _____

Barrera



Carpenter

Se oye como: _____

Carpintero



Dig

Se oye como: _____

Excavar / escarbar



Equipment

Maquinaria / equipo

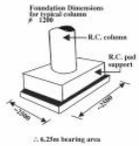
Se oye como: _____



Footing

Cimiento / Zapata

Se oye como: _____



Hammer

Martillo

Se oye como: _____



Hardhat

Casco

Se oye como: _____



C-3

Fence

Barda / cerca

Se oye como: _____



Inch

Pulgada

Se oye como: _____



Glass

Vidrio / vaso

Se oye como: _____



Jack

Gato (Hidráulico)

Se oye como: _____



Knife Cuchillo / Navaja

Se oye como: _____



Ladder Escalera

Se oye como: _____



Masonry Albañilería

Se oye como: _____



Noise Ruido

Se oye como: _____



Nails Clavos

Se oye como: _____



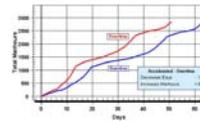
Oil Aceite / petróleo

Se oye como: _____



Overtime Horas extras

Se oye como: _____



Pavement Pavimento

Se oye como: _____



Road Camino / vía
Se oye como: _____



Sand Arena
Se oye como: _____



Scaffolding Andamio
Se oye como: _____



Utilities Servicios
Se oye como: _____



Water Agua
Se oye como: _____



Yield Ceder
Se oye como: _____



Zone Zona
Se oye como: _____



Vowels

Las Vocales

Se oye como: _____

A

Se oye como: _____



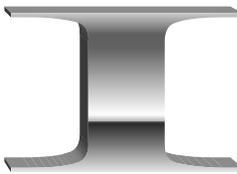
E

Se oye como: _____



I

Se oye como: _____



O

Se oye como: _____



U

Se oye como: _____



Numbers

Los Números

Se oye como: _____

One

Uno

Se oye como: _____

1

Two

Dos

Se oye como: _____

2

Three

Tres

Se oye como: _____

3

Four

Cuatro

Se oye como: _____

4

Five

Cinco

Se oye como: _____

5

Six

Seis

Se oye como: _____

6

Seven

Siete

Se oye como: _____

7

Eight

Ocho

Se oye como: _____

8

Nine

Nueve

Se oye como: _____

9

Ten Diez
Se oye como: _____

10

Eleven Once
Se oye como: _____

11

Twelve Doce
Se oye como: _____

12

Thirteen Trece
Se oye como: _____

13

Fourteen Catorce
Se oye como: _____

14

Fifteen Quince
Se oye como: _____

15

Sixteen Dieciséis
Se oye como: _____

16

Seventeen Diecisiete
Se oye como: _____

17

Eighteen Dieciocho
Se oye como: _____

18

Nineteen Diecinueve
Se oye como: _____

19

Twenty Veinte
Se oye como: _____

20

Twenty one Veintiuno
Se oye como: _____

21

Twenty two Veintidós
Se oye como: _____

22

Twenty nine Veintinueve
Se oye como: _____

29

Thirty Treinta
Se oye como: _____

30

Thirty one Treinta y uno
Se oye como: _____

31

Thirty two Treinta y dos
Se oye como: _____

32

Thirty nine Treinta y nueve
Se oye como: _____

39

Forty Cuarenta
Se oye como: _____

40

Fifty Cincuenta
Se oye como: _____

50

Sixty Sesenta
Se oye como: _____

60

Seventy Setenta
Se oye como: _____

70

C-10

Eighty Ochenta
Se oye como: _____

80

Ninety Noventa
Se oye como: _____

90

One hundred Cién
Se oye como: _____

100

One hundred ten Ciento diez
Se oye como: _____

110

One hundred twenty Ciento veinte
Se oye como: _____

120

Two hundred Doscientos
Se oye como: _____

200

Three hundred Trescientos
Se oye como: _____

300

Four hundred Cuatrocientos
Se oye como: _____

400

One thousand _____ Mil
Se oye como: _____

1000

One thousand one hundred _____ Mil cien
Se oye como: _____

1100

One thousand two hundred _____ Mil doscientos
Se oye como: _____

1200

Two thousand _____ Dos mil
Se oye como: _____

2000

Three thousand _____ Tres mil
Se oye como: _____

3000

4000

Ten thousand _____ Diez mil
Se oye como: _____

10000

Hand tools

Se oye como: _____

Axe

Se oye como: _____



Bender

Se oye como: _____



Broom

Se oye como: _____



Bucket

Se oye como: _____



Herramientas

Acha

Doblador

Escoba

Cubeta

Cutter

Se oye como: _____



Edger

Se oye como: _____



Float

Se oye como: _____



Groover

Se oye como: _____



Cortador

Bordeadoras

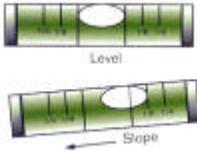
Llana

Ranurador

Hammer Martillo
Se oye como: _____



Level Nivel
Se oye como: _____



Mallet Mazo
Se oye como: _____



Nipper Cortador de Cable
Se oye como: _____



Pliers pinzas
Se oye como: _____



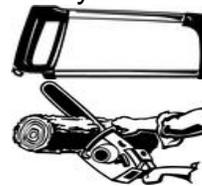
Pipe cutter Cortador de tubería
Se oye como: _____



Riveter Remachador
Se oye como: _____



Saws (hack saw or chain saw) Sierra o Serrucho
Se oye como: _____



Screwdriver

Desarmador

Se oye como: _____



Shovel

Pala

Se oye como: _____



Tape (Measure)

Cinta Métrica

Se oye como: _____



Trowel

Cuchara

Se oye como: _____



Wrench

Llave

Se oye como: _____



Materials

Se oye como: _____

Aluminum

Se oye como: _____



Block

Se oye como: _____



Brick

Se oye como: _____



Cement

Se oye como: _____



Materiales

Aluminio

Bloque

Ladrillo

Cemento

Dirt/Dust

Se oye como: _____



Tierra/Polvo

Explosives

Se oye como: _____



Explosivos

Fluid

Se oye como: _____



Fluido

Glass Vidrio

Se oye como: _____



H-Beam Viga en H

Se oye como: _____



Insulation Aislamiento

Se oye como: _____



Joist Vigueta

Se oye como: _____



Lumber Madera

Se oye como: _____



Mortar Mortero

Se oye como: _____



Nails Clavos

Se oye como: _____



Paint Pintura

Se oye como: _____



Quarry

Pedrera / Mina para extracción de roca

Se oye como: _____



Rebar

Varilla de Refuerzo

Se oye como: _____



Sand

Arena

Se oye como: _____



Timber

Miembro Estructural De Madera

Se oye como: _____



Valve

Válvula

Se oye como: _____



Water

Agua

Se oye como: _____



Workforce

Mano de Obra

Se oye como: _____

Bricklayer

Albañil / Instalador de ladrillos

Se oye como: _____



Boss

Jefe

Se oye como: _____



Carpenter

Carpintero

Se oye como: _____



Drywall Installer

Plafonero

Se oye como: _____



Electrician

Electricista

Se oye como: _____



Engineer

Ingeniero

Se oye como: _____



Foreman

Capataz

Se oye como: _____



Helper

Ayudante

Se oye como: _____



Ironworker
Se oye como: _____

Fierrero



Inspector
Se oye como: _____

Inspector



Laborer
Se oye como: _____

Obrero / Peón



Mason
Se oye como: _____

Albañil



Operator
Se oye como: _____

Operador



Painter
Se oye como: _____

Pintor



Pipelayer
Se oye como: _____

Tubero



Plumber
Se oye como: _____

Plomero



Roofer
Se oye como: _____



Surveyor
Se oye como: _____



Superintendent
Se oye como: _____



Welder
Se oye como: _____



Worker
Se oye como: _____



Equipment

Equipo y Maquinaria

Se oye como: _____

Backhoe

Retroexcavadora

Se oye como: _____



Compactor

Compactador

Se oye como: _____



Compressor

Compresor

Se oye como: _____



Crane

Grúa / pluma

Se oye como: _____



Bulldozer

Tractor / Buldózer

Se oye como: _____



Excavator

Excavadora

Se oye como: _____



Forklift

Montacargas

Se oye como: _____



Generator

Generador

Se oye como: _____



Motorgrader

Motoniveladora /
Motoconformadora

Se oye como: _____



Jackhammer

Martillo / Rompedora

Se oye como: _____



Jumping jack

Apizonadora / Bailarina

Se oye como: _____



Loader

Cargador

Se oye como: _____



Mixer

Mezcladora / Revolvedora

Se oye como: _____



Paver

Carpeteadora

Se oye como: _____



Pump

Bomba / motobomba

Se oye como: _____



Roller

Rodillo

Se oye como: _____



Screeder Allanadora
Se oye como: _____



Motorscraper Motoescrapa
Se oye como: _____



Skid steer loader Minicargador ó Bobcat
Se oye como: _____



Trencher Zanjadora
Se oye como: _____



Trowel Pulidora
Se oye como: _____



Truck (Dump) Camión de volteo
Se oye como: _____



Safety Equipment

Equipo de Seguridad

Se oye como: _____

Boots (Steel toe)

Botas (punta de acero)

Se oye como: _____



Clothing

Ropa para Protección

Se oye como: _____



Cabinets

Gabinetes

Se oye como: _____



Extinguisher

Extinguidor

Se oye como: _____



Ear Protection

Protección para los Oídos

Se oye como: _____



First Aid Kit

Ayuda de Primeros Auxilios

Se oye como: _____



Flashlight

Linterna

Se oye como: _____



Gloves

Guantes

Se oye como: _____



Goggles

Goggles / Gafas

Se oye como: _____



Hardhat

Casco

Se oye como: _____



Harness

Arnés

Se oye como: _____



Respirator

Máscara

Se oye como: _____



Signs

Señales / Señalamiento

Se oye como: _____



Traffic Cones

Conos para tráfico

Se oye como: _____



Vest

Chaleco

Se oye como: _____



Visor

Viseras

Se oye como: _____



Safety Signs

Señales de Seguridad

Se oye como: _____

Authorized

Autorizado



Solo Personal Autorizado
Se oye como: _____

Before

Antes de



Empleados tienen que lavarse las manos antes de retornar a trabajar
Se oye como: _____

Clean up

Limpiar



Prevenga accidentes, limpie los derramamientos
Se oye como: _____

Danger

Peligro



Area en construcción
Se oye como: _____

Do Not

No



No entre

Se oye como: _____

Ear Protection

Protección para oídos



Usar proteccion de oídos en esta área
Se oye como: _____

Enntrance

Entrada



Entrada solo para empleados
Se oye como: _____

Handrail

Pasamanos



Use el Pasamanos
Se oye como: _____

Hazardous



Perjudicial

Área restringida, almacen de residuos peligrosos

Se oye como: _____

Keep away



Mantenerse alejado

Área de explosiones, mantenerse alejado

Se oye como: _____

Keep closed



Mantener cerrado/a

Mantenga esta puerta cerrada

Se oye como: _____

Only



Solamente

Solo empleados

Se oye como: _____

Pedestrian



Peatón

No tráfico peatonal

Se oye como: _____

Personnel



Personal

Solo personal autorizado

Se oye como: _____

Prohibited



Prohibido

Bebidas y comidas prohibidas en esta área

Se oye como: _____

Read



Leer

Leer las instrucciones antes de servir

Se oye como: _____

Restricted



Restringido

Área restringida

Se oye como: _____

Slippery



Resbaladizo/a

Resbaladizo cuando está mojado

Se oye como: _____

Stop



Detener

Apagar maquinaria para limpiar, aceitar, o reparar

Se oye como: _____

Touch



Tocar

Equipo frágil, No tocar

Se oye como: _____

Turn off



Apagar

Apagar cuando no este en uso

Se oye como: _____

Visitors



Visitantes

Todo visitante debe obtener el pase en la oficina

Se oye como: _____

Working



Trabajando

Hombres trabajando

Se oye como: _____

Wash



Lavar (se)

Evite contaminación, lávese las manos

Se oye como: _____

Wear



Usar

Use su mascarilla

Se oye como: _____

Unsafe



Insegura

Agua no es potable

Se oye como: _____

Productivity

Productividad

Se oye como: _____

Linear

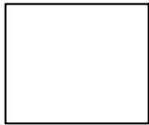
Lineal



Se oye como: _____

Square ²

Cuadrado / a



Se oye como: _____

Cubic ³

Cúbico / a

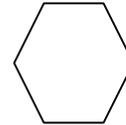


Se oye como: _____

C-30

Perimeter

Perímetro



Se oye como: _____

Area

Área



Se oye como: _____

Volume

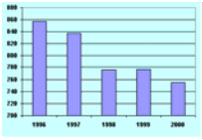
Volúmen



Se oye como: _____

Decrease

Disminuir



Se oye como: _____

Increase

Incrementar



Se oye como: _____

Quality

Se oye como: _____

Adequate tools

Se oye como: _____



What can affect quality?

Se oye como: _____

Quality is everyone's responsibility!!!

Se oye como: _____

Calidad

Herramientas adecuadas

¿Qué puede afectar la calidad?

Calidad es Responsabilidad de todos!!!

Defect

Se oye como: _____



Evaluation

Se oye como: _____



Inspection

Se oye como: _____



Defecto / Rechazo

Evaluación

Inspección

Standard

Standard

Se oye como: _____



Teamwork

Trabajo en equipo

Se oye como: _____



Violations

Violaciones

Se oye como: _____



Miscellaneous

Miscelánea

Se oye como: _____

Yellow

Amarillo

Se oye como: _____



Blue

Azul

Se oye como: _____



Red

Rojo

Se oye como: _____



Green

Verde

Se oye como: _____



White

Blanco

Se oye como: _____



Black

Negro

Se oye como: _____



Purple

Morado

Se oye como: _____



Gray

Gris

Se oye como: _____



Personal Information

Información Personal

What is your name?

¿Cómo te llamas?

Se oye como: _____

Where are you from?

¿De dónde eres?

Se oye como: _____

What is your address?

¿Dónde vives?

Se oye como: _____

How old are you?

¿Qué edad tienes?

Se oye como: _____

Are you married?

¿Eres casado?

Se oye como: _____

Do you know how to drive?

¿Sabes manejar?

Se oye como: _____

Do you have a driver's license?

¿Tienes licencia para conducir?

Se oye como: _____

In case of emergency,
Who do we call?

¿A quién llamamos
en caso de
Emergencia?

Se oye como: _____

What is your phone number?

¿Cual es tu número telefónico?

Se oye como: _____

Days of the week

Días de la Semana

Se oye como: _____

Monday

Lunes

Se oye como: _____

Tuesday

Martes

Se oye como: _____

Wednesday

Miércoles

Se oye como: _____

Thursday

Jueves

Se oye como: _____

Friday

Viernes

Se oye como: _____

Saturday

Sábado

Se oye como: _____

Sunday

Domingo

Se oye como: _____

Months of the Year

Meses del Año

January

Enero

Se oye como: _____

February

Febrero

Se oye como: _____

March

Marzo

Se oye como: _____

April

Abril

Se oye como: _____

May

Mayo

Se oye como: _____

June

Junio

Se oye como: _____

July

Julio

Se oye como: _____

August

Agosto

Se oye como: _____

September

Septiembre

Se oye como: _____

October

Octubre

Se oye como: _____

November

Noviembre

Se oye como: _____

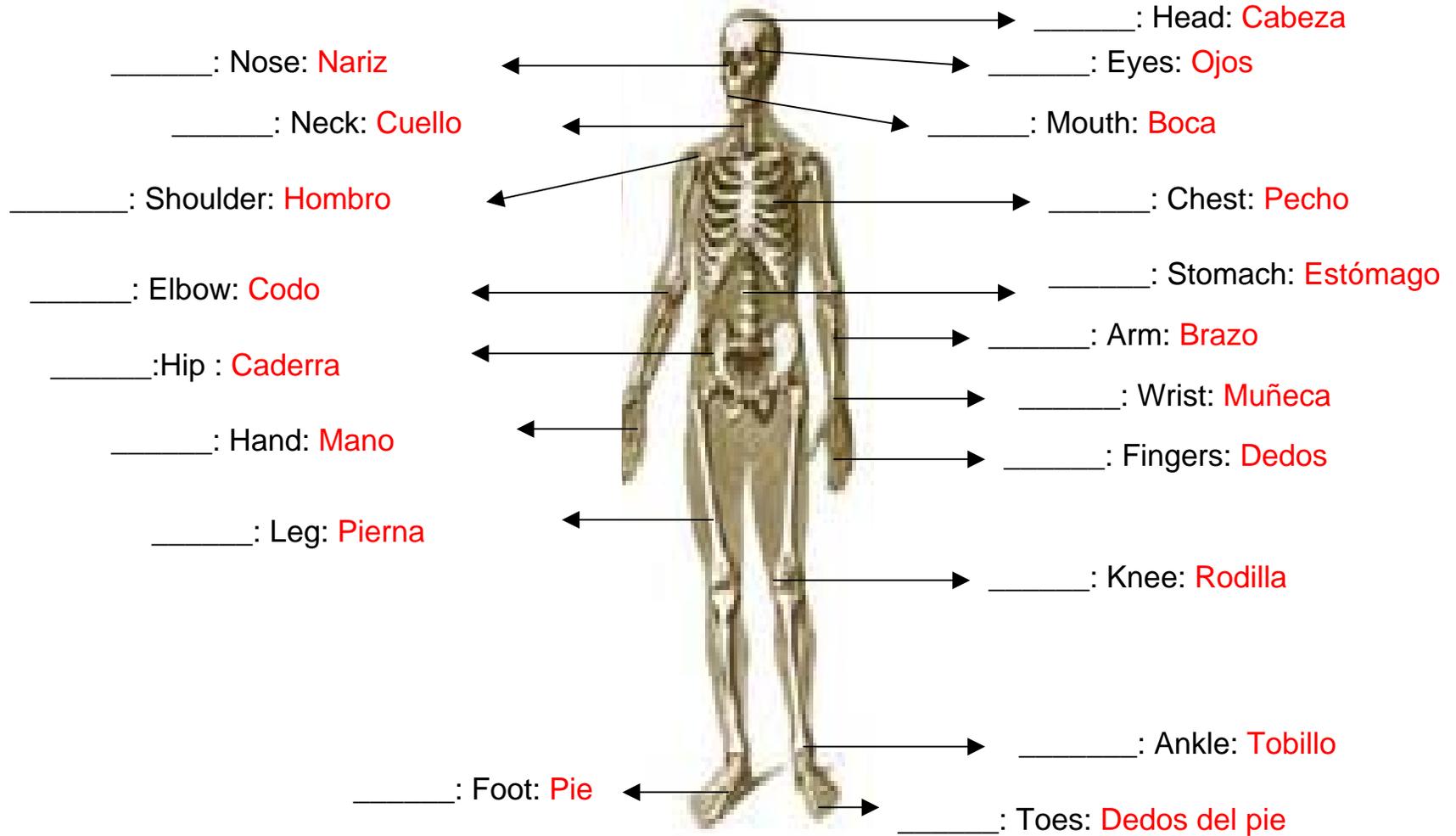
December

Diciembre

Se oye como: _____

Se oye como: _____: Anatomy: **Anatomía**

C-38



Days of the week

Monday

Tuesday

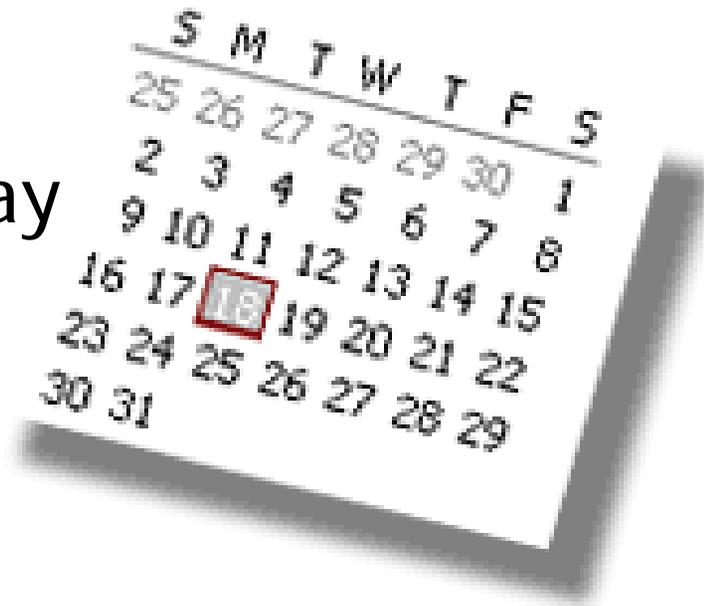
Wednesday

Thursday

Friday

Saturday

Sunday



Lunes

Martes

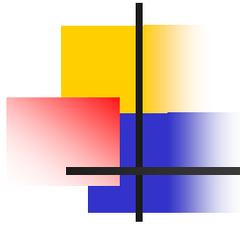
Miércoles

Jueves

Viernes

Sábado

Domingo



Months of the year



January

Enero

July

Julio

February

Febrero

August

Agosto

March

Marzo

September

Septiembre

April

Abril

October

Octubre

May

Mayo

November

Noviembre

June

Junio

December

Diciembre

Seasons of the year Estaciones del Año

Se oye como: _____



Fall Otoño
Se oye como: _____



Winter Invierno
Se oye como: _____



Spring Primavera
Se oye como: _____



Summer Verano
Se oye como: _____

Communication

Comunicación

Se oye como: _____

I. Consequences due to the lack of communication

Consecuencias de la falta de comunicación

Se oye como: _____

Safety risks and hazards

Alto riesgo de trabajo

Se oye como: _____

Low productivity

Baja productividad

Se oye como: _____

Frustration

Frustración

Se oye como: _____

Low morale

Baja moral

Se oye como: _____

Anxiety

Ansiedad

Se oye como: _____

Lack of training

Falta de capacitación

Se oye como: _____

No advancements

No promociones

Se oye como: _____

No better pay

Falta de aumento salarial

Se oye como: _____

Appendix D

Stepping Up to Supervisor Course for Hispanic Construction Workers

Stepping Up to Supervisor Course for Hispanic Construction Workers

The goal of this training course is to provide an effective tool to help the promoted Hispanic craft worker prepare for his/her new supervisory position, manage new responsibilities during the transitory period, and finally become a successful supervisor always looking for opportunities for improvement and working in a safe environment.

The following include the contents of the course by topic and subtopic:

Introduction

- It is different to be a supervisor
- The supervisor's role
- Facing the challenge
- How to handle new responsibilities
- Recommendations on how to be a successful supervisor

Part I: How to work with yourself

- Leadership
- Attitude
- Motivation
- Productivity
- How to deal with stress and anxiety
- Decision making
- Problem solving

Part II: How to work with an individual

- Factors influencing individuals
- Giving workers your opinion about their performance

- How to instruct your workers
- How to evaluate your workers
- Setting goals
- Disciplinary measures
- Terminations

Part III: *How to work with a group*

- Selecting and managing your crew
- Taking advantage of your crew members' skills
- Involving others in the decision making process
- Dealing with complaints
- Putting together an effective work team
- Job site meetings
- Crew performance

Part IV: *Key points*

- Weekly and daily schedules
- Getting the resources you need
- Assuring quality
- Enforcing safety
- Scheduling overtime
- Supervising friends
- Common mistakes

Evaluating yourself

- It is different to be a supervisor
- The supervisor's role
- Benefits of being a supervisor
- How to handle new responsibilities
- Recommendations on how to be a successful supervisor



It is different to be a Supervisor

1. After years of experience as a construction craft worker, you have been selected to advance to a supervisory position like your immediate boss's. Therefore, now you have to lead and report instead of just following.
2. You may experience some difficulties with former co-workers.
3. In this position, you are now in the middle; that is, you will have workers to supervise and bosses to report to.
3. The fundamentals you will need to be a successful supervisor in the future are not necessarily the ones that helped you to be promoted to this position.
4. You must develop new skills.

- Consider that many of your co-workers have been waiting for this opportunity as long or, perhaps, longer than you have and therefore not everyone may be pleased with your promotion.
- Authority figures vary from one culture to other. Some of your people may be more sensitive to being supervised than others.
- You will have to deal with rejection from some people with whom you used to work comfortably.

→ *Experience plays an important role at this stage. Talk to former supervisors who can guide you in facing these new challenges. Accept the new position with a positive attitude from the first day.*



The supervisor's role

1. The role of a supervisor will not always be easy; it will be a matter of attitude.
2. Supervisors must achieve a stronger authority position when facing new challenges.
3. New additional responsibilities:
 - The combination of satisfying (reconciling) not only your boss, as you have so far, but also your new crew members at the same time.
 - You are responsible for your crew's performance, which will be measured upon your own and your crew members' outputs.
 - In most cases, you to decide who will be the members of your crew.

- Make sure you clearly understand your responsibilities and those assigned to your crew members.
- You have to train your people, especially the one person who will substitute for you (temporarily) when you are not on the jobsite.
- It is your responsibility to get the job done.
- Although at the beginning it may be somewhat difficult, try to think about how your workers will react when you ask them to do something.

→ *Keep in mind that this is a new different role from what it used to be, even if you are still working for the same project or company.*

Tips:

- Be reasonably sensitive in your day-to-day activities



Benefits of being a supervisor

1. Opportunities to learn and develop new skills
2. Increased job satisfaction by now being responsible for the work you used to do
3. The possibility to obtain a better salary
4. Increased self-confidence
5. Upgraded standard of living
6. Exposure to new job opportunities as the one you just obtained.

- Take advantage of this opportunity to help your people now with additional power.
- It may appear difficult to take on so many responsibilities. But keep in mind that usually people will thank their bosses at the end when they have successfully passed the transition.
- You will be capable of responding to new challenges.

→ Be patient and maintain your positive attitude, benefits will come differently this time; they might take longer but more rewarding than expected



How to handle new responsibilities

1. The transition, considered as the initial stage of your supervisory career, is seen as the most critical one.
2. Use your experience now to create a new work style according to your new occupational requirements.
3. Before you take actions, you need to control them by planning and establishing parameters and limits.
4. The degree of firmness of your actions taken at the beginning will determine the value of your performance.
5. Recall advice from experts on newly upcoming challenges before facing them.

- Treat your crew members equally, and do not forget that you are still the same person but now with authority over those that, perhaps, are still your friends.
- Be humble.
- Keep working hard.
- Accept criticism from whomever but only retain the constructive ones.
- Always consider different ways of doing the same task

*→ There is nothing wrong with asking for advice from your new boss; on the contrary, you will learn his techniques
Remember that the fact that he is in that position means that he has already been through your position and felt the same way.*



How to be a successful supervisor

1. Establish authority from the very first day. You have to prepare this authority position in advance.
2. Learn more about the company you are working for. Finding out about previous successful and ongoing projects will give you the big picture of what your company expects from you as a supervisor.
3. Present a strongly natural and positive image.
4. Strive for a safer environment and a higher quality work on time and under budget.
5. Communication requires listening and speaking effectively with both your boss and your crew members.

- Encouragement must be followed by recognition of your worker's accomplishments in order to achieve a complete success
- Soliciting advice from your workers may mean showing confidence in their capabilities; watch out for differences among opinions.
- At this point, you already know what it feels like to be in a craft worker position. Use this experience to avoid making the same mistakes that your previous supervisors made.

→ Now you have the opportunity to help reduce those barriers that keep people from succeeding productively and safely. Show and maintain a winning attitude and do not give up, even if it seems almost impossible to be successful

Tip:

Your style may change according to your job conditions. The best approach it to match them effectively.



PART I: HOW TO WORK WITH YOURSELF

- Leadership
- Attitude
- Motivation
- Productivity
- How to deal with stress and anxiety
- Decision making
- Problem solving

Leadership

1. The first thing to work on is your attitude.
2. Understand what it means to possess and transmit a leader's authority.
3. An appropriate combination of politeness and firmness makes it easier for workers to follow your orders.
4. Generate a clear understanding of your responsibilities, particularly about implementing a team work spirit.
5. Develop confidence, trust, and support in your own ability to get tasks done, but at the same time be humble.

- Authority must be clearly understood because you are not in a position to succeed at the crew's expense, but to encourage success through team work.
- "There is a problem with...". This philosophy puts crew members in a defensive and negative mind-set. Always try to find a positive and polite way to ask for things. You should request not demand.
- Avoid the trap of becoming a dictator: Develop a strong leader personality in a gentle but firm manner.

→ *Be always courageous*
Be aware that you want to find new improvement opportunities and safer work environments, which involve more risks, therefore act prudently and results will come positively.



Attitude

1. A supervisory position requires a continuously positive attitude. Your crew members' productivity will depend on how encouraging you are to them.
2. This attitude must be kept up consistently, even under adverse circumstances.
3. Be honest with yourself, you are not expected to know everything, therefore do not feel bad about not knowing something; rather learn about it.
4. Review your work day achievements. Feel good about them, but also learn from your mistakes. This is experience.
5. Always listen carefully to your employees concerns. Develop the ability to prioritize which complaints are more valid than others. Be a good listener.

- Remember that in this new position you will usually know more than those workers who work for you. Therefore your attitude towards teaching your knowledge will be the base of their outcomes.
- A supervisory attitude should always express friendliness, and patience when necessary.
- You are now the leader of your team.

→ Attitude starts with greeting your crew members in the morning, expressing appreciation for the efforts and assistance of your workers during the day, and ends with a positive such as "see you tomorrow".



Motivation

1. Understand your motivation process. What motivates you to work, Is it the money?, Achievement?, Recognition?, Family work pressure?
2. Provide a motivating environment based on the fact that you need your employees more than they need you and that they understand what motivates each of them.
3. Be motivated to create an environment that challenges, appreciates, and respects your crew members. This should take into account that different individuals are motivated by different things.
4. Motivate yourself to develop and encourage your workers' involvement by initiating discussion about their developmental skills, providing them with constant feedback about their work, and asking for their expectations and needs on a regular basis.

- Workers come to work each day hoping that some of their needs will be satisfied that day.
- Establish the rules at the beginning and make them clear
- Provide the tools, materials, and safety equipment in place and on time required by the type of activity and those particularly asked by your workers.
- When changing job conditions, communicate in advance new approaches, directions, and priorities.

→ Motivate yourself to grow everyday and transmit a healthy motivational attitude that will lead you to grow as a person focused on your job.



Productivity

1. Now, as a supervisor, your productivity is obtained from what you produce plus the sum of what your workers produce for you.
2. Planning ahead is essential and will show you what and how to perform and get the work done in advance.
3. Establishing challenges is the key to productivity improvements. Be specific with the amount of work required to be done during a certain period of time, and when you or your workers find a promising opportunity for improving a task, accept it and try it.
4. Make records and document everything in writing will play a big role in achieving better production.
5. You must get used to carrying a notebook or pad (something to record things).

- You should always want to improve productivity. Since this is the product of a planning plus constantly effective execution between you and your team members, you should always ask for their new ideas of how to perform the work better. You can do so by listening to them and encouraging them to look for opportunities for improvement.

→ Keep in mind important daily and weekly production rates. Be clear with how much work you are expecting to get done every day, and let your crew know quantities and time for it.

Avoid:
- lack of materials, supplies, equipment tools, and manpower

How to deal with stress and anxiety

1. Understand and accept that stress will be present at different levels where assignments exist. Becoming a supervisor involves stress. You can manage and channel it.
2. Control stress effectively by creating the right channels to eliminate it before it becomes a negative factor.
3. Avoid ineffective solutions such as alcohol, drugs and medications, as well as the easy way out (such as quitting the job). Rather, identify the causes of stress and reduce them as possibly as you can.
4. Supervisors constantly face situations that seem to be out of control. Therefore, first decide what your goals and capabilities are and then take responsibilities.
5. Do not hesitate to ask for help if a situation appears to be out of control.

- A good combination of the amount of work and the leisure time will lead to reducing levels of stress.
- You, as a worker, have to balance the new stress created by being promoted.
- Your culture tends to spend a great amount of time in recreational and family activities, and now with your additional responsibilities as supervisor, it is likely that the combination can be unbalanced and therefore stress arises.

→ *Stress is commonly associated with negative consequences; however, it is necessary to keep some stress in a positive way which will force you to be creative and productive.*

Common Causes of Stress:

- deadlines
- goals
- meetings
- conflicts
- problem workers
- lack of skills or knowledge

Decision making

1. This process contains two parts: *what* decision and *how* to make it. Both of them are different in your supervisory position.
2. As a craft worker, your contribution was less visible and influential to this process; now you make the decision.
3. Making decisions depends on different factors. Therefore, decisions vary from one to another. In addition, the way you make these decisions will, of course, vary depending upon each situation.
4. You may have to: (1) tell employees your decision, (2) rely on others to make a decision, (3) put together your and their opinions to make a decision, and (4) delegate responsibility to other/s and become a coach in the decision making process.

Since this a process, you should try to follow the following steps in order to make the right decision:

- Define the problem
- Find all the influential factors and information
- Determine evaluation criteria
- Generate potential alternatives
- Choose the most appropriate alternative
- Develop a plan to develop the chosen alternative
- Announce and implement the plan
- Monitor the new outcomes

→ *At this point is when your additional cultural advantage may help you choose the right decision and announce it adequately to your workers.*

Tips:

Make sure you follow this procedure:
1. Decide whether or not the decision is necessary.
2. Ask yourself if you have the authority to make that decision.
3. Make sure you have all the information necessary to make the decision.

Problem solving

1. Now, you need to solve those problems you used to encounter as a craft worker. This is another component of the supervisory challenge. Be aware of it and make it part of your daily tasks.

2. A problem is solved successfully when the right decision is made. This process depends upon how you apply your decision making skills (previously presented) and the results will be a combination of the two.

3. A person may respond to a problem either inactively, (ignoring the situation and assuming that it will go away) or reactively, (analyzing the causes and remedying the problem), or proactively, (anticipating the problem through planning to reduce its impact if it is to occur). You must be proactive.

- An effective solution is to be prepared for the future before it arrives.
- Identify affecting factors and then prioritize them according to their impact
- Use your records as part of the solving process because some of those problems may become repetitive and you will have to use the same approach to solve them again.
- In the past, you could see that problems happen. Some can be avoided but others cannot, minimize what problems you can.

→ *Be proactive at solving problems, it is easier, faster, and less costly to anticipate problems rather than solving them when they occur.*

Suggested Techniques:

- focus
- be clear, accurate, and honest
- give feedback to your employees
- inform employees of new changes
- listen carefully and pay attention



PART II: HOW TO WORK WITH AN INDIVIDUAL

- Factors influencing individuals
- Giving workers your opinion about their performance
- How to instruct your workers
- How to evaluate your workers
- Setting goals
- Disciplinary measures
- Terminations



Factors influencing individuals

1. An individual may be influenced by internal and/or external factors. You act as an external influence. Internal factors refer to the individual's abilities, values, needs, and interests, whereas external aspects are from those conditions surrounding the individual.
2. To work with the individuals of your group you need to know their expectations, give opportunities, evaluate performance, provide feedback, and offer reward or punishment.
3. Some individuals require different attention; remember that you will have to approach some individually to get full cooperation.

- Do not exceed his/her limits by making unreasonable demands. Keep your promises about rewards or punishments.
- Try to keep yourself up to date as far as knowledge and practice is concerned. Be available as much as possible, providing guidance and solving requests.
- Establish your relationship limits with each individual, build an honest relationship and do not ever ask for something illegal or that violates the individual's values.
- Do not ask anyone to do something that you would not be able and willing to do yourself

→ *Be aware of the impact that an individual can have on the group. Approach your people at the right time and in the right place.*

Tips:
Know people in your crew individually
- needs
- interests
- motivation



Giving workers your opinion about their performance

1. Your opinion will be the key for workers to knowing whether they are doing right or wrong. Therefore, if you do not express your opinions to them, they will assume that they are performing an optimal job. When they see their co-workers being promoted, however, they may conclude that they did not do as well as the promoted.

2. Feedback comes in three types: informative, reinforcement and corrective. If change is the solution, the best way to express your feedback is in a corrective manner. Be clear, make sure they understand your opinion and ensure they will follow thoroughly.

3. Select the most important aspects of their performance as soon as you can, describing your interests, suggestions or new guidelines.

- Your feedback consists of informing the individual of positive or negative outcomes, and also of a comparison between their performance and expectations agreed upon previously. Be specific; instead of letting them know that they are doing a “good job”, be quick and precise on the details
- When correcting someone’s performance, do it privately, not in front of somebody else
- All people are valuable; therefore, make sure you let them clearly know that what you are evaluating is their performance, not them as persons

→ It will take some time for your crew members to adjust to new corrective procedures. Be patience but firm, and constantly monitor new processes on an individual basis.

Tips:

-Individuals expect honest evaluations of their performance

- Set clear goals and expectations about performance



How to instruct your workers

1. One of your goals as supervisor is to improve individual performance. In the long run this represents an improvement in total work group performance. Some workers will need to be trained more than others in different areas.
2. Once you have identified the areas in which your people need training, you need to prepare materials and procedures. When training, make proper use of training aids according to individual needs. Combine your training material with your personal experience and present practical cases in which trainees can actively participate.
3. Instruct by example, teaching your crew how they should go about performing a task.
4. People will feel grateful if they see you interested in their training.

- Perform the activity first emphasizing on what should and what should not be done, explaining potential risks and expected results, especially when equipment is involved, keep in mind that safety is a top priority
- Once you have shown how to perform the task, make them show their understanding and provide feedback
- Ask if there is any questions, concerns or whether they have a more effective approach to do the same task.

*→ Instruct others as you would like to be instructed yourself.
Do not be afraid about teaching people in your crew.*

Tips:

Exercise real-life situations in which your workers have the opportunity to practice prior to doing the real work.

How to evaluate your workers

1. Since you are in a middle position between your subordinates and management, you need to report your group's performance to your boss. Keep in mind that this is an ongoing responsibility as a supervisor.
2. Select individuals who are not fully performing from those who in fact are exceeding your expectations. You may now start the evaluation process.
3. You must compare the results achieved with the job requirements. Quality, quantity, cost, and time must be evaluated. You must look for bad habits, misunderstandings, communication barriers and safety issues.

- Follow the evaluation criteria so you do not overlook any factors that may affect your workers' performance.
- Evaluate your workers according to their physical capabilities, which may be easily measured, and to their attitude towards the job, which will require a closer evaluation.
- Total honesty is required when evaluation is performed.
- A complete evaluation not only consists of telling your workers what is wrong. It also means explaining why it is wrong and teaching them how to correct and do it right next time.

→ If your workers know from the beginning what their results should be, then when being evaluated, they will accept your corrections more easily.

Procedure
Tips:

- Monitor progress.
- Evaluate results.
- Give feedback.



Setting goals

1. In order for an individual to achieve a goal, a development plan is required. You must ask yourself two questions: What is to be performed and which procedures are to be followed?
2. Most of time there is always something to do. Be specific and clear when listing delegated activities. Define who would perform those activities the best. Provide a clear and detailed plan, start/finish dates, and schedules so that your workers can get the idea from the very beginning. In case of changes, approach them and let them know of any changes, modifications, and so on.
3. Make each individual set their own goals and help those who, need help to overcome any personal shortcomings, provide help, but you should make sure your help works effectively.
4. Set your expectations by using numerical examples, for instance LF/day, SF/day, and CY/day.

- Establish dates for reviewing work progress. Each individual will know by when they should get the work done.
- Let your workers get involved when making decisions. Their satisfaction will be significantly influenced by their degree of involvement.
- Always challenge your workers and give deserved reward.
- Present practical examples at the time of delegating the work to them.

→ *After achieving your goals, no matter what kind of outcomes you have, you still have to give feedback to each individual or reward them if necessary.*

Tips:
-Establish weekly and daily tasks and schedules.

Work
Time

Disciplinary measures

1. As you have just become a new supervisor, make sure that before you take any disciplinary actions against an individual, you know and follow the established company procedures.
2. When a problem arises, the first step to follow is to identify how serious the problem is. Based on its severity, take some appropriate action.
3. Try to follow procedures by first verbally warning the individual. A second warning should be in writing. Fire the employee if necessary.
4. Be understanding when listening to excuses. If you are not convinced, do a check to verify that the individual is telling the truth.

- Try to avoid these types of actions, especially during the first two months of your supervisory position. During this time you will gain experience and opportunities to learn more about disciplinary procedures.
- Contact your boss or someone who knows the procedures correctly.

→ Always take disciplinary actions in private, and do not talk more than is necessary. DO NOT hesitate, even if you are a new supervisor, to act promptly and ask for advice if necessary.

Tips:

Written records such as warnings will help you explain why the termination was made.



Terminations

1. Getting to this point means that you have already taken the action recommendations provided in the previous page (*Disciplinary measures*) and you still have problems with that specific individual. Review the prior disciplinary actions and check to confirm that you have followed the procedures properly.
2. If you decide that a person has to be fired, then prior to doing so talk to your boss about this decision. It is clear among the group members when someone is not doing the job properly. Pay attention to other individuals before making any decisions.
3. Express your obligations to your group, and then to the individual. Be completely honest and straight to the point.
4. After termination, be sensitive, do not blame, and focus on the positive aspects.

- Try to be clear when terminating someone, and if necessary, explain the procedure of termination you followed to get to that point.
- Establish your rules from the beginning as far as warnings and probation time periods is concerned.
- Remember that if no improvement during the probation time was made, then remove the individual from the group, but keep in mind that by doing so you still will not solve your problem with performance.

→ Do not terminate an individual before having made sure that you follow every step of the company procedure. Add authority; be straightforward, understanding and positive.

Tips:

Make sure you have followed this process before making a termination decision:

1. Evaluate.
2. Place the individual on probation.
3. Have your supervisor review the decision.

PART III: HOW TO WORK WITH A GROUP

- Selecting and managing your crew
- Taking advantage of your crew members' skills
- Involving others in the decision making process
- Dealing with complaints
- Putting together an effective work team
- Crew performance
- Job site meetings



Managing your crew

1. Crew members can make your job more or less difficult. Selecting the right persons plays the first role in your success as a crew supervisor.

2. You need to staff your work group with skilled workers, but after *finding* these skilled applicants, it is your responsibility to choose *the most skilled ones for a task*. You must make sure that the *job requirements* properly *match* their skills.

3. Once you have chosen, worked with, and know your group members, experience and outstanding performance records will help you select the workers who are ready to be promoted.

Tip:

Stick to relevant qualifications related to the upcoming job

- First, determine what you are seeking. Second, find candidates and assess their qualifications. Third, choose the ones that match the most
- Avoid over-qualified candidates. Consider qualities relevant to the job
- When promoting, remember that you have understood that new activities are to be performed and perhaps, not only good past performance records will be necessary to make the decision to promote them

→ *Get to know candidates as much as possible before including them in your crew.*
Get to know people's skills and character during actual job performance.



Taking advantage of your crew members' skills

1. To get things done, you must make effective use of your crew's skills. You need to ensure that work is done efficiently.
2. Delegation is the key once you know your people's skills. Not every worker has the same abilities. In order to delegate responsibilities you have to consider the task, the worker's proficiency, the time available, and management interests.
3. Appropriate delegation depends upon how familiar the workers are with the job responsibilities. Your goal should always be full delegation which means that you will assign some of your responsibility to the crew members. This means they have to be fully capable of making decisions.

- Be specific about the levels of delegation.
- Give the group all the relevant information you have about the task
- Decide what work can be done only by you, work that can be delegated immediately and work that can be eventually delegated
- Willingness can be just as important as ability when performing a job or role

→ Do not perform somebody else's job, delegate effectively. Always have willing and able people in your crew.

Tip:

Keep in mind that delegation may be the most difficult task for you as a new supervisor



Involving others in the decision making process

1. Making decisions is inherent to your new job. You must address two main issues in order to consistently meet the job requirements: Procedure to follow when making decisions and the extent to which others should be involved in the process.
2. You have the option to make decisions by yourself, involve others with you, or delegate the decisions to someone else.
3. You must involve others when you don't have all the information you need to make a good decision. Some situations require the group's involvement because a group working together can create more possibilities than individuals.
4. Give opportunities to those whose knowledge and experience meet your needs.

- Time is highly influencing when deciding whether or not to involve others. It might take longer for you to receive feedback from others when you have enough experience to make decisions by yourself.
- Always try to have more than one alternative prior to making a final decision.
- According to the situation, you can make the decision alone, in a meeting, or individually with each of the crew members.

→ *Getting others involved gives the sense of importance. Be careful not to show that you do not know what is going on, rather involve them as part of decision making process.*

Tips:

- Make your workers feel themselves as a part of the company's objectives. Let them know their importance and influence in the company's goals.

Dealing with complaints

1. As supervisor you have to be ready to receive complaints at any level. You may affect your worker's morale if you fail to be attentive and responsive. It is quite difficult to satisfy each member's complaints. The least you can do is to listen and provide help with the issue.
2. Keep in mind that your decisions have to be based on your company's policies. You must be unbiased during the discussions. Always take complaints seriously, even when they don't seem to be important to you.
3. Try to discuss and provide solutions as soon as possible. Putting people off will show lack of interest.

- Show concern with a fair treatment. If you are not able to solve the problem right away, let the workers know when they will have the answer.
- Take into account that your workers will sometimes take sides and omit part of the problem. Always listen to both sides of the conflict.
- Do not let your workers leave your office if you are not certain that the results were positive.

→ Do not be concerned about who is right or wrong. Act objectively with the case facts. Do not be afraid to apologize if at some point you were rude to your workers; that will build respect among your crew.

Tips:

Try to separate the group and deal with them individually

Putting together an effective work team

1. You must build an effective and strong relationship between you and your work group. Your success depends upon the success of your group. Your function is to create a group of members with willingness and high capabilities to support you.
2. Look for favorable attitudes towards the goals to be accomplished. Motivate people to perform an effective job.
3. Build cohesive teams. The feeling of being accepted within the group boosts the sense of responsibility to get the job done according to expectations.
4. You are the most important part of your team. You have to project an open, supportive, and cooperative image. Also, show confidence in your team's capabilities.

- Provide encouraging feedback.
- You are the bridge between your subordinates and your bosses. Therefore, you have to speak on behalf of your group. They will expect protection and backing from you.
- Allow your members participation as much as necessary.
- Facilitate detailed schedules, materials, equipment, tools, and supplies at the right time and in place.
- If you feel lack of confidence in your group, try to promote more group involvement.

→ Sponsor lunch breaks to promote group integrity. Off site activities are good opportunities to better integrate your group members.

Tips:

Always maintain good relationship good your crew members, even when someone disagrees...



Crew productivity

1. You can obtain positive crew productivity several ways: their outputs are more than their inputs, or if they have to reduce inputs, they get the same outputs, or if they increase inputs, the outcome represents a larger increase.

2. Now, as supervisor, you already know what affects your productivity. At this point, you have a group. After figuring out how much an individual performs, add them all up and determine how you can get an increased level of output.

3. Always look for ways to improve the productivity of your work group. There are three main components to look into to improve your crew productivity: the final product, the process, and the components of the product. You will be able to know opportunities for improvement. First look at your crew's outputs, then go backward through the activity processes and finally decide where, what, why, and how to modify the product components.

- Make sure that you make your group work smarter rather than harder. The *how* of things will help you find the most efficient ways for your group to use, so ask them *how* they think the final product could be better.
- Always provide components (materials, supplies, equipment, tools) in place and an hour earlier.

→ *The interest in doing a job may play the same or a more important role among your group members. Make sure that not only they are good at it, but also that they are happy and feel comfortable with it.*

Tips:

- provide components
- monitor and/or teach the process
- Evaluate final product, give feedback, and listen to your group members' suggestions

Job site meetings

1. Failure to schedule meetings properly with your group might result in a waste of time. Meetings should be informal. You should use simple techniques to manage the meetings.
2. As a new supervisor, meeting can be a little frightening. However, they will strength your relationship with your subordinates, letting them know your expectations. You will also receive feedback from them.
3. Every meeting has a different purpose. Be selective with the people required to attend the meeting. Make sure that the topic of the meeting is top priority for each attendee.
4. During the first two months plan on meeting with your group workers once or twice a week. Later on, when you get to know each other better, a more balanced distribution of the meetings can be arranged.

- It is practical to first select your attendees, then prepare the agenda and finally arrange the meeting place.
- During the meeting organize activities in the least amount of time. State clearly the purpose of the meeting and the outcome that you are expecting at the end of the session. You are the leader, so keep attention focused on the topic until it is resolved. Collect feedback at the end and allow time for questions or additional comments.
- After the meeting, provide your crew workers with a list of action plans and/or to-do lists.

→ *Too many meetings is as bad as no meetings at all. Balance the frequency of your meetings as well as their duration. Do not use your workers' breaks for meetings.*



- Weekly and daily schedules
- Getting the resources you need
- Assuring quality
- Enforcing safety
- Scheduling overtime
- Supervising friends
- Avoiding mistakes



Weekly and daily schedules

1. Effective schedules require not only good planning but good continuous updating effort. In the past, you used to be told when things would need to get done. Now, you are in charge of scheduling daily and weekly activities.
2. Your experience should give you some expertise in the job flow. Detailed and updated schedules will help you get the job done on time. During the process, activity durations may change as well as their sequence. Look for those activities affected by the changes you make to your schedule. Make certain to update it!
3. Always set your list of activities for each day of work, with the required labor and materials. At the end of each week, prepare your weekly summary to see what needs to be adjusted for the next week's schedule.

- Do not ever get to the job without your daily activities. Rather, at the end of each day revise your list, check what has been completed during that day, and prepare for the next day. If changes occurred, make sure you adjust your upcoming activities.
- Maintain and document your job diary. Document as much as you see happen on the job site, such use of materials, individual and group performances, suppliers, equipment maintenance, subcontractors, and any information related to your responsibilities.

→ Remember that if you update your schedules in a daily basis, weekly schedules* will not contain as many conflicts at the end of the week. Your workers need to constantly hear about progress in a daily and weekly basis.

Tip:

Be prepared for things before they happen

* Next page provides a Weekly Schedule Form

Getting the resources you need

1. At this point, you have the opportunity to ask for what you consider necessary to get activities done properly, on time, under budget, and with the best quality.
2. Analyze the actual job conditions, thus determining what is needed for now on. Ask your subordinates if there have been any problems concerning resources availability, equipment breakdowns, or any relevant information that may help you get a better concept of your new challenges and needs.
3. Work with your immediate boss once you know what is needed for the future. Include your subordinates' suggestions. Tell your boss your view point. Suggest opportunities for improvement if better resource conditions are provided.
4. Making a proper inventory now will save you from headaches later.

- Take into account that when starting out as a supervisor, it will be more difficult to identify additional resources. Make sure that you know of all available resources, even those that may not be on your job site.
- Document everything in writing from the first day. Inventories will help you keep track of the resources available and also the unavailable ones.
- Make sure your workers have and are using the appropriate tools

→ *Keep track of who is using what and when and how they used it.*
Always have handy all tools for the job.

Tips:

- Insist in supplying the resources you need
- Keep inventories as small as possible
- Keep appropriate tools



Assuring quality

1. One of your responsibilities as a worker/laborer is to perform quality work. But, now as a new supervisor you will have to look for quality from a new view point. You must assure the quality of both your work plus that of your team.
2. Encourage your people to think big. Enforce the real concept of achieving quality from start-to-end by creating a free-error attitude within your workers.
3. Make it clear that quality must be considered with a long-term perspective. Quality won't only benefit an individual or a project, but it benefits the entire group, you, and the company.
4. You must conduct inspections. Make sure that standards are understood the first day.

Tips:

- Assure quality by making your people aware of the benefits obtained when quality is in them.
- Avoid re-work

- Good quality is obtained from constantly and appropriately monitoring a process. More than having a group of hard workers, you are now in charge of creating an environment that encourages workers to keep errors minimized
- There will always be more beyond an achieved goal. Keep on looking for opportunities for improvement
- Avoid re-work as much as possible

→ *Tell your workers how much they influence the company's results and encourage them to think of quality as a benefit for themselves.*



Enforcing safety

1. Make this process take place in your daily and weekly activity lists. The process consists of creating and implementing a safe environment for any person in or near the jobsite.
2. Creating safety programs is the first step. As a new supervisor, you need to be aware of all the details related to your jobsite. Past incidents, risks, accidents may give you additional awareness and help you prepare during the transition.
3. Once you have become familiar with the jobsite, alert your subordinates, and especially yourself, of facts and possible risks.
4. Make training the key tool to ensuring safety. Pay closer attention if you have new crew members.

- Be concerned not only about what and how your workers do at work, but also about what and why they do not do.
- If you are taking over someone else's position, then DO NOT start getting prepared from the first day. Look back and ask more about jobsite precedents.
- Construction projects face several types of risks. Remember that you may end up being responsible for persons or actions you did not think could be affected by your actions.

→ *Talk with your crew about accidents in the past, increasing trends, and if necessary, bring up the fact that your culture is the most affected one in the construction sector.*

Tips:

When deciding about what goes first among quality, safety, or productivity always put **SAFETY FIRST**



Scheduling overtime

1. You will find the two types of people to choose from: those who want all the overtime they can for financial purposes, and on the other hand, those will not do anything beyond their regular work hours.
2. Try to keep your labor force balanced. Avoid scheduling workers who do not want to be at work if possible. The difficult part herein is to schedule people to work overtime. Be fair and understanding.
3. If you see workers taking advantage of the fact that you as a new supervisor will not notice whether or not they are loafing during the day so they can work overtime, then transmit the message that you are considering eliminating overtime.
4. Give special consideration to employees with kids

- Keep in mind that even those workers initially willing to get some overtime will reach a peak in their productivity after a certain point. Their overtime productivity will begin to decrease; at that point, overtime is not longer a good solution to your setbacks
- Let your workers know well in advance that they have been scheduled to work overtime
- Consider conflicts such as family issues and time conflicts

→ *A good way to avoid overtime is to avoid promising completion dates that cannot be met.
A detailed and realistic schedule avoids unnecessary overtime.*

Tips:

- Work overtime when absolutely necessary
- Consider other alternatives to earn more money



Supervising friends

1. It is quite normal that you will have to deal with former co-workers you used to work with. It is expected that both you and your “friends” will adjust quickly and properly.
2. During this transitory period, avoid showing any kind of favoritism. There may be some similar friendship aspects influencing you and your workers such as practicing the same sports and family activities.
3. Keep a workplace relationship and avoid that from extending to other interests. Also emphasize that you, do not want your promotion to harm your friendship.
4. In situations when a friend gets difficult to supervise because you became his/her boss, you will have to consider ending your common interests or transferring to another crew.

- Remember that it is you who was promoted to supervisor and therefore it is you who make the difference as to how to manage the transition.
- Downplay your friendship, especially during your initial transition time. However, do not try to hide the friendship

→ *Setting your friendship limits during your transition is the key to supervising your former co-workers.
Do not let your friendship affect the performance of your work.*

Tips:

- Separate work from friendship
- Set your friendship limits
- Downplay existing friendship with former co-workers



Avoiding mistakes

1. As a part of your preparation, you should also be aware of common mistakes that frequently occur to new supervisors:

- Forget to set effective examples for subordinates to follow
- Misunderstand the concept of friendship
- End up being unfair when trying to be firm
- Make promises that eventually cannot be kept
- Lose credibility from workers by making a decision one way today and another way tomorrow
- Show false favoritism when trying to give recognition for outstanding performance
- Fall in the habit of making excuses
- Take the blame for someone else's mistakes
- Avoid providing assistance to workers by referring them elsewhere
- Feel tested when workers ask questions
- Overload workers
- Overlook quality to keep the job on schedule and under budget
- Overreact when workers make mistakes
- Assume they know something when in fact they are uncertain

Tips:

- Always remember you are new in your job
- If you do not know something, do not say: "I don't know," and find out who does

→ *When something goes wrong, accept the mistake and do not try to make excuses.*



EVALUATION

	YES	NO
1. Are you willing to use a portion of your personal time in training your crew?	<input type="checkbox"/>	<input type="checkbox"/>
2. Do you think that the more capable a worker is, the more work should be delegated to him?	<input type="checkbox"/>	<input type="checkbox"/>
3. Do you think that raising your voice could be an effective way of showing authority?	<input type="checkbox"/>	<input type="checkbox"/>
4. Are you willing to take someone else's responsibilities?	<input type="checkbox"/>	<input type="checkbox"/>
5. Do you feel technically prepared to perform the tasks that will be assigned to your crew members?	<input type="checkbox"/>	<input type="checkbox"/>
6. Do you think that your workers will respect you if you constantly look over their shoulders to make sure their work is being done right?	<input type="checkbox"/>	<input type="checkbox"/>
7. Would helping your crew make you reach your goals more effectively?	<input type="checkbox"/>	<input type="checkbox"/>
8. Do you give special consideration to those workers with family problems?	<input type="checkbox"/>	<input type="checkbox"/>
9. When making decisions, do you take your workers' ideas into account?	<input type="checkbox"/>	<input type="checkbox"/>
10. Do you find it necessary to let your workers know more about the company's goals?	<input type="checkbox"/>	<input type="checkbox"/>

EVALUATION

	YES	NO
11. Do you keep your records in writing?	<input type="checkbox"/>	<input type="checkbox"/>
12. Do you give special treatment to those former co-workers you used to work with?	<input type="checkbox"/>	<input type="checkbox"/>
13. Are you willing to accept criticism from your boss, fellow supervisors, and even from your crew workers?	<input type="checkbox"/>	<input type="checkbox"/>
14. Do you think that admitting a mistake will affect your authority as a supervisor?	<input type="checkbox"/>	<input type="checkbox"/>
15. Are you willing to continue taking training courses to improve your supervisory skills?	<input type="checkbox"/>	<input type="checkbox"/>
16. Do you think that you can make your crew's work better by becoming a supervisor?	<input type="checkbox"/>	<input type="checkbox"/>
17. Do you use external methods to keep your stress and anxiety under control?	<input type="checkbox"/>	<input type="checkbox"/>
18. Do you maintain a positive attitude at all times, even in difficult situations?	<input type="checkbox"/>	<input type="checkbox"/>
19. Are you willing to change you habits and personal relationships prior to becoming a supervisor?	<input type="checkbox"/>	<input type="checkbox"/>
20. Do you instruct your workers the same way you would like to be instructed?	<input type="checkbox"/>	<input type="checkbox"/>
21. Do you think that teaching your workers will affect your advancement opportunities?	<input type="checkbox"/>	<input type="checkbox"/>

EVALUATION

	YES	NO
22. Do you think that a good feedback technique is to make your workers show you what you just taught them?	<input type="checkbox"/>	<input type="checkbox"/>
23. Would you delegate work to your workers which you would not be willing to do yourself?	<input type="checkbox"/>	<input type="checkbox"/>
24. Do you feel responsible for helping your workers' personal and work problems?	<input type="checkbox"/>	<input type="checkbox"/>
25. Do you care about your workers feeling comfortable with the work they are asked to perform?	<input type="checkbox"/>	<input type="checkbox"/>
26. Do you promote confidence among your crew members?	<input type="checkbox"/>	<input type="checkbox"/>

EVALUATION

Circle one answer:

27. What is more important to you?

- a. finishing the job on time
- b. finishing the job under budget

28. Which of the following do you consider the most important?

- a. productivity
- b. quality
- c. safety

29. In the case of a potential problem, would you rather spend some time...

- a. ...planning how to avoid the problem?
- b. ...solving it when it occurs?

30. If you have a problem, do you try to...

- a. solve it immediately?
- b. understand why it occurred?

31. During a day of work,

- a. do you rely on your memory to keep track of your job?
- b. do you document everything in writing?

32. When solving a problem,

- a. do you come up with innovative solutions?
- b. do you ask for advice to find standard procedures?



EVALUATION

Circle one answer:

33. Would you delegate overtime to workers who:
- a. are willing and need extra money
 - b. are more capable of doing the job faster
34. What satisfies you the most:
- a. only getting the job done
 - b. finding more opportunities for improvement
35. Do you correct a worker's performance...
- a. individually
 - b. in front of the rest of the group
36. If one of your workers is not doing the job correctly,
- a. do you delegate the task to someone else
 - b. do you correct the worker and teach him/her how to do it correctly
37. When a task is accomplished successfully,
- a. do you let your workers know that they did a good job
 - b. do you assume that a good job is always expected and do not provide any positive feedback
38. When do you think is more effective to establish your standards and leadership position?
- a. From the very first day of work
 - b. During the process



EVALUATION

39. Name three situations in which a worker's contract should be terminated.

40. How long do you think it will take you to be promoted to a higher position?

41. How often do you think that group meetings should be held?

42. What is the best time and place for you to provide feedback to your workers?

43. Assign number 1 through 6 according to the degree of importance you would give to the following aspects. (*1 is the most important, 6 is the least important*)

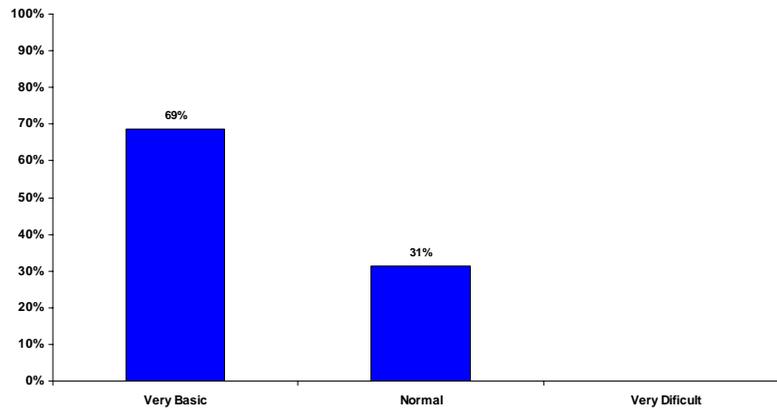
- ___ Communication
- ___ Leadership
- ___ Motivation
- ___ Recognition
- ___ Feedback
- ___ Record keeping



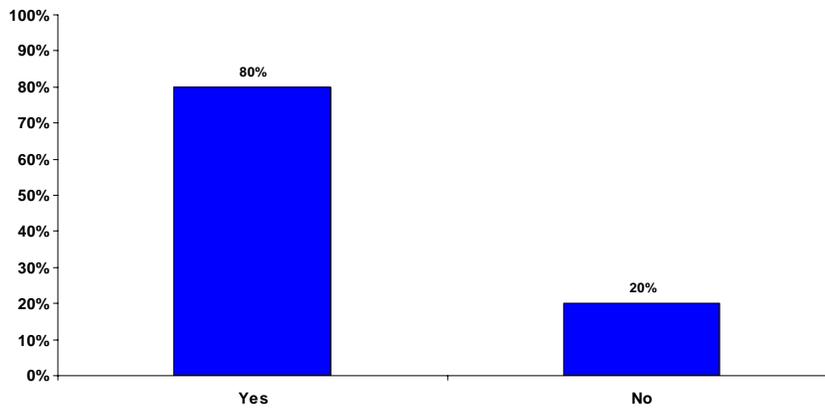
Appendix E

English as a Second Language Survival Course Evaluation Results

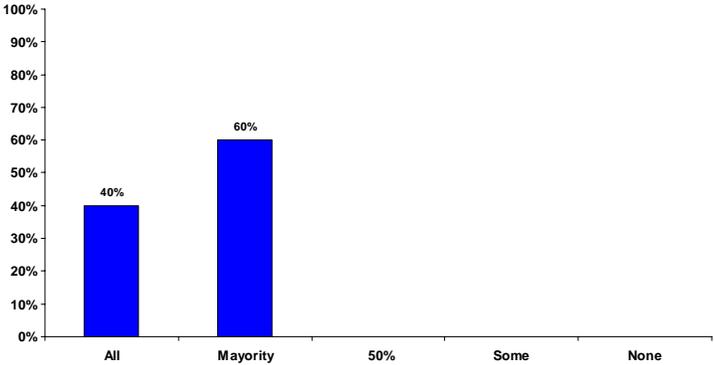
Course Content



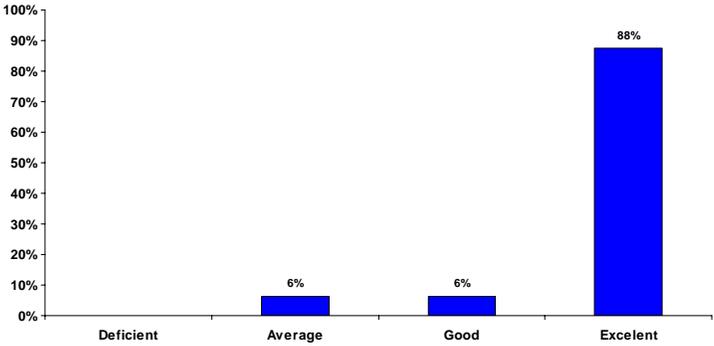
Was the course easy to follow?



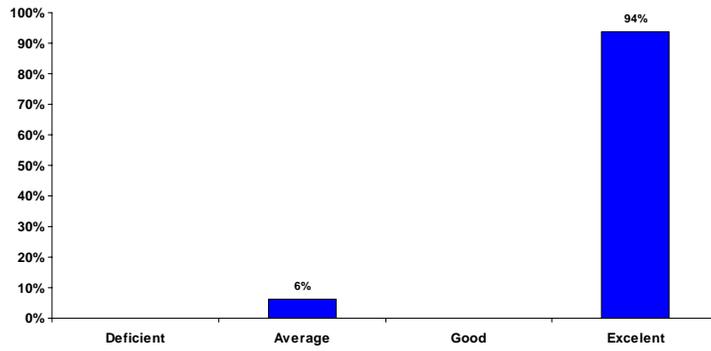
How much of the information provided is going to be useful in your working environment?



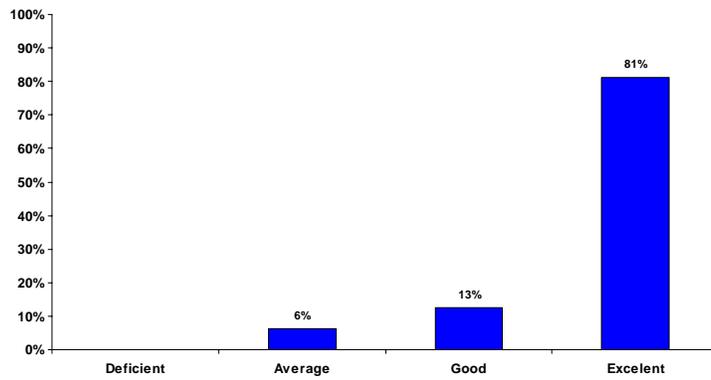
Did the instructor had knowledge of the subjects discussed during the course?



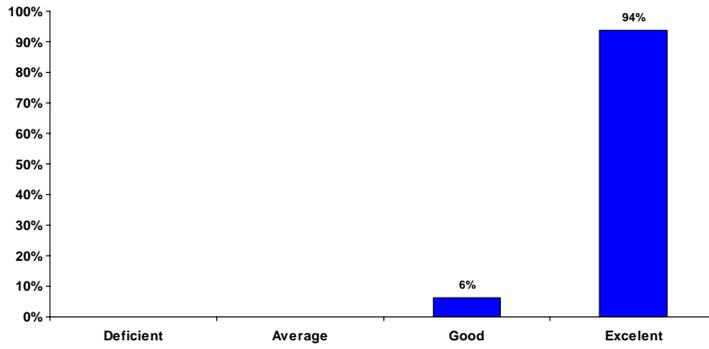
Was the instructor communicating clearly?



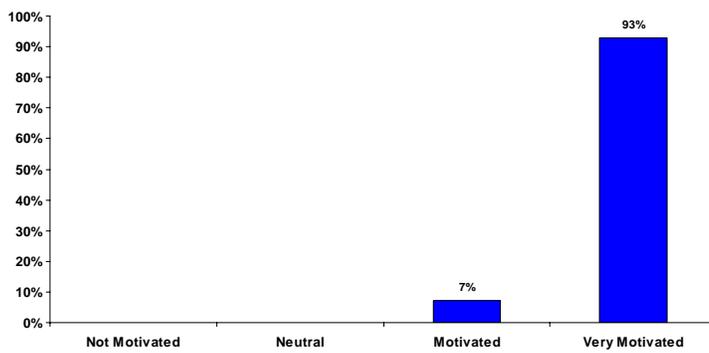
How good were the teaching aids used for this course?



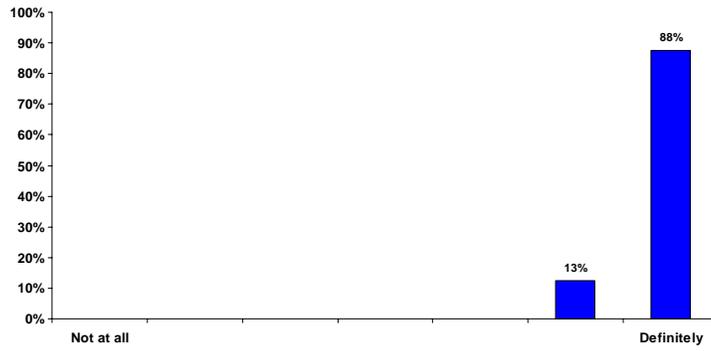
Were all questions addressed to the instructor answered appropriately?



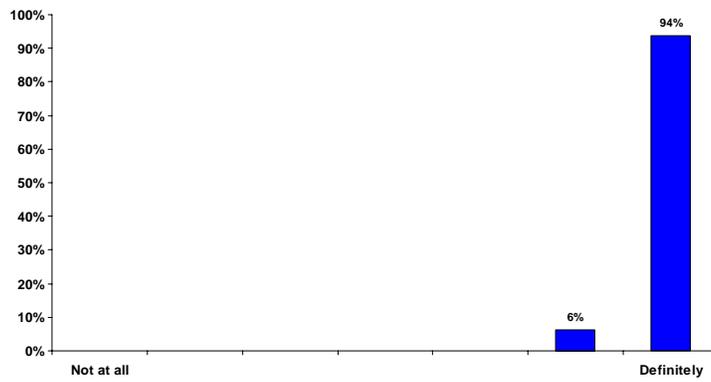
How motivated was the instructor to teach you the course?



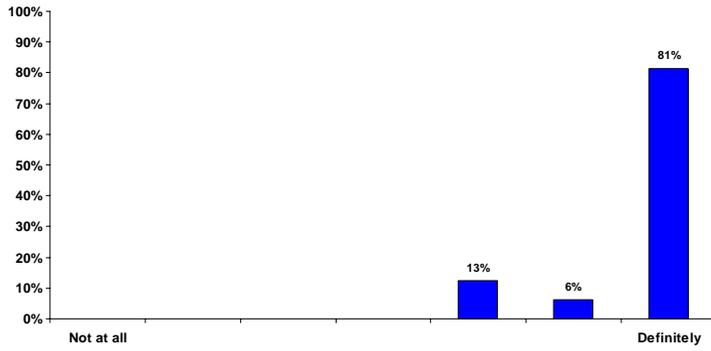
Was the course what you expected?



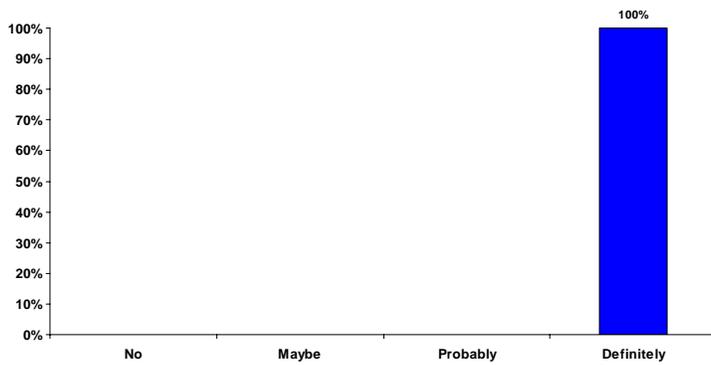
Was it worth taking the time to attend the course?



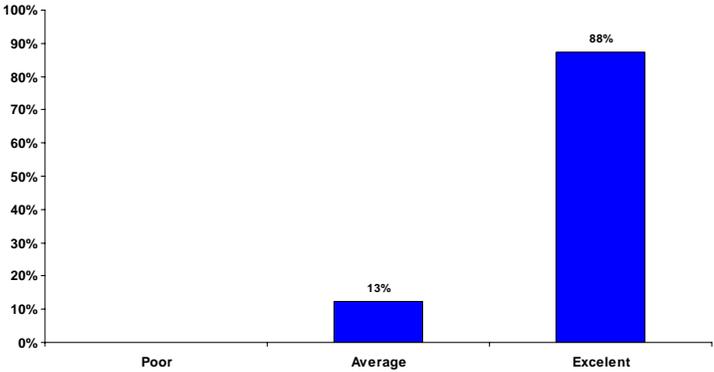
Did your confidence grow?



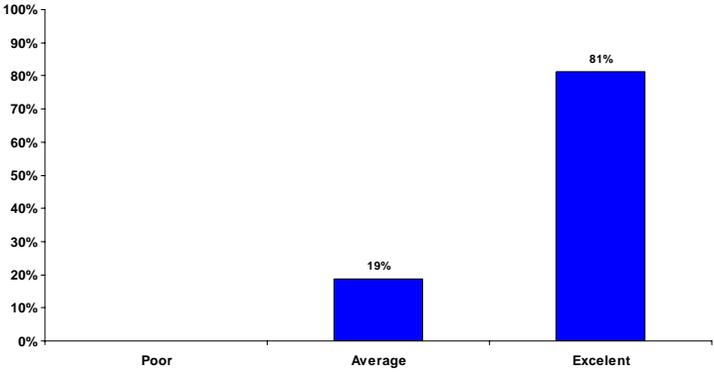
Would you recommend this course to others?



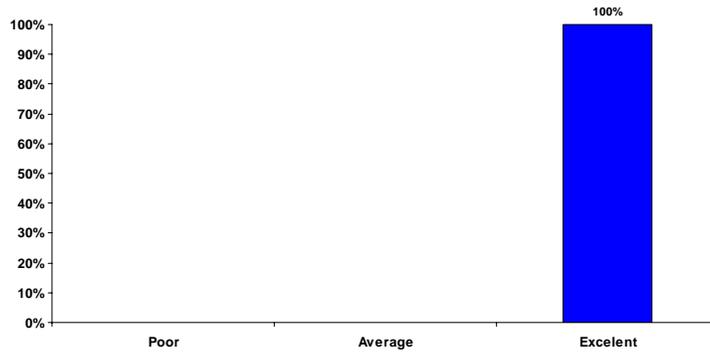
How would you qualify the workbooks?



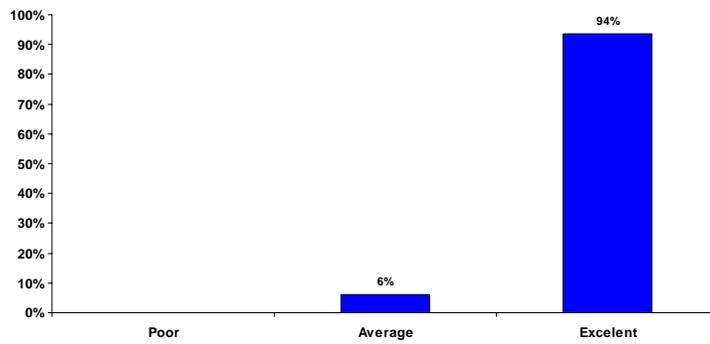
How complete was the content of the workbooks?



Where the workbooks specific enough?



How useful were the course activities?



How would you qualify the classroom setting and equipment?

