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**Yang, Bee. *Developing an Effective Training program for First Generation Hmong Employees in Manufacturing Positions***

**Abstract**

Research was conducted to find if there are ways that technical training can be offered in a fashion that addresses the learning needs of the first generation Hmong employees working in manufacturing positions. These employees are employed in positions that require them to learn and understand how to use technical equipment as part of their jobs. A total of 14 first generation Hmong individuals participated in the interview, which consisted of six questions.

The analysis of results revealed the following common themes:

- (1) The limited ability to speak, read and understand English amongst first generation Hmong creates barriers to learning the operation of technical equipment during training and in the workplace;
- (2) The Hmong believe that on-the-job and hands-on training are the most beneficial forms of training for them;
- (3) Having more time available to utilize the technical equipment is important to improve the Hmong understanding of the equipment and performance.

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## Chapter I: Introduction

The Vietnam War caused the Hmong to leave Laos, their native homeland. Laos, a country located in Southeast Asia were involved in the Vietnam War of 1955 due to the spread of communism. Communism is a political system that allows the government to take control of all the capital and industry in the country. During the war, the Hmong supported the United States to prevent the spread of communism. If the Hmong stayed or returned to their homeland, they could have encountered punishment that could potentially lead to execution by the communist North Vietnamese government. After the Vietnam War ended in 1975, the Hmong relocate and settle in many different parts of the world. The immigration process among the Hmong population did not become well known until the early 1980's (Arguelles, 2003). The majority of the Hmong people settled in the United States, across different states. Three states that have attracted Hmong population are California, Minnesota and Wisconsin.

Upon their arrival in the United States, the Hmong people experienced culture shock. Housing such as rented apartments/homes in America have limits to how many people can live in them. Land properties are owned by individual owners or through the state (Lindsay, 2013). According to Va Vang an elderly Hmong women, the living condition and land property in Laos is very different from that in America. In Laos, individuals Hmong families build their own homes and there were no limit to how many people can live in them. The lands were not owned by individual owners or state and are open for anyone that pleases to enter (personal interview, February 16, 2015). The majority of the Hmong people in Laos were agriculturalists, also known as farmers. Hmong families grew their own crops and raised their own animals such as chickens, ducks, pigs, and cows to support their own families. Any other employment opportunities were very limited. If employment was available, it involved trading or performing

services for other Hmong villagers. Education was also extremely limited in Laos. There were no schools or instructors at that time to help educate the Hmong villagers. Instead, the elders through their life experiences transmitted knowledge orally. Vang (2015) also indicated that many Hmong families viewed education as unnecessary because the elders taught the essential needs for survival (personal interview, February 16, 2015).

In the United States, the Hmong people had to adapt to American culture in order to be able to support their own families. The Hmong people needed education to understand and comprehend how to read, write and speak in English. Finding a job in America can be difficult for many Hmong people because with the lack of education and language. Small portions of the Hmong people are able to find jobs that are hourly positions in manufacturing. Referring to the report of “The State of The Hmong American Community” (2013), there are 29% of Hmong workers that are employed in manufacturing jobs (Vang C. Y., 2013). Manufacturing jobs are in production facilities that required labor workers to operate equipment/machinery converting raw materials to finished goods to meet the needs and expectations of the organization and for the customers.

Today, technology is gradually increasing and expanding throughout the American industry. Manufacturing companies are using advance technical equipment in the workforce to increase production and still deliver effectiveness and efficiency throughout the organization. This results in job loss for many first generation Hmong employee who are not well trained in the use of technical equipment provided by the organization in the manufacturing workplace. The Hmong are at risk because their culture lacks the use of technology that involves them operating technical equipment. Thong Lee Yang (2015), a first generation Hmong indicated that working with technical equipment had not been a part of the Hmong background knowledge



prior to coming to the America (personal interview, February 16, 2015). Today, many Hmong employees are faced with and are having difficulties with the operation of the equipment in the manufacturing work environment.

### **Statement of the Problem**

In the manufacturing workplace, some first generation Hmong employee are struggling with the advanced technical equipment that companies are utilizing to carry out daily tasks and procedures. Without the appropriate training designed to meet the learning style of the first generation Hmong employees, their employment in the manufacturing jobs is in jeopardy. Language and cultural barriers need to be considered and addressed when developing training.

### **Purpose of the Study**

The purpose of this study is to find if there are ways that technical training can be offered in a manner that addresses the learning needs of the first generation Hmong employees. With the advancement in technology, more manufacturing companies will be utilizing technical equipment to benefit the organization and stay competitive. Data was collected through individual interview sessions with first generation Hmong who had experienced working with technical equipment in the manufacturing setting.

### **Assumptions of the Study**

In regards to this study, the following assumptions exist:

1. The first generation Hmong employees did not have proper training when they were hired.
2. The Hmong employees were not able to read and comprehend the training manuals provided by the organization.

3. There were no written tests or hands-on tests to demonstrate if the Hmong employees actually learned and understood the training materials.
4. The trainers did not suggest any feedback to improve their training program for the Hmong employees.
5. There was no follow-up from the trainers to check how well the Hmong employees are performing in the workplace.

### **Definition of Terms**

**Ethnic.** “Of, relating to, or characteristic of a sizable group of people sharing a common and distinctive racial, national, religious, linguistic, or culture heritage” (Webster’s New College Dictionary, p. 393).

**Immigrate.** “To enter and settle in a country or region to which one is not native” (Webster’s New College Dictionary, p. 566).

**Culture.** “The totality of socially transmitted behavior patterns, arts, beliefs, instructions, and all other products of human work and thought typical of a population or community at a given time” (Webster’s New College Dictionary, p. 281).

**Trade.** “An occupation requiring skilled labor. The business of buying and selling commodities” (Webster’s New College Dictionary, p. 1195).

**Technology.** “The application of science esp. to industrial or commercial objectives. Electronic or digital products and systems considered as a group” (Webster’s New College Dictionary, p. 1159)

### **Limitations of the Study**

The limitations in this study included:

1. Only first generation Hmong immigrants who had experienced working with technical equipment in a manufacturing setting were interviewed.
2. The respondents' only included only participants aged 40 through 62.
3. Not all Hmong who had experienced working with technical equipment in a manufacturing setting were willing to be interviewed.
4. Participants in the research are limited to family members, relatives and friends of the researcher.

### **Methodology**

The method in this research study includes a six-interviewed questions based on the literature review in chapter 2. Four of the interview questions refer to the participants' job responsibilities and how they were trained; with two additional open ended questions. The participants include male and female first generation Hmong who had experience working with technical equipment in the manufacturing workplace. The data gathered in the interview will be analyzed qualitatively such as common themes and patterns. The results will help the researcher find if there are ways technical training can be offered in a manner that addresses the learning needs of the first generation Hmong employees.

## **Chapter II: Literature Review**

Some first generation Hmong employees are being exposed to advanced technical equipment in the manufacturing workplace. Because they have no background in using this kind of equipment, they are at a greater risk of losing their jobs due to a lack of understanding of the use of technical equipment provided by manufacturing companies. The following literature review explores the following areas: who are the Hmong and their level of education and employment status in America; what is manufacturing and why do companies implement technical equipment; and how do adults learn when there is a need to acquire a new set of skills.

Many manufacturing companies do not realize that the Hmong have little to no experience utilizing technical equipment. Operating machines and equipment is a big part of America's industry because it is a necessary element of the manufacturing process. Hmong employees will need to adapt and learn the technical skills to utilize the equipment provided by their company in order to be successful in their job and for the organization.

### **Who are the Hmong**

The Hmong have two different identity names when referred in two separate countries. In China, the Hmong were known as Miao, and in Laos, they were known as Meo. The Hmong find the term Meo offensive when called upon when referring in Laos because in the Lao language, the term has a similar sound to the word meaning "cat" (Duffy et al., 2004). The Hmong form one of the many tribal minorities known as Miao/Meo (Lee, 2005). The ethnic name can be used to determine the language that is spoken by each different group. The social organization of these groups can also be based on each clan through sharing surnames to those of Chinese. Although the Hmong have migrated out of China, the Hmong do not have their own written records of where the Hmong actually originated (Lee, 2005).

The Hmong language is tonal and related to the Sino-Tibetan family (Duffy et al., 2004). There are two different dialects in the Hmong clan: White Hmong, and Green Hmong. These two dialects are the most common language spoken by the Hmong people. The Hmong Der represents “White Hmong” and the Mong Leng represents “Green Hmong” (Duffy et al., 2004). Both dialects are in the Hmong branch of the Hmong Mien family spoken in the Southeast Asia and southern China. Before the Vietnam War invaded Laos, Hmong Der and Mong Leng lived in separate villages because of not being able to understand the types of language that were spoken between them. More than half of the words that the Hmong Der and Mong Leng speak are Chinese in origin (Duffy et al., 2004).

The Hmong people have been migratory for thousands of years and moved from place to place. More than 5,000 years ago, the ancestors of the Hmong lived in northeastern China. Due to the high population growth and scarcity of resources, the Hmong had to migrate to Southeast Asia and settled on the mountaintops of North Vietnam, Laos and Thailand (Cha, 2004). The Hmong are a distinct group of people originating from China to settle in the highlands of Southeast Asian countries. Although many Hmong have left the country, some Hmong still remain and continue their lives in China.

### **Hmong Education**

The Hmong are oral learners and lack the alphabet and knowledge of basic literacy processes in their own language. Many Hmong people did not know how to read or write in the late 1950s (Duffy et al., 2004). When the Hmong migrated out of China and resettled in the northern mountains of Southern Asia, there were no public schools. Public schools were not available in the areas that the Hmong had settled.

The rate of Hmong who did not read or write was as high as 99%, while a 1986 study by Karen Green and Steven Reder of 20 Hmong refugee families in the United States indicated that 80% of those surveyed could not read or write Lao, and 70% could not read Hmong (Duffy et al., 2004, p. 25).

When the Hmong soldiers became vital to the CIA in Laos, the Hmong found that they had leverage over the Royal Lao Government and wanted to make several demands supported by the United States (Duffy et al., 2004). One of their demands was to have a greater access to public education. In support, the United States Agency for International Development (USAID) helped finance an intensive school construction program for the Hmong students in Laos.

The U.S. program helped build nearly 300 elementary schools, 9 junior high schools, and 2 senior high schools. Teachers were also provided. A study of the Hmong school enrollment rates during this period rose from 1,500 students in 20 schools in 1960, to 10,000 students by 1969. All students who were enrolled in schools learned how to read and write in Lao, studying a curriculum of Lao history, government, and ethics (Duffy et al., 2004, p. 27).

The Hmong continued their education in Thailand after the Vietnam War invaded Laos. It was Thailand where the Hmong adults learned English and obtained vocational training (Duffy et al., 2004).

### **The Vietnam War**

The Vietnam War was the impetus that forced the Hmong to leave their country and settled in different countries around the world. The North Vietnamese attacked the South Vietnamese in an attempt to expand communism all over Southeast Asia (Cha, 2004). Therefore, the Hmong became involved with the conflict because their home, Laos, bordered

Vietnam. The Hmong supported and became allied with the United States in 1960's to prevent the North Vietnamese communists from taking control of Laos. "The Hmong were highly skilled at the rescue of American pilots shot down by North Vietnamese and Pathet Lao soldiers, as well as in the protection of American radar inside Laos" (Cha, 2004, p. 8). The CIA was able to make friends with Southeast Asian Hmong and trained local people to defend themselves from attacks by the communists.

After the Vietnam War ended in 1975, the communists took over Vietnam and Laos. The Hmong were targeted by the communists for persecution due to helping and supporting the US army. The Hmong had limited choices, and decided to flee to the refugee camps in Thailand. Some Hmong were fortunate and had already been provided refuge in the United States, while others were not so fortunate and left behind to take care of themselves (Cha, 2004). After settling in the refugee camps in Thailand, many Hmong left the refugee camps and resettled in third countries such as United States, Canada, Australia, France, South America, and many other countries to start their life over.

### **Hmong Settlement in the United States**

The United States, along with Congress started allowing Hmong people into the states in December of 1975 (Bankston, 2014). In 1975, there were 3,466 individuals that were admitted into the United States and within the next following year, 10,200 additional refugees were admitted again to the states, part of which was the Hmong population (Bankston, 2014). There were 50,000 Hmong individuals living in the United States by the 1980's (Bankston, 2014). In the early 1990's, the Hmong population doubled to nearly 100,000 (Bankston, 2014).

The determination of location for the Hmong people was dependent upon voluntary agencies such as churches and sponsors, when coming into the United States. Various groups

were scattered in 53 different cities, within 25 different states (Bankston, 2014). After settling in the United States, the majority of the Hmong people resided in states that included California, Minnesota, and Wisconsin (Bankston, 2014). In the west coast of California, there were 43,000 people settling throughout Fresno, Merced, Sacramento, Stockton, Chico, Modesto and Visalia. The Hmong population in Minnesota estimated to be about 70,000, following with 16,000 in Wisconsin (Bankston, 2014).

### **Hmong Employment in the United States**

In America, the amount of people percentage in the labor force is about the same for the Hmong and U.S American. The U.S citizens employed about 59% in the labor force while the Hmong labor force employed 57% (Vang C. Y., 2013). The unemployment rate for the U.S population in 2013 is 6% and 8% is for the Hmong population (Vang C. Y., 2013). Both U.S American and Hmong had similar labor force employment and unemployment rate when compared in 2013. However, there are significant variations when comparing just Hmong labor force across the U.S. Table 1 below shows the percent of Hmong civilian in the labor force and the percent employed in each state. The highest percentage in the state labor force is Georgia (79.4), followed by Colorado (77.5), North Carolina (74.1), Arkansas (73.8), and Wisconsin (70.2). The lowest percentage of participation in the state labor force is Oregon (56.8), followed by California (58.2), Washington (60.1), Oklahoma (63.5), and Minnesota (65.1).



Table 1

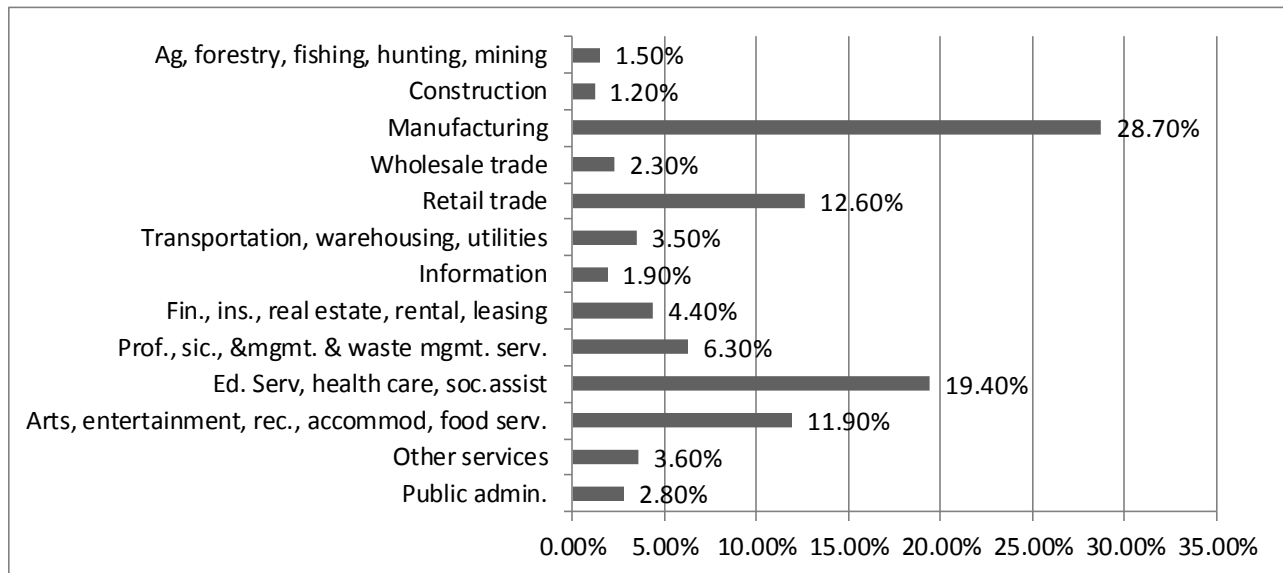
*Hmong Employment Status in the United States*

State	% Civilian Labor Force	% Employed
AK	73.8	68.2
AR	67.4	59.7
CA	58.2	49.6
CO	77.5	75.2
GA	79.4	71.4
MI	65.5	54.9
MN	65.1	57.3
NC	74.1	66.9
OK	63.5	55.8
OR	56.8	52.8
WA	60.1	53.1
WI	70.2	62.5

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(Vang C. Y., 2013, p. 21)

According to the 2010 U.S. Census Report, the Hmong concentrated heavily in the manufacturing jobs at 29% compared to other occupations in the U.S (Vang C. Y., 2013). Wisconsin employed 18% of the state's population in manufacturing jobs whereas 40% of the Hmong population works in this industry; Minnesota employed 30% in the manufacturing industry compared to 14% of the state's population; and California employed 10% of the state's population in manufacturing jobs and 15% of the Hmong population works in this industry (Vang C. Y., 2013).



*Figure 1.* Shows the occupation by industry of U.S Hmong population. The statistic illustrations that Hmong are employed more heavily in the manufacturing sector (28.70) percent than any other occupation. Hmong are employed the least in construction.

(Vang C. Y., 2013, p. 22)

### **U. S Manufacturing Companies**

Manufacturing starts with raw materials, such as metals, semi-finished materials, or subsystems (Dickens, Kelly, & Williams, 2013). A manufacturing company is an organization that uses components, parts or raw materials to make a finished good. The finished products can be either sold directly to its consumers or to other manufacturing company and use them to make a different product. Manufacturing work settings are often operated as an assembly line, where a process of products is put together in a sequence from one workstation to the next (Dickens, Kelly, & Williams, 2013). This process includes machines, robots, computers and human skills to create a specific product. Manufacturing is important to the United States due to its drive on economy and global competition (DeRocco, Duesterberg, & Kilmer, 2009).

The United States manufacturing sector is the eighth largest in the world, which generated \$1.64 trillion worth of goods and increase in industrial output in 2008 (DeRocco, Duesterberg, & Kilmer, 2009). For the 10 years ending in 2008, the manufacturing value added has increased 22 percent (DeRocco, Duesterberg, & Kilmer, 2009). Manufacturing supports millions of U.S. employee jobs and other sectors in America. About one in six of U.S. private sector jobs depend on the U.S. manufacturing base (DeRocco, Duesterberg, & Kilmer, 2009). In 2009, U.S. manufacturing supported 18.6 million jobs, and 11.8 million jobs directly within manufacturing (DeRocco, Duesterberg, & Kilmer, 2009). Manufacturing also drives productivity and growth. According to Federal Reserve Chairman Ben Bernanke, he stated that productivity growth is “perhaps the single most important determinant of living standards”. Between 1987 and 2008, manufacturing productivity grew 103 percent (DeRocco, Duesterberg, & Kilmer, 2009).

U.S. manufacturing continues to shift due to technological change, shifting demand patterns, and international competition (DeRocco, Duesterberg, & Kilmer, 2009). Other changes such as federal and state regulatory initiatives, tax policies and changes in energy price can also affect the future of manufacturing sectors in the U.S.

In the 21st century manufacturing companies face increasingly frequent and unpredictable market changes driven by global competition, including the rapid introduction of new products and constantly varying product demand. To remain competitive, companies must design manufacturing systems that not only produce high-quality products at low costs, but also allow for rapid response to market changes and consumer needs (Dickens, Kelly, & Williams, 2013, p. 18)

The four largest manufacturing industries in the U.S are food, chemicals, computers and electronic products, and fabricated metal products that account for 44 percent of manufacturing Gross Domestic Product (GDP) (DeRocco, Duesterberg, & Kilmer, 2009). GDP are indicators used to measure the condition of a country's economy and represents the total dollar value of all goods and services produced over a certain period.

The manufacturing workforce has become more skilled as technology starts to increase. Employees in the workforce with B.A degrees increased from 16 percent to 19 percent; graduate degrees increased from 5.7 percent to 8 percent; those who had less than a high school diploma decrease from 14 percent to 12 percent during the year of 2000 and 2008 (DeRocco, Duesterberg, & Kilmer, 2009). Manufactured companies continue to train workers with the right skills to keep pace due to increasing technical demands of the productively oriented manufacturing sector (DeRocco, Duesterberg, & Kilmer, 2009). Today, advanced manufacturing companies are requiring a technical workforce with math and science skills. Thus, a new paradigm of lean manufacturing that requires production workers with increased numeracy, team building, and problem solving abilities (DeRocco, Duesterberg, & Kilmer, 2009).

A manufacturing company is essentially the idea of an organization that utilizes raw materials that includes metals, semi-finished materials or subsystems to produce a finished good. A typical work setting in a manufacturing environment can be seen as an assembly line, by processing products in a sequence from one station to another. Growth productivity can be seen as an important determinant of an economic standard. Manufacturing is gradually shifting towards the use of technological change, causing a shift of demand in patterns and international competition. The demands of companies utilizing technical demands are increasing, which is

creating a new paradigm of lean within manufacturing industry. This in return, is requiring more specific knowledge and ability performances within employees.

### **How do Adults Learn**

As learners, adults are self-directed and have developed a wider variety of experiences than younger learners (Post, 2010). For instance, adults decide whether the topic is important to be learned and obtained; what information is considered valid according to their own moral or ethical experiences; and how can the learning of the materials be beneficial once the information had been attained (Post, 2010). To understand how an adult learns, trainers and instructors should understand the different types of learning and styles. Educators have determined that most adults learn best by experiencing a blend of activities in the three areas through: cognitive, affective, and behavior (Murphy, 2012).

Table 2

#### *The Three Types of Learning Domains*

Cognitive	Affective	Behavior
Lectures	Value clarification exercises	Role plays
Brainstorms	Nominal group process	Simulations
Discussions	Consensus-seeking activities	Teach backs

(Murphy, 2012, p. 1)

Individual adults are most effective when they are taught in their personal learning style. The three types of learning styles include: (1) visual learners, those who think in terms of pictures, prefer to see things to be written down, and provide handouts or PowerPoint slides; (2) auditory learner, those who learn by listening, prefer learning through lectures, discussions, and

reading aloud; and (3) kinesthetic learners, those who learn through touching, feeling, and experiencing what they are trying to learn (Post, 2010)

Table 3

*The Types of Adult Learning Styles*

Visual	Auditory	Kinesthetic
Transparencences	Lectures	Role plays
Video/Slides	Group discussions	Simulations
Flip charts	Informal conversations	Practice demonstrations
Readings	Stories and examples	Writing/Taking notes
Demonstrations	Brainstorms	Activities

(Murphy, 2012, p. 2)

It is often stated that we retain about 10 percent of what we see, 30 to 40 percent of what we see and hear, and 90 percent of what we see, hear and do (Murphy, 2012). Adults learn best when the information that is being provided is useful for them. Adults learn more effectively when they are trying to develop new skills, to acquire new information, to fulfill an inner desire, and to improve professional competence (Post, 2010). The percent of recall from learning process by adults is: visual, 20 percent; auditory, 10 percent; and kinesthetic, 70 percent (Post, 2010).

Adults are problem and tasks oriented and want hands-on experience in things that can be used now. Adults acquire learning when they are treated with mutual respect, trust, comfort, collaboration, and freedom to participate. Therefore, it is important to use a variety of activities to help encourage the adults to learn. Studies also show that some adults prefer to receive learning through visual such as DVDs, videotapes, PowerPoint, and handouts while others prefer auditory presentations like lectures (Post, 2010). To have successful adult learning, it should relate to their life experience. If it does not, adults may reject learning at any time. There are tips for the trainers when teaching adults. Before interacting and engaging with the adult, selecting the appropriate and comfortable environment is very important. The learning environment is where the teaching and learning takes place between the trainers and learners. Without the proper learning environment, the learners will not be able to obtain the information that is being provided. Trainers need to emphasize the learning materials to address the issues, needs and interest of the adult learners; keep the adults activity involved by encouraging them to share ideas and information; and use a variation of training methods that will help the adults learn (Post, 2010). As a trainer, always be prepared to reconstruct the activities and implement new strategies to fit the needs of the learners in the learning environment.

### **Summary**

Chapter 2 summarizes the literature review on the following areas: who are the Hmong and their level of education; Hmong employment in America; what is manufacturing and why do companies implement technical equipment; and how do adults learned. The Hmong are oral learners and did not know how to read or write in the late 1950s. It was not until Laos was invaded during the Vietnam that Hmong adults immigrated to Thailand, learned English, and obtained vocational training. The ability to speak and write English is still a barrier to many

Hmong adults. Manufacturing is important to the United States because it drives the economy and is globally competitive. Adults are most effective when they are taught in their personal learning style. Kinesthetic learners learn through touching, feeling, and experiencing what they are trying to learn.

Chapter 3 will discuss the methodology of the instruments being used and how the results will be analyzed. In addition, Chapter 4 will report the results from the findings provided by the instruments, along with Chapter 5 providing a review and recommendations for future research.



### **Chapter III: Methodology**

The anticipated purpose of this research study was to find possible solutions to help improve methods for first generation Hmong employees to learn and understand training materials related to manufacturing equipment within the workplace. The results of this research study could possibly help increase the efficiency of training for Hmong employees with the goal to improve in their performance in a manufacturing work environment. It is important to recognize the barriers that may inhibit first generation Hmong employees from understanding training materials and opportunities. The purpose of this research is to identify those barriers so that efforts to improve the training environment can be developed.

The Human Resource Department should realize that the first generation Hmong employees have little to no experience with technical equipment. This can have an effect on their performance to accomplish their job responsibilities. This chapter examines the subjects that were chosen for the study, the instrument used to collect the data, and how the data was collected and analyzed.

#### **Subject Selection and Description**

The targeted group for this study was first generation Hmong who are currently employed and those who had previously experienced working with equipment in manufacturing jobs. Participants who were chosen for this study were between 40 and 62, and were either currently or previously working part-time or full-time. Nine males and five females participated in this study. There were no knowledge and experiences difference based upon either gender in utilizing with technical equipment. Neither gender had seen or used manufacturing equipment prior coming to America. The participants were family members, relatives, and friends of the primary researcher.

## **Instrumentation**

This study contained six interview questions that required face-to-face or over the phone conversation with first generation Hmong immigrants. The interview questions emerged from the literature review in Chapter 2. A sample of the interview questions is found in Appendix B. These questions were created to help the researcher effectively interact with the first generation Hmong about their job experiences to help understand how they were trained from their employer; and their suggestions and recommendations to help improve manufacturing companies training programs.

## **Data Collection Procedures**

The researcher completed an Implied Consent Form and provided an explanation of the research study to each participant. The researcher explained that participation was voluntarily and the participant had the right to withdraw or stop the interview at anytime. After explaining about the Implied Consent Form, the researcher asked each participant to sign the form indicating they understood the research study and participation. The research then started the interview process with each participant.

Six interview questions were administered to the participants by the primary researcher. Four of the ten participants were interviewed by face-to-face or in person at the participant's home. The data were collected by the researcher, writing down and take notes of the participant's responses to each of the six questions that related to their job responsibilities and training experiences. Ten of the participants interviewing session were conducted over the phone, where the data were also collected by writing down the participants' responses to each of the six questions. The researcher also took notes during the interviews when the participants explained in detail about their job responsibilities or training experiences. The questions asked

were to help the researcher understand the problems related to training of the first generation Hmong immigrants encountering jobs requiring technical skills. Each interview took approximately 15 to 20 minutes.

### **Data Analysis**

After collecting the data, the researcher utilized qualitative analysis to analyze the participant's responses from the six interview questions. Each participant's responses were reviewed for a frequency of common themes. The responses were reviewed by the researcher, and then categorized into related categories. Following the review of responses, the researcher concluded the participant's responses into the related themes of (1) limited ability to understand English during training, (2) the Hmong being in favor of on-the-job and hands-on training, and (3) time as a factor in operating the technical equipment for a better understanding. After reviewing the responses, 11 participants responded with answers relating to the limited ability to understand English during training. There were 14 participants whose responses were found to be related to being in favor of having the company provide on-the-job and hands-on training. Six participants indicated that the ability to have more time in operating the technical equipment could enhance their job performance.

### **Summary**

Chapter 3 discussed the subject selection and the instrument used to collect the data for this study. Chapter 4 will report the results from the data gathering and analyze the data based on common themes and patterns from the participants. Chapter 5 will review the findings of the analysis and provide recommendations for training needs for future manufacturing company.

## **Chapter IV: Results**

The purpose of this study is to find if there are ways technical training can be offered in a manner that addresses the learning needs of the first generation Hmong employees in the manufacturing setting. After the Hmong were made aware of the purpose of the research study, they were asked to participate and for their willingness to respond to the six questions for the study. Data was collected individually at the participant's most convenient time either by phone or in person. The analysis of results revealed the following common themes:

- (1) First generation Hmong have English barriers that makes it difficult for them to operate the technical equipment during training, and in the workplace;
- (2) The Hmong believe that on-the-job training and hands-on is the most beneficial form of training when being trained; and
- (3) Giving the Hmong more time utilizing technical equipment is important to improve their understanding of the equipment and performance.

This study contains 14 (N=14) first generation Hmong immigrants currently or previously employed in manufacturing jobs. Of the participants, 10 (71%) were questioned over the phone and 4 (29%) were questioned in person. The results of the interviews were used to help the researcher find if there were ways that technical training can be offered that addresses the learning needs of the first generation Hmong employees.

### **Describe Your Job Responsibilities and the Training Process**

All 14 participants had experiences utilizing some sort of technical equipment in the manufacturing workplace, and were able to describe their job responsibilities related to his or her position. Here, there is a variety of similar and different equipment utilized by individuals based on their job titles. Depending on the company and their job responsibilities, manufacturing

requires employees to perform and carry out their daily tasks by utilizing equipment that uses more of a person's mental abilities, rather than physical performance. For example, one of the respondents describes their job responsibilities as a computer operator. This participant controls the types of colors needed to paint heated incoming aluminum products and timing of how long the products stayed heated.

All the participants were trained adequately to perform their job responsibilities. The participants (N=14) encountered hands-on and on-the-job training. The majority (N=9) of the participants were involved with one-on-one training with the lead or supervisor. Videos were provided throughout the training process to enhance the learning of the participants. Handbooks, such as manuals were also provided for the participants to help guide their performance on operating the equipment. Due to each participant's job responsibilities, those who utilize numbers are required to be tested, based on their knowledge. There were a few of the participants (N=5) that were tested, after the training had been provided, and some that were not tested (N=9). Another participant described their training process by getting a tour in the workplace and being familiar with the equipment before the training was provided. A video was provided after the tour to learn the safety and regulations about the company and job responsibilities. The training was provided after the video, and took place in the work environment. This participant was involved with one-on-one training, with the lead person in the department when training.

### **What Types of Resources or Materials were Provided During the Training?**

The types of resources or materials provided during the training were consistent across all 14 participants. Videos and handbook manuals were provided to help guide the participants in their job responsibilities and operating the equipment. The equipment presented during the

training was the same equipment used in the workplace. Some (N=5) of the participants were tested after the training had been provided to ensure if they understood the lecture materials.

### **Describe the Challenges that you Encountered During the Training Process**

The majority (N=11) of challenges participants encountered during the training process were related to understanding of English. English was used orally throughout the training process, which includes videos, handbooks, and when utilizing the equipment. Reading and comprehending the handbook manuals was difficult for all 14 participants. Participants indicated that the pace of the training process was too quick (N=8). For this reason, it was difficult for them to process the information and learn the materials before moving on to the next materials or stations. All 14 participants indicated they had never seen or utilized any types of manufacturing equipment prior coming to America.

### **Describe the Equipment You Utilized and its Functions**

All 14 participants had experience using equipment in the manufacturing workplace. Some equipment used was similar, while others were different. This depended upon the company and the individual participants' job title. All 14 participants were able to describe the equipment they utilized and its functions related to their job responsibilities. For example, one participant described the equipment they used as a big machine that cuts aluminums into sizable product. This participant operates the machinery by receiving aluminum and using the machine to cut it into pieces. Another participant described his or her equipment as packaging equipment. This participant was in charge of using a wrapping machine to wrap products for shipping.

### **What Recommendations Would You Suggest to Improve the Training Program?**

The Majority of the participants (N=11) recommended a Hmong interpreter to improve the training program. An interpreter is a third person communicating to the trainers and trainees

during training. The participants feel that if a Hmong interpreter were to be involved, it would increase their communication, performance of their job responsibilities, and equipment operation. Half (N=7) of the participants also suggested having the handbook manuals translated into Hmong words. This could help improve their performance based on utilizing the equipment and having a better knowledge and understanding of the materials. Participants also recommended having a steady and consistent pace when trainers are providing training. They referenced from their experiences that at times, the on-the-job training could be too fast, especially where they had not become familiar with the job tasks. By the time they understood, the training would have already proceeded to the next step.

### **Please Provide any Comments, Questions and/ or Concerns to Help Improve Your Job Responsibilities**

Out of 14 participants, six participants (N=6) provided comments and suggestions to help improve their job responsibilities. Time spent on learning is a factor for the participants, which they recommended be increased to help improve their job responsibilities. These participants perceive themselves as slower learners and more time would help the participants to progress within their job responsibilities. Another suggestion was to have other Hmong employees present, in order to help assist, train and translate to accomplish their job tasks. This could help improve the participants' learning and performance abilities.

### **Summary**

Chapter 4 discussed the results of the interviews with 14 first generation Hmong who had experienced utilizing technical equipment in the manufacturing workplace. The analysis of the interview revealed the following common themes:

- (1) First generation Hmong have English barriers that prevent them from correctly utilizing the technical equipment during training;
- (2) First generation Hmong believe that on the job training and hands on is the most beneficial form of training; and
- (3) Giving the Hmong more time utilizing technical equipment is important to improve their understanding of the equipment and performance. Chapter 5 will provide a discussion and conclusion of these findings, along with recommendations for future research.



## **Chapter V: Discussion**

The purpose of this study is to find if there are ways that technical training can be offered to address the learning needs of employees who are first generation Hmong immigrants. With the advancement in technology presented in today's American industry, more manufacturing companies are utilizing technical equipment to improve their organization and stay competitive. Therefore, without the appropriate training designed to meet the learning style of the first generation Hmong employees, their employment in the manufacturing jobs is in jeopardy. Language and cultural barriers need to be considered and addressed when developing training for the Hmong. Conclusions and recommendations will be discussed in the following chapter.

### **Conclusions**

First generation Hmong employees are being exposed to technical equipment in the manufacturing workplace. For many of the Hmong employees this is their first exposure to such equipment, and they will need to adapt and learn the technical skills to utilize the equipment provided by their company in order to be successful in their position. Some of the highlights provided by the participants include: English barriers, operating equipment, pacing on learning and kinesthetic learners.

### **English Barriers**

For most (N=12) of the participants, English was not their primary language, which made it challenging for them to communicate with the trainers. This also hindered their reading and writing capabilities as the materials were provided in English. The participants stated they found a difficult time reading the training manuals and handouts provided by their company, which made it problematic for the Hmong to comprehend and ask questions. This was another drawback barrier between Hmong employees and the trainers. They also suggested for the

training materials and/ or manuals to be translated into Hmong, their native language to help enhance their performances in their job responsibilities. As seen in Duffy 2004 article,

The rate of Hmong who did not read or write was as high as 99%, while a 1986 study by Karen Green and Steven Reder of 20 Hmong refugee families in the United States indicated that 80% of those surveyed could not read or write Lao, and 70% could not read Hmong (Duffy et al., 2004, p. 25).

### **Operating Technical Equipment**

The participant's manufacturing company provided the necessary equipment for them to use to complete their job responsibilities. Although the equipment was provided, participants (N=14) stated it was new to them; therefore they needed the extra time and training to learn the materials and equipment. The participants also suggested that if there were other Hmong employees who speak English in their company, it would encourage them to ask for assistance and other related equipment matter. Referring to Yang, working with technical equipment in company had not been a part of the Hmong background knowledge prior to coming to the America (Yang, 2015)

### **Pace of Learning**

The Hmong are oral learners and lack the alphabet and knowledge of basic literacy process in their own language. Many Hmong people did not know how to read or write in the late 1950s (Duffy et al., 2004). During the interview with the participants, they provided information that tells the researcher about their learning pace during training. Due to English and technical equipment barriers, the participants' are slower at learning and needed more time to learn the provided materials. The majority of the participants (N=11) suggested that if there were a Hmong interpreter during the training, it would improve their knowledge, skills and

abilities to perform effectively on their tasks and would allow them to ask questions when there is a need for clarification from the trainers.

### **Kinesthetic Learners**

The participants interviewed indicated they strongly value kinesthetic learning. They learned best by working one-on-one with the trainer in the workplace. The Hmong are oral learners, and learn by doing with example based on how they were taught from their elders back in their native country. The participants suggested kinesthetic learning is the only type of learning for them to understand their job responsibility. From the literature findings, kinesthetic learners are those who learn through touching, feeling, and experiencing what they are trying to learn (Post, 2010).

### **Learning Environment**

The learning environment is where the learners obtain most, if not all of their learning from the trainers. Referring to the literature findings, the learning environment is very important for adults when obtaining learning materials and resources (Post, 2010). The learning environment can also encourage adults to interact and engage with the trainers that will allow them to be productive. Without the proper learning environment for the adult learners, it will be difficult for them to take in the information provided by their trainers. Therefore, selecting an appropriate and comfortable environment for the adults can lead to a successful learning experience for the learners.

### **Recommendations**

Manufacturing companies should implement technical training that addresses the learning needs of the first generation Hmong employees. Based on the interviews, the Hmong suggested that having a Hmong interpreter presented during the training process would increase their

learning abilities and their interactions with the trainers. Other participants also indicated that having handbooks and manuals translated into Hmong would help them understand the equipment. To encourage future learning for the first generation Hmong, there should be a training evaluation for the Hmong at the end of the training program to help improve the learning needs of the Hmong employees. Future recommendations for this study include:

### **Sample Participants**

The sample of the participants should not be limited to family members and friends, but other first generation Hmong who had experienced utilizing technical equipment as well. Focusing on just family members and friends can reduce the amount of participants or may not generate enough evidences to find solution for the study. The targeted participants should be those who are currently employed in the manufacturing industry, and are actually experiencing problem utilizing with technical equipment. This can help the researcher better understand the situation and generate potential current solutions to the problems. Also, the ages of the participants should be reconsidered with a shorter age gap. This can give the researcher a greater precise of the participants' answered related to the technical equipment experiences.

### **Modify Interview Questions**

The questions provided to the participants should have been more specific about their training and how they were actually trained. This can give the researcher an idea of their training program and generate ways to offer training that will benefit the first generation Hmong employees. There should be more questions added to the interview to generate sufficient information so this study can provide an effective training for manufacturing companies. For example, other questions added can ask the participants' about their reactions towards and after

the training was provided; creating a rating scale for the participants to rate the overall training; and describe their level of utilizing equipment competency when entered into the workplace.

### **Taking Family Members to Work**

The researcher recommends manufacturing companies to implement a policy, permitting the first generation Hmong to invite English speaking family members to provide as a communicator between the training processes. This will help Hmong employees to understand the materials provided by their company and encourage them to engage with the trainers. Handbooks and manuals that are in English can be given to the Hmong employees to take home for family members to translate and interpret the information. This can help save the company's time and money by hiring an interpreter during the training process for Hmong employees.

### **Summary**

This study is to find if there are ways that technical training can be offered in a manner that will address the learning needs of the first generation Hmong employees in the manufacturing workplace. Chapter 1 identified the problem and the need for this study. Chapter 2 discussed relevant literature related to this study. Chapter 3 provided an overview of the methodology and methods used for this study. Chapter 4 provided an analysis of the results. Chapter 5 discussed the findings with the literature in Chapter 2 and provided recommendations for manufacturing companies that can offer training, and future research study.

## References

- Arguelles, E. L. (2003). *Asian nation*. Retrieved from <http://www.asian-nation.org/hmong.shtml>
- Bankston, C. L. (2014). *Hmong Americans*. Retrieved from <http://www.everyculture.com/multi/Ha-La/Hmong-Americans.html>
- Cha, D. (2004). *History of the Hmong*. Madison: Madison Childrens Museum.
- DeRocco, E. S., Duesterberg, T. J., & Kilmer, R. D. (2009). *The facts about modern manufacturing*. Washington, DC: The Manufacturing Institute.
- Dickens, P., Kelly, M., & Williams, J. R. (2013). *What are the significant trends shaping technology relevant to manufacturing?* London: Government Office for Science, UK Government's Foresight Future of Manufacturing. Crown.
- John Duffy, R. H. (2004, June). The Hmong an introduction to their history and culture. *Center for Applied Linguistics*, 60.
- Lee, G. Y. (2005). Diaspora and the predicament of origins: Interrogating Hmong postcolonial history and identity. *Hmong Studies Journal*, 25.
- Lindsay, J. (2013). *Culture clash: The Hmong in America social problems faced by the Hmong people*. Retrieved from <http://www.jefflindsay.com/hmong-clash.html>
- Murphy, D. (2012, November 14). *Principles of adults learning & instructional system design*. Retrieved from <https://www.nhi.fhwa.dot.gov/downloads/freebies/172/PR%20Pre-course%20Reading%20Assignment.pdf>
- Post, H. W. (2010, February). *Teaching adults: What every trainer needs to know about adults learning stlyes*. Retrieved from <Fhttp://www.fastfamilysupport.org/fasttraining/Other/teachingadults-whattrainersneedtoknow.pdf>

Vang, C. Y. (2013). *The state of the Hmong American community*. Washington, DC: Hmong National Development Inc.

*Webster's new college dictionary*. (2008). Boston: Houghton Mifflin Harcourt Company.

## **Appendix A: Consent to Participate In UW-Stout Approved Research**

**Title:** Developing an Effective Training program for First Generation Hmong Employees in the Manufacturing Position.

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**Description:**

In the manufacturing workplace, first generation Hmong employees are struggling with the advanced technology that companies are utilizing to carry out daily tasks and procedures. Without the appropriate training designed to meet the learning style of the first generation Hmong employees, their employment in manufacturing jobs are in jeopardy. Language and cultural barriers need to be considered and addressed when developing training.

The purpose of this study is to provide the first Hmong generation employees the appropriate training program when using technical equipment in manufacturing workplace offered by the company. With the advancement in technology, more companies will be utilizing technical equipment to benefit the organization and stay competitive. Data will be collected individually through interview sessions from each current and prior Hmong employees who had worked in the manufacturing jobs.

This study consists of six interview questions that are given to the first generation Hmong employees. The interview was conducted to understand how the first generation Hmong



employees' were trained, and their knowledge in utilizing operational equipment in the manufacturing workplace to further provide an effective training program.

**Risks and Benefits:**

There will be minimal to no risk in participating in this interview. There is a possibility that the results will take longer than expected depending on the participant's availability to setup the interview. The benefits of participating in this interview can help organization design and develop an effective training program for the first generation Hmong. Prior and current Hmong employees who had worked in the manufacturing industry are encouraged to participate in this study.

**Special Populations:**

There are no minors involved in this research. The special populations for this research are the Hmong population.

**Time Commitment and Payment:**

There will be no compensation or incentive involved in this research study. I will be conducting the interview and will take approximately 15 to 20 minutes depending on your ability to answer the questions. Participants will be able to setup a time with the researcher to complete the interview questions according to their availability.

**Confidentiality:**

When signing this document, we will assign a unique id number to your data. Your name will not be saved with the answers you provide to any of the questions during the interview.

When analyzing and publishing the data, it will be done in a way that does not reveal who provided the answers to the questions.

**Right to Withdraw:**

Your participation in this study is entirely voluntary. You may choose not to participate without any adverse consequences to you. You have the right to stop at any time during the interview process. However, if you decide to participate and complete the interview, your information will be kept at a minimum of three years for possible investigation.

**IRB Approval:**

This study has been reviewed and approved by The University of Wisconsin-Stout's Institutional Review Board (IRB). The IRB has determined that this study meets the ethical obligations required by federal law and University policies. If you have questions or concerns regarding this study please contact the Investigator or Advisor. If you have any questions, concerns, or reports regarding your rights as a research subject, please contact the IRB Administrator.

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**Statement of Consent:**

By completing the following survey you agree to participate in the project entitled, **Developing an Effective Training program for First Generation Hmong Employees in the Manufacturing Position.**

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Signature

Date

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Signature of parent or guardian

Date

### **Appendix B: Interview Questions**

1. Describe your job responsibilities and the training process.
2. What types of resources or materials were provided during the training?
3. Describe the challenges that you encountered during the training process.
4. Describe the equipment you utilized and its functions.
5. What recommendations would you suggest to improve the training program?
6. Please provide any comments, questions and/ or concerns to help improve your job responsibilities.