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GENERATIONAL DIFFERENCES IN MOTIVATION FOR LEARNING:

AN ETHNOGRAPHIC RESEARCH PROJECT ON THE DIFFERENCES BETWEEN
LEARNING STYLES AND MOTIVATIONS TO LEARN BASED ON GENERATION

by

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A Research Project Presented in Partial Fulfillment
of the Requirements for the Degree
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ABSTRACT

There are a number of differences between generational groups as far as influences, technology, and preferences. The purpose of this research project can help determine if there are differences in motivations and preferences toward learning delivery methods, based on age groups. To determine this, a Likert scale survey was issued to seventy four college students via a Zoomerang online survey link. The respondents were only asked to display their age and were classified into one of four generational groups. The Likert scale helped determine preferences to online or traditional classroom training. In addition the respondents were asked to list frustrations that they had experienced in both online courses and traditional classroom settings. Participants were also surveyed on the convenience of online courses, experience working with other students, and how comfortable each was with the use of technology. The survey results indicated that most of the groups preferred traditional classroom training over online courses. In addition all of the generational groups responded that they learned best with a traditional classroom setting. Of these two items, Millennials (those born between 1981-1994) had the highest preference to classroom learning, and lowest preference to online learning.

Chapter 1

INTRODUCTION

Background of the Problem

In order to create effective educational and corporate training programs, leaders will need to anticipate the differences in their learners. The dynamics of the classroom are changing with more and more non-traditional students entering educational institutions, and different generation groups entering new or first careers. One major generational group that has been examined in previous research articles is the Millennial generation. This group consists of younger adults born between 1981-1994 (Dziuban, Moskal, & Hartman 2004 pg 2), who are considered savvy when it comes to the use of technology. Does that mean that this group likes to learn with technology? Maybe, maybe not, one thing is for sure this group is much different in terms of communication expectations, learning needs, and social preferences. As Tyler explains, "Millennials' world is far more expansive than previous generations' because, through online social networks, they can reach well beyond the confines of geography and establish relationships with others." (Tyler 2007).

Though this group may have more advanced knowledge and experience with technology, they may lack certain skills due to their social networks, and ease of gathering information (Google, Yahoo, other Search Engines, does this group trust too many internet sites and not enough research publications?). In addition what other skills do these students/workers lack as a result of their upbringing? As Tyler points out,

"students' grammar may suffer from an over-reliance on computer programs that correct language errors, which will perpetuate poor written communication skills. E-mail and instant messaging reduces the opportunity for face-to-face interpersonal interaction. The lack of strong interpersonal skills impacts other soft skills, such as conflict resolution." (Stephen P. Seaward, director of career development for Saint Joseph College in West Hartford, Conn as quoted in Tyler 2007).

In addition to the classroom changes, business leaders are also faced with a large workforce of experienced knowledgeable employees that are nearing retirement. The Baby Boomers, or those born between 1946 and 1964 (Dziuban, Moskal, & Hartman 2004 pg 2), are the largest generation in the United States, and make up a bulk of the working force. These individuals are closing in on retirement, which will cause business leaders to re evaluate the "bench strength" of their organizations. . In anticipation of this, leaders will need to prepare other generations of employees to take over these key job functions and roles. Understanding the needs and motivations of learners of all generations will help business leaders utilize each group's strengths to reduce risks of skills gaps in their organization.

Sandwiched between the Millennials and Baby Boomers is the group known as Generation X. This group is comprised of individuals born between the years 1965 and 1980 (Dziuban, Moskal, & Hartman 2004 pg 2). Also known as latchkey kids, this group is more skeptical when it comes to corporations, and their leaders. This group has experience with technology, but still has critical thinking skills that Millennials may not have. They should not be forgotten by educators and business leaders, and have different needs from a learning and leading standpoint.

To assist educators account for these changes, a number of questions need to be asked. First are there differences in motivations to learn between different generational groups. Second, are there preferences to learning methods used (classroom, eLearning, blended learning, team projects etc.) based on difference in age?

Statement of the Problem

Each of the generational groups listed in the background has specific learning preferences, and needs. In addition each of these groups has a different range of experience and comfort with technology. Educators and business leaders need to tap into the differences in these preferences and level of comfort with technology, to design learning projects that meet each of their needs.

In addition educators and business leaders need to understand what motivates, and frustrates each of these generational groups in terms of working with each other, and learning together in either an online or classroom environment. Understanding these differences is essential for both educators and business leaders as they solve problems such as identifying skills gaps, improve employee engagement, improve classroom dynamics, offer more online courses specific to each learners needs, and improving the general workplace and classroom environments. For the purpose of this project I will focus on the differences in both motivations and experiences of each generational group in the classroom, and their preference to either online or formal classroom training.

Purpose of the Project

The purpose of this paper is to formalize research on the differences in generational learners. The project will help answer the aforementioned questions, and determine if there are differences in motivations and learning preferences of various learners based on those learners' generation. In addition the project will identify how prevalent the differences are. In this paper I will provide reasons for the research, outline the methods used to conduct the research, and provide benefits for the research project findings. I will also review past studies and literature related to this project, to make a case for a new study.

The study will utilize survey questions to identify preferences among generational groups toward a certain type of learning delivery method. The learning delivery method will either be online or traditional classroom format. The questions will determine what each generational group's impression of each learning method is, list how they perceive they learn best, and identify barriers that frustrate them with each type of delivery method.

In addition to questions designed to find preferences in delivery method, the participants will also be asked to identify their comfort level with technology, and experience working with other generational groups. These experiences will also help identify the motivation for seeking an online course or a traditional classroom course.

Definitions

e-Learning: Also known as online learning is a type of education where the medium of
                     instruction is computer technology. (Wikipedia.org).

Baby Boomers: Generation of adults born between the years 1946 and 1964 (Dziuban,
                     Moskal, & Hartman 2004 pg 2).

Generation X: Generation of adults born between the years 1965 and 1980
                       (Dziuban, Moskal, & Hartman 2004 pg 2).

Greatest Generation: Generation of adults born before 1946 also known as matures
                       (Dziuban, Moskal, & Hartman 2004 pg 2) (Wikipedia.org 2008).

Latchkey Kids   A child who returns from school to an empty home because his or her
                       parents are away at work, or a child who is often left at home with little or
                       no parental supervision. (Wikipedia.org 2008).

Millenials: Generation of adults born between 1981 and 1994.
                       (Dziuban, Moskal, & Hartman 2004 pg 2).

Zoomerang: An independent online survey organization.

Chapter Summary

The end result of this research will benefit educational and business leaders, to help build solid age friendly learning programs. The results will also provide a framework for understanding how differences in age affect learners in the classroom setting. With the information educators and leaders will be able to design effective courses, as well as be able to motivate learners of any age.

In addition the research can help us determine what leads to frustrations in learners with online formats, as well as classroom teaching. The project can also help determine what each generational group values from their educators, fellow students, and support personnel.

Chapter 2

REVIEW OF LITERATURE

To help answer these questions educators can review past research, and conduct new research on the differences between generational groups. In this chapter, I will review what research has been accomplished on the matter, and will analyze past studies that show differences in generational groups motivations and learning styles. I will also analyze research that shows how working together in an educational setting can eliminate conflict among different generational groups.

Before deciding if there are differences in motivations and learning styles based on generation, educators and leaders need to understand why this type of research is important. As mentioned above, more non-traditional students are entering universities every day. In addition Baby Boomers are leaving stable careers for new endeavors as well. Finally a lack of skill or interest in key positions in the economy has forced corporations to prepare younger generations of workers. This combination will lead to a mixture of age groups in corporate training programs, and degree programs across the world. First let us take a look at the skill gap situation facing our global economy.

As mentioned large retirements or lack of interest in certain areas is creating a void of skilled workers in key areas of the economy. One sector feeling the crunch of a lack of skilled workers is the industrial sector. Manufacturers voiced their concern in a 2005 survey administered by Deloitte Consulting LLP. The survey produced alarming results, " 65% of more then 800 manufacturers surveyed reported a moderate to severe shortage of engineers and scientists," (Moschetto 2008). The manufacturers have reason

to be concerned about their labor force. According to a report issued by the National Association of Manufacturers, " manufacturers will need as many as 20 million new skilled workers by the year 2020," (Industrial Engineer 2007).

To help combat this skill gap corporations are working within the school systems to generate interest in subjects, and add skills to younger generations of students. These programs enable different generational groups the opportunity to work together in a learning environment. An example of this is National Instruments STEM program (science, technology, engineering and math). Though STEM and Mindstorm NXT are designed for younger students, there are also programs designed for college aged students (Moschetto 2008).

In the United Kingdom, companies are working with educational institutions to prepare graduates for the workforce, " Imperial College London is working with Nexia Solutions one of the UK's largest employers in nuclear science and technology, to develop industry ready graduates," (Professional Engineering 2007). The efforts of these educational institutions, and corporations should help fill some of the void in the industry.

Not only are specific industries preparing for a lack of skilled workers, business leaders across all sectors of the global economy are preparing their talent for management positions. With the skills gap, corporations are starting to see how effective managers can help them be more competitive in the marketplace when it comes to recruiting top talent. Good managers assist with employee engagement, turnover, and productivity. And executives are willing to pay to train their managers, " about one-third of that spending, or roughly $13 billion was devoted to grooming leaders, including spending for manager training programs, outsourcing, trainers' salaries, content development, coursework and other services," (Kranz 2007).

In addition to the skills gap situation, there are also a number of non traditional students heading back to educational institutions. This has caused an increase in the amount of different generational groups attending colleges and universities. These different generational groups have different needs, motivations, and learning styles.

Proof of this can be seen in Wilson, Harlow-Rosentraub, Manning, Simson, and Steele (2006-2007). This article indicates how the Baby Boomers enjoy new endeavors. The article cites studies by Merrill Lynch (2005) and AARP (2004a), to show how most Baby Boomers surveyed wish to continue their education and careers after retirement.

With the sheer number of Baby Boomers falling into this category, educators and leaders need to plan accordingly. This article indicates that Lifelong Learning Institutes, "are looking at how to engage their members not only in the internal activities of their institutes and university but also in the needs of the external community" (Wilson, Harlow-Rosentraub, Manning, Simson, and Steele 2006-2007 pg 93). This is one way of meeting needs of Baby Boomers, but how will Lifelong Learning Institutes affect members of other generations? Will the members of the younger generations also benefit from Lifelong Learning Institutes? Do the different generation group's value work and education the same as the Baby Boomers? To answer these questions we must evaluate how different are the generations.

The first research to look at shows how different generational groups perceive work, and education. Aro et al (2005) identified the differences in option of work, and education based on the generations. In this work Aro et al (2005) surveys several age groups on their opinions of education, versus their opinions of work experience. The generational groups are classified as the generation before the war, or those born before 1935. The generation born during the age of educational reform in Finland, or those born between 1935 and 1955. And the generation born

after 1955 in a time of large educational opportunities, and high unemployment (Aro et al 2005 pg 462).

The study argued that those born before the war would have higher views of work experience as they started work at a younger age, and had limited chances to continue with education. By way of contrast those born later in life in a time of abundant educational opportunities but limited work opportunities, would value education more than work experience.

The results of the study did show that the older groups of respondents had higher views of work experience compared to the younger groups. The research also showed that all respondents had relatively high views of education as a whole. But even though the study proved that different generation groups weighted on the job experience and education differently, it did not prove exactly why. According to Aro et al (2005), "it is impossible to say whether belief in education or in on the job learning increases with age, or whether it is a characteristic which is especially typical of the older generation and has not changed with time," (Aro et al 2005 pg 472). For this reason it is important for researchers to study why the generational groups have different views of work and education. Is it a mere case of being born at a certain political or economical time, or are other factors that play large roles in a person's attitude toward work and education? How do advances in technology such as the television, radio, microwave, computer, and other conveniences in our lives shape our views of what work and education are?

There are a few studies that attempt to find out why there are differences in generational groups. One approach suggests the economic differences between the generations can create different views and attitudes as a whole. Pusey (2007) uses the economic approach to bring in to light the economic reality facing the younger generation.

Pusey (2007) looked at the economic differences facing the younger generations, compared to that of the Baby Boomers. In this article, Pusey points out a number of factors that have led to differences in economic standing, which in turn can lead to conflict between the two generations. First, the Baby Boomers are a much larger generation then that of Generation X or the Millennial Generation. The Baby Boomers are also living longer lives. These two factors lead to a higher tax burden (in the USA Social Security payments) for the younger generations. In other words, Generation X and the Millennials will have to pay more in taxes, to support a larger population of people for longer periods of retirement.

In addition Generation X and the Millennials are making about $75 per week less in relative income, compared to that of the Baby Boomers (Pusey 2007 pg 10). They also have been stretched by bills that the earlier generations did not have to worry about. Changes in Australian legislation has left the younger generations with even more economic burden. As Pusey describes, "the private health insurance premiums, increase indebtedness in just those years when young people are typically seeking to establish themselves in couple households," (Pusey 2007 pg 12). This mixture, combined with a high debt to income ratio, can lead to differences in overall attitudes among the generation groups.

These attitude differences include how each group perceives authority figures such as business leaders or educators. The differences in attitude can also manifest in how each group is motivated (to learn or work hard). For instance a worker who is a member of Generation X, may not be motivated by a new product his or her company is unveiling. This worker may think to themselves, "great I have to work harder to sell your idea so you can make more money, and retire earlier." The worker may not see the strategic advantages the product brings to their

company, only that they will not benefit from any of it. They may only see what they are used to, and that is working to support other groups.

Though economic differences between the generational groups does not necessarily cause classroom conflict, it is another variable polarizing the generational groups. In addition to the economic differences, other factors can lead to tension as well Dirkx (2005) suggests that there are three major reasons for tension among students of various generations in college classrooms. These three reasons are, the intergenerational differences and the nature of work and education (more non-traditional students entering classrooms, and more generational groups entering the work environment), the varying generations view of knowledge in the postmodern era, and each generation's need for an identity Dirkx (2005).

The first factor is obvious. In past decades, colleges and universities had traditional aged students, while work was filled with laborers and older experienced employees. The two groups were not in the same setting at the same time. And when there were non-traditional students in the classroom, and non-traditional employees in the workforce, the roles were understood (those with more experience were the mentors and were given more respect).

There is no longer a set understanding of these roles, as Dirkx (2005) suggests, " teachers often complain of the lack of respect for authority among the younger students, younger students complain about the ways in which older adult learners like to go on about their experiences, and older learners decry the lack of seriousness to learning among the younger students" (Dirkx 2005 paragraph 4).

The second factor leading to conflict in the classroom and training room is each generational group's view of knowledge. Each group learns and processes knowledge

differently. This may be due to the trends in education at the time each group went to school, or just in the types of media that was used to deliver teaching.

As trends have changed, the learners have as well. In the past, experience was highly valued. Having done the work, or having been a part of an experience carried more weight in the eyes of the learner. For these reasons Baby Boomers prefer to bring out their experiences and learn in that setting. Other generational groups grew up in eras of collaborative learning, and independent study. For this reason these generation groups learn from working together (Millennials) or alone (Generation X). They do not wish to share stories or understand the value those stories bring. Likewise the Baby Boomer student may feel as though their contributions are not being valued by the other students. This may hinder their ability to learn, as they may be more reluctant to offer their thoughts and experiences.

The final factor contributing to conflict among the generational groups in a classroom setting, is that of identity. As mentioned earlier, the roles and rules regarding authority are not so clear. Learners from newer generations do not necessarily understand when they have broken an unwritten rule. They do not identify authority figures the same way, or themselves the same way that the Baby Boomers may. They may look at a teacher as a person who is responsible for giving them knowledge. Where as the Baby Boomer student understands that the teachers role is to be a leader who sets the rules to abide by. These differences in view points may cause members of different generations to assume that the members of the other generation are confrontational, or too much of a conformist. In either case respect must be gained by both parties to effectively work together in a learning environment.

Though differences in generational groups can cause conflict in a classroom the question still remains, can these groups accept each others differences and learn together?

Layfield (2004) sought to answer that very question. The research in Layfield (2004) focused on the affects of intergenerational service learning programs on younger generational group's view of older generational groups.

The research partnered 15 traditional aged students with older students from a near by nursing home. The traditional aged students were given a pretest to determine their views of the older generation, and then worked with the older students to teach them computer programs. Once they had completed teaching the students the course, the traditional aged members of the study were then given a post test to determine if their views had changed.

The pre and post test assessed the traditional students' views of the older generation, by asking them whether they agreed or disagreed with a statement regarding older adults. The statements included, "old people are set in their ways, meddlesome, old fashioned, and think about the good old days," (Layfield 2004 pg 141). The surveys were scored on a seven point scale (the higher the number the more the respondents agreed with the statement), and results were reviewed following the post test.

The results of the study showed that the traditional aged students' views of the older generational learners did change after the intergenerational service learning program. The study showed that the students' agreement with the survey questions had dropped from the pre test to the post test. In addition the traditional aged students were given the opportunity to express their views on a message board following the intergenerational service learning program.

The messages on the board were favorable regarding the experience, and regarding the older generation. For instance one respondent wrote, "A lot can be learned from older people but we hardly ever take the time to listen. Through this project, we are being forced to listen (in a good way) to the people who have been on this earth longer then we have," (Layfield 2004 pg

142). Responses like these are encouraging as they show that students can learn from each other regardless of generational differences. In addition the responses and survey results prove, that negative views of older generations by younger generations can be mitigated by working closely together.

Larson (2006) also wrote on intergenerational programs, and the positive affect these programs had on younger and older generations. This article shows how intergenerational programs related to arts, such as theatrical performances, dance recitals, and music concerts, have become positive learning experiences for members of all generations. As Larson (2006) indicates, " participants in these programs are also more likely to experience a change in attitudes toward other age groups, a sense of community, and enhanced self-esteem (Larson 2006 pg 38).

Not only are the benefits positive, there are also a number of ways in which these programs can be developed. Educators and business leaders can design intergenerational programs where the younger generation assists the older generation (as in Layfield 2004). Educators can also design these types of programs where the older generation assists the younger (by mentoring or sharing their experiences). The key to these types of programs is to create positive synergy between the participants. As long as both generational groups gain in some way, the results will continue to be positive. In addition these programs do not necessarily have to be centered on the arts, as the next set of research shows.

Another study, which is directly related to our case, is that of Hanks and Icenogle (2001). In this study the authors were determined to find out what perceptions each generation had of the other. Their goal was to determine how intergenerational differences can cause conflict in the workplace. Hanks and Icenogle (2001) noted that, "age discrimination cases already represent

about 20% of all discrimination cases filed with the Equal Employment Opportunity Commission, and these cases are among the most costly to settle," (Steinhouser 1998 as cited in Hanks and Icenogle 2001 pg 50). Another purpose of the study was to determine if involvement in intergenerational service learning programs, changed each generational group's view of the other.

Hanks and Icenogle (2001) used several different surveys to collect their data. First, they used information from a statewide polling agency, to gather facts about the general populations' view of workers. In this survey 425 interviews were conducted with participants who were at least 18 years of age, Hanks and Icenogle (2001). The participants of the statewide survey also ranged in age, race, and gender. This ensured that the survey numbers would not be skewed due to an overabundance of one type of respondent (all men or women, all Caucasian, all over seventy five, etc.).

The respondents were asked questions related to their impressions of the different generations of workers (older and younger workers). The national survey would determine if there were stereotypical views of workers from different age groups in our society. For example the survey would gather whether or not the vast community at large believed that older workers were more costly, more committed, or less engaged then that of the younger workers.

In addition Hanks and Icenogle (2001) also surveyed students from the University of South Alabama, who were enrolled in Gerontology courses, and students from Mitchell College of Business. These two focus groups were given a pre course survey on their attitudes of older workers. Then they were enrolled in a 14 hours of service learning activities outside the classroom (Hanks and Icenogle 2001 pg 58). Once completed, the participants were given the survey again (post course survey) to determine if the experience had changed their views of the

different generational workers. This would show whether or not participation in intergenerational service learning programs, helped create positive attitudes toward members of different generations.

The results of the statewide survey showed that, "attitudes toward older workers were most negative in the areas of comfort with technology, interest in training for a new job or task, and high costs to employers for health care," (Hanks and Icenogle 2001 pg 61). This group had positive views in job quality, and were scored high on the question concerning commitment to the job. By way of comparison the younger workers were viewed as having high absenteeism, least productive, low quality, and cared more about their personal life then work. This younger group only received positive remarks on their abilities with technology.

It is important to note that the respondents in this survey did not necessarily speak from experience. The questions were merely a form of gauging the perception the community at large had toward workers of different generations. It is also important to note that the survey did not have a post course survey attached to it, as the respondents were not part of the intergenerational service learning experience.

The results of the separate student pre course surveys (students enrolled in the gerontology course), showed that the younger students had relatively favorable attitudes toward older workers. In addition, the respondents showed that their attitudes toward older workers improved after the intergenerational service learning project. The results of the pre course survey for the business school students also produced some interesting results. Although the students views did not change significantly as a result of the intergenerational service learning project, their mean score for attitudes toward older workers was higher then that of the gerontology students. This was a surprising finding given the students field of study.

Through this study, Hanks and Icenogle (2001) concluded that there are stereotypes toward workers in certain age groups. The national survey proved that people of all age groups believe that you can expect certain workers to be more engaged then others. The study also showed that in this instance intergenerational service learning projects can be effective in mitigating stereotypical attitudes of older and younger workers. This research does have limitations and research should be expanded to include respondents who are not part of a volunteer course, but part of a working environment. Since the research focused on attitudes in the workplace, it would make more sense to administer the same type of study in an office environment.

With the research that has been provided on intergenerational service learning, business leaders and educators can design their own intergenerational programs that benefit all generational groups. These could include a mixture of mentoring and teaching from both older generations of students/workers, and younger generations of students/workers. Participants and leaders can reap the benefits of the programs regardless of the programs purpose. Whether the program is designed to solve a problem, or designed to have participants learn and relate to each other, learners and leaders can use them to help increase their awareness and understanding of different generational groups.

In addition to programs like intergenerational service learning, educators can also mitigate conflict in the classroom by mixing up their teaching style. Dziuban, Moskal, & Hartman (2004) makes a case for more blended learning in the classroom. In this article the authors begin by identifying the different generations, and the experiences these generations have had throughout their life. These life experiences ultimately have shaped the way the different generational groups think, learn, and are motivated.

The first thing the authors did was to identify the specific generational groups. These groups are, Matures (born before 1946), Baby Boomers (born between 1946 and 1964), Generation X (born between 1965 and 1980), and Millennials (born between 1981 and 1994), (Dziuban, Moskal, & Hartman 2004 pg 2). Each group had their own characteristics, and thus those characteristics could lead to differences in the way each group preferred to learn.

For example, the Matures are extremely loyal and hard working. They have high views of education, and limited experience with computer technology. By way of comparison, the Baby Boomers are confident, aggressive go getters. They value teamwork and experience. They seek educational opportunities for their own development, and may or may not be comfortable with technology.

The group known as Generation X, were known as latchkey kids because they were the first primary generation where both parents worked. They are skeptical of authority, computer savvy, and resourceful. Finally the Millennials are fast, collaborative learners who are extremely comfortable with technology. This group will work together to solve a problem, but may lack critical thinking skills.

After identifying the generational groups, the authors then make a case for adding blended learning into the classroom curriculum. The authors argue that given the vast differences with each generation, no one type of media or teaching style will be able to meet all of the learners needs. To make their case for blended learning, the authors survey students of all generations. The purpose of the survey was to see if the students enjoyed blended learning activities. Students rated statements on a scale of one to five (one being strongly disagree, and five being strongly agree).

The questions measured engagement by asking the respondents how they felt with the statements, I was satisfied with the course, I had more learning control, I would take another blended learning course etc. .(Dziuban, Moskal, & Hartman 2004 pg 8). The results of the survey showed that students of all generations had high levels of engagement (except for Matures who were not represented in the study).

The research showed that blended learning techniques increase students' engagement with a course, regardless of generational learning preference. Increased engagement leads to better performance. Increased performance leads to better attendance and better skills. A case may be made that all of these factors can lead to less tension in the classroom.

The purpose of this chapter was to review previous research to answer questions related to generational differences in the classroom. These questions are as follows, are there differences between motivations and learning styles based on different generation groups? The answer to that question is yes. Because of their life, work, economic, and historical experiences, each generational group has different motivations, learning styles and perceptions of education.

Do these differences in motivations and learning styles create conflict in the classroom, or do the learners benefit from each others differences? The answer to those questions are still relatively unknown. Although some of the research provided shows that there are stereotypical views of each age group, they do not necessarily prove that each generational group has negative views of the other. In addition the research shows that certain types of activities, such as intergenerational service learning programs, may help mitigate negative attitudes between generations, but this research is also limited in scope. The research does not involve prolonged exposure to working with different generational groups in a work environment.

In addition conflict as a result of clashing cultures can happen in any classroom, but not necessarily just because someone is older or younger. Some of the research proposed suggests that there is already conflict between different age groups, but does not provide data that supports that claim. In addition students can learn from each other regardless of age. Differences in personality, background, gender, race, religion, political affiliation etc. can all lead to a melding of opinions and thoughts. These can either create a conducive learning environment or cause conflict among students. For this reason, more research needs to be conducted to specifically determine if the age differences cause conflict in the classroom.

So why is it important to know the differences in these generational groups? By understanding the differences between the generations, educators and leaders can create learning materials that incorporate activities that meet each learners needs. In addition, by knowing how each generation works best, educators and teachers can assist in helping the generational groups work together in the classroom. Educators and leaders can help create healthy working relationships, and classroom dynamics.

Future research needs to be conducted to find out what the perceptions of each generational group are. How do Generation X students view Baby Boomers? How do Millennials view Generation X students etc.? In addition educators can observe how students of mixed generations work together over time (not necessarily in an intergenerational service learning program). By answering these questions researchers can determine how to create more positive perceptions of each group. By changing perceptions, leaders and educators will ensure they have a healthy learning environment for all generations of students and workers. With the next chapter of this paper, I will create methods for such a research.

Chapter 3

METHODS

To determine the differences in preferences to learning methods, and motivations and experiences for learning based on generational groups, I chose to use a qualitative research survey. This type of survey gave me the opportunity to find a large group of learners in each generational group. Having a large population of participants will show if there are indeed preferences based on generational groups. In addition the technology made it appropriate for the study of human subjects. The online technology assured participants that there would be no information about the student revealed to me.

Survey Questionnaire

The survey was designed to answer the following questions: how do different generations prefer to learn material? And are there differences in motivation for enrolling in educational programs based on generation? When receiving the survey respondents were asked to identify which generational group they belonged to. They checked the most appropriate box labeled, Baby Boomer born between 1946 and 1964, Generation X born between 1965 and 1980, and Millennial born between 1981 and 1994 (Dziuban, Moskal, & Hartman 2004 pg 2). The generational information was the only demographic or general characteristic gathered from the respondents. If respondents did not fit into these generational groups they could select "Other" on the survey and fill in their age.

Once respondents marked their generational group, they proceeded to answer thirteen survey questions. Questions one through eleven were used to determine their preference for delivery method, and characteristics about classroom and online courses. These questions were based on a five point Likert Scale. In these questions, respondents were asked to identify how they identified with a specific statement by checking the box from strongly agree (5), to strongly disagree (1).

By way of comparison respondents were asked to specifically answer questions twelve and thirteen by filling in the blank. These questions were used to gage the specific experiences and frustrations that the respondents had with both traditional classroom training, or E-learning methods. See appendix A for an example of the online survey that was administered to students.

The questions were written and two training professionals reviewed and answered the questions. Both professionals were employees of American Century Investments, one was a training specialist, the other a training manager. One of the reviewers would be classified as Generation X and the other as a Baby Boomer. Both of the reviewers looked for content, and made determinations on whether the questions could help gather the appropriate results. Once the questionnaire was reviewed edits were made, and the final copy was placed online.

Though there were two reviewers from the educational field, there was not representation from the other two generational groups that were surveyed from the general population. Although this was a gap, the survey appeared to be reliable and valid for the project. In addition the survey was received by the Chair of the Masters of Arts and Humanities department of Regis University Dr. Robert Collins. Although the survey questionnaire was received by Dr. Collins I did not confirm or deny that he had reviewed it for relevancy. For this reason some of the results of the survey may be impacted.

Procedures

In the beginning the project was designed to survey, interview, and observe different generations of learners in a work training program. The original design would interview participants of American Century Investments as they began a six week training course for a new career. The participants would be asked to rate their preference in learning method (online or traditional classroom learning) and their experience with the other classmates from various generational groups

The students would also be observed during the six week courses to see how the different generational groups worked with each other, and determine if specific generational groups gravitated to a particular learning method or not.

After the six weeks of observation during their training program, the participants would be interviewed again to see if their preferences toward learning method had changed, and to see if they had built stronger working relationships with members of different generational groups. The interviews would be kept confidential ant the results were to be displayed in the projects analysis.

It was determined before the class had started, that the company was taking on significant risk in allowing me to pursue the project. As a result I changed my method and enlisted the help of Regis University.

Through Dr. Robert Collins, Regis University, I was able to secure permission to survey human subjects at Regis. The only stipulation was that the students' information including email addresses would be anonymous to me. In order to insure this, I utilized Zoomerang, an independent online survey creator to assist with the survey. Through Zoomerang I was able to

create my survey as a link and have Dr. Collins distribute the link to participants. The results could be seen and analyzed on the Zoomerang website, and I was able to see individual responses, but not participants' personal data (other then age).

Population

The population was made up of the entire student population of the Regis University School of Humanities and Social Sciences Master of Arts program. A population of three hundred and twenty five. There was a number of reasons that this group was ideal for the project. First they were comprised of mostly professional adults who had careers outside of their educational endeavors. This made them ideal for the purpose of the study, as I was looking for differences for learning in the classroom or at work

In addition the MA program at Regis utilizes online learning methods as well as traditional classroom learning. This was also ideal as the project focused on the preferences toward these delivery methods. Having a population of participants that had experience with both methods was critical.

Finally this group was ideal as there were a number of each generational group enrolled in the program. If I was able to utilize the participants at American Century Investments I would have a limited number of participants, and I would not have had a sample for the Greatest Generation.

The survey link was administered via an email from Dr. Collins, to the entire MA population. The survey was left open for two weeks, and closed after that. The data from the survey was collected, and the results were analyzed. Each survey response was placed into one

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of four generational groups (Baby Boomer, Generation X, and Millennial, or Other). Once separated the surveys were reviewed and responses were analyzed.

Of the three hundred and twenty five possible respondents, seventy five participants actually completed the survey. Of these, thirty three fit into the Baby Boomer Generation, thirty one comprised of Generation X, seven completed the survey for the Millennials, and four were considered other, comprising mostly of the Greatest Generation (those born before 1946). Although three of the four participants in the "Other" category one of the participants checked other, but listed a birth year of 1977. Since the respondent could not be contacted, it could not be concluded which error was made by the respondent (checking the other box or listing the wrong birth year). For this reason the results were kept in the Greatest Generation results. The results of the survey are listed in the next chapter.

Chapter Summary

The methods used for this project were qualitative. The initial plan to survey members of a business organization fell through, but the alternative of surveying educational students proved to be successful. The survey questionnaire was designed to gather appropriate preferences based on generational group, but could have been reviewed in greater detail. Once the survey was finalized and the population chosen, the methods portion of the project delivered.

Chapter 4

RESULTS

To determine the results each question on the survey was analyzed based on the mean,

median, and mode for each generational group. The mean was used to determine the average

preference toward the question based on the generational group, the median determined the half

way point of each generational group's preference, and the mode helped determine which value

appeared most often in each question, based on generational group. These three statistical

measurements determined the most common occurrences and a value of preference based on

generational group.

In addition to the statistical measurements, the survey was broken out into two different

types of questions. Those that showed preference to a delivery method, and those that showed

preference to a characteristic of the class (flexibility, teamwork, experiences etc.). Of the

delivery methods, the questions were broken down even further into categories of online

preferred method, and classroom preferred method.

The first question was directly related to preference toward online learning. In this

question, only the Baby Boomer generation showed preference scoring a mean of 3.58. Though

this number was the highest out of the generational groups, the median and mode did not concur

with the results as they were 2.5 and 2 respectively. In addition the Baby Boomers results for

question three would seem to indicate that they prefer classroom courses over online courses.

Question three asked " I do not like traditional classroom courses because I would rather work on

my own." For this question Baby Boomers scored a mean of 2.35, with a median and mode of 2

(disagree).

The Millennials had the lowest results for question number one with a median of 2.28, and a mean of 2 (no mode). For question one Generation X scored a 2.86 mean with a 3 median, and the group who marked as other on the survey had the following results, a mean of 2.5, median of 2.5, and mode of 2. The results of question three were similar to those of the Baby Boomers. The Millennials had a mean of 2.42 with a median and mode of two. Generation X had a mean of 2.3 with a median and mode of two, and the group comprising of mostly The Greatest Generation had a mean of 2.5 with a median of 2 and a mode of 1.

Question four was related to the participants' perception of how they learn best (online or in the classroom). All of the generational groups' scores indicated that they believed they learned better through traditional classroom courses. Of the generational groups the Millennials scored the highest with a mean of 3.66 ,and a median and mode of 4. The Baby Boomers were next with a mean of 3.11, and a median and mode of 3, while Generation X scored a 3.11 mean, and median and mode of 3. Finally the group known as other scored a mean and median of 2.5.

In addition to surveying respondents on their preferences for learning method, participants were also surveyed on their comfort level with online courses. Question eleven asked respondents to rate how confident they were in their ability to use the computer for school. All of the generational groups scored high with the Millennials responding with a mean, median, and mode of 5. Generation X scored a mean of 4.7 with a median and mode of 5. Baby Boomers responded with a mean of 4.52 with a mean and median of 5. Finally those listed as other scored a mean of 4.25, with a median of 4.5 and a mode of 5.

These results were similar to those of question ten which asked respondents if they were intimidated by online courses due to not know the technology as well as other students. The results for these questions were low among all generational groups, with Millennials scoring of

mean of 1.14, and a median and mode of 1. Generation X had the next lowest results with a mean of 1.63 and a mode and median of 1. Baby Boomers had a mean and median of 2 with a mode of 1. And the other generational group scored a mean and median of 2.5 with no mode.

Question five also made references to the comfort level with technology. This question asked respondents whether or not they spent more time learning the technology associated with an online course, then the actual course. The results for this question were also consistent with questions ten and eleven. The Millennials again had the lowest agreement with a mean of 1.42 and a mode and median of 1. The group comprised of mostly The Greatest Generation scored 2 for the mean, median, and mode. Generation X scored a mean of 2.06 with a median of 2 and no mode. Finally, The Baby Boomers scored a mean of 2.26 and a median of 2 and no mode.

The next set of questions were used to gauge the respondents' needs and experiences with learning programs. Questions two and eight were based on convenience and flexibility in taking courses and completing assignments. Question two asked respondents about they enjoyed the flexibility of online courses. Most of the respondents scored this question high with the Generation X having the highest mean of 3.7. In addition the median and mode for this group was 4. The Baby Boomers had the second highest mean at 3.63 and also had a median and mode of 4. The Millennials responded with a mean of 3.57 and also had 4 in median and mode. Finally the group primarily comprised of The Greatest Generation scored a mean of 2.8 with a median and mode of 3.

Similar to question two, question eight was asked students if they prefer to have assignments given to them with due dates (as opposed to having the assignments given during class). The results were similar to question two with high scores across all generational groups. The group comprised of mostly the Greatest Generation, and the Baby Boomers had the same

mean median and mode all were 4. The Millennials scored a mean of 3.85 with a median and mode of 4, and Generation X had a mean of 3.83 with a median and mode of 4.

The rest of the scaled questions (six, seven, and nine) were used to determine the experience of the participants. These questions were used to determine the motivation between choosing an online course or classroom based on working with others. Question six stated " I do not enjoy interacting with other students in an online format, I would rather interact with students in the classroom." For this question, all generational groups scored high with the Millennials scoring the highest. For this question the mean was 4.28 and the median and mode were 4. Generation X scored the second highest with a mean of 3.46, and a median and mode of 4. The group primarily made up of the Greatest Generation had a mean and median of 3.5 with no mode, and the Baby Boomers had a mean of 3.35 with a median of 3 and a mode of 2.

Question seven was similar to question six and asked respondents if they would rather work in groups of people regardless of online or classroom. The group primarily made up of the Greatest Generation scored the highest on this one with a mean and median of 3.5 with no mode. The Baby Boomers had the next highest scores with a mean of 3.2 a median of 3, and a mode of 2. The Millennials scored a mean and median of 3 with a mode of 4. And Generation X had a mean of 2.8 with a median of 3 and mode of 4.

Finally question nine asked students if they believed that they learned best when students shared experiences with the class. The results were similar to questions six and seven with Generation X scoring the highest mean of 3.76. Not far off was the group primarily comprising of the Greatest Generation, their mean score was 3.75. The Baby Boomers had a mean of 3.69 and the Millennials had a mean score of 3.28. For all of the generational groups, the median and mode was 4.

The other portion of the survey allowed respondents the opportunity to add their own opinions. Questions twelve and thirteen asked respondents to share frustrating experiences with both online and classroom courses respectively. These topics were also reviewed and analyzed based on generational group. Here are some of the excerpts from each of those groups.

The Group primarily comprised of the Greatest Generation there were three responses. Two responded to their frustrations with classroom courses, while all three weighed in on their frustration with online courses. Of the online courses feedback, one respondent wrote that there was frustration with the computer equipment and software. The other two respondents mentioned timely feedback from their professor as the catalyst to their frustration with online courses.

For the classroom courses, both of the respondents mentioned the delivery as a source of frustration. One participant listed that classroom courses often were to lecture focused, and not enough mixing of the media (audio, video, group work etc.). The other respondent listed that classes were too large and the level of learning was not the same as a result.

Out of the Millennial group, five participants responded to either question twelve or thirteen, or both. There were four total responses for question twelve (frustration with online courses), and three total responses for question thirteen (frustration with classroom courses). Some of the catalysts to the frustration with online courses included, lack of clear objectives and assignments, hard to communicate via written format all the time (messages get lost with out body language and tone), lack of interaction with other students, and meaningless assignments given designed to make up for lack of interaction (having students post questions and answers to simulate a discussion).

For question thirteen this group had similar frustrations as listed by the previous generational group discussed. This group indicated that large classes are a source of frustration like the previous group. The Millennials also listed frustrations based on the lecture and the other learners. The respondents mentioned undirected discussions, getting off topic, and lingering on a topic when most students already understand for one student who can not grasp the concept as sources of frustration.

Out of the respondents that made up Generation X, sixteen participants answered question thirteen, and fifteen answered question twelve. The responses for twelve were similar to those of the Millennials and of the group that primarily consisted of the Greatest Generation. Lack of interaction, lack of timely feedback, losing the message in the communication, and meaningless busy work types of assignments (posting questions and answers from other students on a chat board), were the main sources of frustration. As one student pointed out, "Ridiculously overzealous participation requirements, group work required to be held on campus for an online class, lack of feedback from instructors, inane comments made on bulletin boards just to meet participation requirements. In addition to these types of frustrations, students also listed technology issues as a source of frustration.

For question thirteen, Generation X also had remarks that were similar of the Millennials. The most common situation was that of discussions. The respondents noted that people tell personal stories, get off the topic, take over the discussion for everyone else, and lectures are geared toward a slower learner. In addition to these remarks, Generation X also noted the physical limitations of classroom training. One respondent noted that she was a single mother with three children and finding baby sitters for classes was tough. Other respondents also

mentioned that the class they need was not offered when they needed it, they did not like driving in to class, and their work schedules eliminated them from being able to attend a course.

Twenty three Baby Boomers responded to question twelve and twenty to question thirteen. This group had similar responses to question twelve as the generations discussed earlier. These included computer technical issues, lack of support, lack of timely feedback, lack of interaction, and busy work that did not lend to learning.

In addition to these results, the Baby Boomers also noted that other students could dominate the discussion in an online format, as opposed to the classroom where a facilitator could control the conversation and the student. In addition, this group added more discussion on the complexities of a chat room discussion, such as questions are answered before the student has a chance to read. Another example brought up by this group is that many of these types of courses require the student to rely on other students by posting questions on a board to be answered. When other students do not post in a timely manner it can be frustrated for learners who want to complete the task in a timely manner.

Another interesting result of this group is that some of them responded that they have not tried an online course. Some of the responses indicated that they do not trust their technology knowledge, or do not feel they would like the format. In these cases just the perception of an online course is keeping them from enrolling even though it may be the best type of course for their schedule.

On question thirteen, the Baby Boomer responses were similar to those of the other generational groups previously discussed. The most glaring response was of inflexibility with the class (not offered at a convenient time for working adults). In addition this group noted

driving in the winter, limited offerings, and one person mentioned that a disability makes attending classes tough.

The group also mentioned frustrations with the facilitator's ability and other students sharing experiences that do not add value, as reasons for their overall frustration. In addition this group pointed out that they have witnessed a lack of respect for teachers, and other students as a frustration. One student wrote, "people checking e-mail on lap tops. If they are that uninterested in the class, they should find another to take. I also have problems with people talking while other students and teachers are talking. This, however is a problem that reflects a teacher's inability or unwillingness to set behavior boundaries to begin with and then reinforce these boundaries as needed through the course of the class."

Chapter Summary

The data showed that the there were specific preferences to online or classroom learning based on generational groups. Of these the generational group that preferred online learning over classroom learning the most were the Baby Boomers. In addition the group that proffered the classroom and believed that they learned better from the classroom the most were the Millennials. In addition to these preferences, the survey showed that Baby Boomers may enjoy the convenience of online learning due to busy schedules, and more complex lives (families, jobs, extra curricular activities etc.). Whereas the Millennials may enjoy the social aspect that a classroom gives them.

In addition to preferences, the survey showed that there were also differences in the learning experience based on generational group. Of these experiences, the results of the survey showed that all generational groups felt comfortable with technology. These groups did

however, have reservations to how online courses were delivered. Millennials believed that online courses were not interactive enough, and did not believe the courses were designed well enough. The Baby Boomers did not feel that they received enough support, and could become frustrated with other students in the online format.

For classroom experiences, all generational groups experienced frustration with other students and professors. There were differences however in the experiences based on the generational group. For the Millennials (who may be faster learners) the pace of a course could frustrate them. These learners want a quick pace and enjoy a number of blended learning techniques. When the course is all lecture, or the professor caters to the lowest learner, this group can become disengaged. For Generation X, frustration set in when other students offered stories that had no value, and for the Baby Boomers disrespectful students frustrated them. These results are interesting, as they give researchers an idea of what each generational group feels is important. These results can be expanded in the discussion

Chapter 5

DISCUSSION

Interpretation of Results

The results of the research help educators understand some of the key differences and similarities between different generations of learners. First we can see that all groups prefer traditional classroom courses over online formats. In addition all of the groups indicated that they feel they learn better in a traditional classroom setting.

Some of the differences can be seen in why these students choose the online or classroom course. For instance it appears that the Baby Boomers and Generation X have more schedule conflicts and therefore may not be able to choose a classroom course. Where as the Millennial group becomes frustrated by larger classrooms and slower learners, and for this reason may choose to take a course online.

In addition to preferences the results show the differences in experiences with online courses and classroom courses based on generational groups. All groups agree both types of courses can be improved, but differ on what they would like to see. These differences in experiences can be seen in the results for questions twelve and thirteen. These two questions can help educators and researchers understand a few of the key differences in expectations between each generational group. The Millennials expect everyone to be able to grasp a concept, the Baby Boomers expect respect for everyone in the classroom, and Generation X expects people to be professional. Being able to utilize

this information can be helpful to educators, administrators, and researchers in many ways of which I will discuss in the chapter summary.

Recommendations

As a separate research project it would be interesting to see how the Millennials view of classroom learning changes as they become more entrenched in the workforce, or as they begin to raise children and families. Will they be more likely to choose an online course based on schedule needs, or will they continue to see the classroom as more valuable?

In addition to the schedule differences, the generation groups had varying views of what experiences are important to learning. All of the generational groups indicated that they learn best when the class shares experiences, and they enjoy interaction with students (this was one of the reasons given for online course frustration from all of the generation groups), but their view of the social aspects of class is different.

These differences are important to note. As learners and educators how can we mitigate issues in our classroom. We need to make sure we are utilizing the strengths of the Millennials who may learn quicker, with the Baby Boomers who want to share their experiences with a topic. In addition we can involve activities quicker instead of straight lecture, and have learners teach others in a designed facilitation. Educators should continue to research to uncover new ways of involving students of every generation. This will help eliminate some of the frustrations that were listed in this research.

Educators can also expand on this research to improve online and classroom courses. From this research we know that online methods are convenient for the learner but not

optimized. It will be important for educators to research new methods of adding interactivity with other students. Synchronous learning modules web cams, webinars etc. can help provide the interactive student to student learning that every generation group values. In addition these will meet the convenient needs of working adults with families.

As far as the overall results, there is more that can be researched to determine more concrete motivations. This survey focused on the delivery method, social aspects of learning, preferences to learning, and overall experience with online and classroom delivery methods. More can be researched to determine if there are differences in the value of education among generational groups, and reasons for attending a degree program. For now this research can provide a foundation for understanding how learners of different generation groups perceive how they learn best, and what delivery method is optimal for their needs.

As far as my experience with the research, I do feel there was a great deal of work that went into arriving at the results. To be more effective I would have had more reviewers look at the questionnaire to offer critical feedback. As it was I do believe I gathered the specific information needed for this project, but more essay questions would have helped uncover more of the "whys' behind frustrations, or motivations for attending classes.

In addition to the questionnaire, I would have liked to learn more about the students who were responding. One respondent did let me know that he/she was handicapped and for that reason they preferred online learning. Knowing that I would receive that type of candid response I would have asked more questions about the general characteristics, and demographic information of the participants. This would have allowed me to break the survey results down even further into gender, race, physical characteristics etc. to see if there were different results among these groups of people.

Chapter Summary

Knowing the differences in advance can help educators alleviate frustration in a classroom. There are some simple practices facilitators can do in the classroom to create an optimal learning experience for all learners. These include: moving at an acceptable pace, not allowing students to dominate a discussion, checking in with other/quieter students to make sure their thoughts are being gathered, and making sure students turn off their cell phones and other portable devices before class.

The results of the survey can also assist educators and administrators design more effective online courses. First marketing can target those who have more complex schedules such as Baby Boomers and Generation X. These groups may be more prone to take an online course if it is offered in an effective manner

It will then be up to administrators and educators to design online courses that are attractive to these groups of learners. Some key tips to help with this are: design classes that offer more interaction and less busy work, allow students to work together but do not force students to depend on other students for their grade, provide regular feedback (professors), and insure that all students have adequate technical support.

REFERENCES

Aro, M. Rinne, R. Lahti, K. & Olkinuora, E. (2005). *Education or learning on the job? Generational differences of opinions in Finland.* International Journal of Lifelong Education, Vol 24. No 6. November –December 2005 pg 459-474

Dirkx, J. M. (2005). *Generational differences and the problem of identity in the adult education and community college classroom.* Northern Illinois University. November 21, 2005. Retrieved May 23, 2007 from https://idea.iupui.edu:8443/dspace/handle/1805/433

Dziuban, C. Moskal, P. & Hartman, J. (2004). *Higher education, blended learning and generations: Knowledge is power-no more.* Research Initiative for Teaching Effectiveness University of Central Florida, LIB. 118. Retrieved March 22, 2007 from http://tlc.ucalgary.ca/documents/chuck.doc.

Hanks, R. S. & Icenogle, M. (2001). *Preparing for an age-diverse workforce: Intergenerational service-learning in social gerontology and business curricula.* Educational Gerontology, 27, pg 49-70.

Kranz, G. (2007). *A higher standard for managers.* Workforce Management, Vol 86. Issue 11. June 11, 2007, pg 21-25.

Larson, R. (2006). *Building intergenerational bonds through the arts.* Generations. Sring 2006, pg 38-41.

Layfield, D. K. (2004). . *Impact of intergenerational service learning on students' stereotypes toward older people in an introductory agricultural course.* Journal of Southern Agricultural Education Research. Volume 54, November 1, 2004. Pages 134-146. Retrieved May 23, 2007 from. http://pubs.aged.tamu.edu/jsaer/pdf/Vol54/54-01-134.pdf

Moschetto, M. (2008). *Closing the skills gap.* Control Engineering, Vol. 55. Issue 1. January 2008, pg 34-40.

Outreaching further. Industrial Engineer: IE, Vol. 39. Issue 4. April 2007, pg 10-10.

Pusey, M. (2007). *The changing relationship between the generations. It could even be good news.* Youth Studies Australia. Vol 26 No 1. pg 9-16.

Rothwell, J. & Kazanas, H.C. (2003). *The strategic development of talent: A framework to support your organizational strategy. HRD Press Inc. Amhurst, MA.*

Salopec, J. J. (2007). *Wit and wisdom walking: Corporate culture can suffer when seasoned employees retire.* T+D. Vol 61. Issue 8. August 2007, pg 20-22.

Tyler, K. (May 2007). *The Tethered Generation*: HRMagazine. Vol 52. Number 5. Retrieved
July 18, 2008 from http://www.shrm.org/hrmagazine/articles/0507/0507cover.asp

Wikipedia.org. (2008). Retrieved July 18, 2008 from http://en.wikipedia.org/wiki/E-Learning
and http://en.wikipedia.org/wiki/Latchkey_kid

Wilson, L. B. Harlow-Rosentraub, K. Manning, T. Simson, S. & Steele, J. (Winter 2006-2007*).
Civic Engagement and lifelong learning*. Generations. Winter 2006-2007, pg 90-94.

Universities and companies team up to tackle the skills gap. Professional Engineering, Vol. 20
Issue 22, December 12, 2007, pg6-6.

APPENDIX A
SURVEY QUESTIONNAIRE

Please check the box for the year in which you were born.

☐	☐	☐
1946-1964	1965-1980	1981-1994

Please answer each question by checking the box that most appropriately reflects your response to each statement.

1. I prefer to take classes online over traditional classroom courses.

    Strongly Agree ☐

    Somewhat Agree ☐

    Neither Agree nor Disagree ☐

    Somewhat Disagree ☐

    Strongly Disagree ☐

2. I enjoy the flexibility of online courses over traditional classroom courses.

    Strongly Agree ☐

    Somewhat Agree ☐

    Neither Agree nor Disagree ☐

    Somewhat Disagree ☐

    Strongly Disagree ☐

3. I do not like traditional classroom courses because I would rather work on my own.

    Strongly Agree ☐

    Somewhat Agree ☐

    Neither Agree nor Disagree ☐

Somewhat Disagree ☐

Strongly Disagree ☐

4.   I do not learn as well from an online course as I do from traditional classroom training.

☐

Strongly Agree

Somewhat Agree ☐

Neither Agree nor Disagree ☐

Somewhat Disagree ☐

Strongly Disagree ☐

5.   I do not like online courses because I spend more time learning the technology required for the course, then what the course was actually supposed to teach me.

Strongly Agree ☐

Somewhat Agree ☐

Neither Agree nor Disagree ☐

Somewhat Disagree ☐

Strongly Disagree ☐

6.   I do not enjoy interacting with others in an online format. I would rather interact with others in a classroom setting.

Strongly Agree ☐

Somewhat Agree ☐

Neither Agree nor Disagree ☐

Somewhat Disagree ☐

Strongly Disagree ☐

7.   I enjoy working in groups of people regardless of if the course is administered online or in a classroom.

      Strongly Agree

      Somewhat Agree

      Neither Agree nor Disagree

      Somewhat Disagree

      Strongly Disagree

8.   I would rather have assignments given to me with due dates so I can complete them on my own.

      Strongly Agree

      Somewhat Agree

      Neither Agree nor Disagree

      Somewhat Disagree

      Strongly Disagree

9.   I learn best when the class shares experiences.

      Strongly Agree

      Somewhat Agree

      Neither Agree nor Disagree

      Somewhat Disagree

      Strongly Disagree

10.   I am intimidated by online courses because I feel other student know how to use the technology better then I do.

Strongly Agree

Somewhat Agree ☐

Neither Agree nor Disagree ☐

Somewhat Disagree ☐

Strongly Disagree ☐

11. I am confident about my ability to use a computer for general course work.

Strongly Agree ☐

Somewhat Agree ☐

Neither Agree nor Disagree ☐

Somewhat Disagree ☐

Strongly Disagree ☐

12. If you have been frustrated with online courses please list reasons for your frustration.

13. If you have been frustrated with traditional classroom courses in the past please list reasons for your frustration.