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Assessing the Cost, Quality, and Effectiveness of Local Government Training Methodologies

Michael Dean Norman
Western Michigan University, budnorman2@gmail.com

ASSESSING THE COST, QUALITY, AND EFFECTIVENESS OF LOCAL GOVERNMENT TRAINING METHODOLOGIES

by

Michael D. Norman

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Doctoral Committee:

Matthew Mingus, Ph.D., Chair
Robert Leneway, Ph.D.
Stephan Kleinschmit, Ph.D.

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Michael D. Norman, Ph.D.

Western Michigan University, 2019

Two significant factors are present in our current environment: constrained resources and increased globalization. Training is widely recognized as an imperative to increasing productivity, improving economic conditions, and exploiting global opportunities. But what is the most effective learning modality that should be applied in an environment of constrained resources and increased globalization? This study examines that question by comparing, contrasting, and analyzing the advantages and disadvantages of traditional learning vs. e-learning in local government organizations. The variables used in the analysis are cost, quality, and effectiveness.

The results indicated that there are several factors in the analysis of the advantages and disadvantages of online vs. traditional learning in local government institutions. Rather than one preferred learning pedagogy both should be implemented and practiced based on resource allocation, and learning preferences to ensure the continued effective training for local government employees. The study uncovered an additional element necessary for training in local government, which is emotional intelligence. Local government employees must effectively interact with employees and citizens. It is essential that they connect and understand others in their interactions to ensure service delivery.

The advancement of online learning is affecting the training development of local government units. This study provides a recommendation for a training model that incorporates these impacts.

Keywords: training, learning, globalization, resources, online, traditional

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CHAPTER I

INTRODUCTION

The purpose for this study is to identify the advantages and disadvantages of e-learning and traditional learning for training employees of local government organizations given an environment of constrained resources and globalization. Government agencies have recently experienced fiscal reductions that have forced reconsiderations of funding. Frequently, a target for reduction is training, yet training is essential to ensure the maximization of employee productivity and cost efficiency. The common downsizing oath is "more with less" and this pledge must be adopted and supported by government human resource departments to maintain efficiency and relevance. Another significant challenge is globalization and the need to communicate, complete transactions, and deliver services at a distance. As local governments adapt to economic changes and a continued demand for services while facing reduced resources, training to address these challenges has become more important (Slack, 1990; Ammons & Fleck, 2010; Police Executive Forum, 2010; Getha-Taylor, et al., 2015, Jacobson & Sowa, 2015).

Secondly the purpose is to explain how these identified advantages and disadvantages affect local government training. Online training has grown significantly in the last 10 years. Ginn and Hammond (2012) reported that over a third of all higher education students had taken courses online by 2010 and the growth continues for reasons to include globalization. Nollenberger (2015) cites MIT President L. Rafael Reif as stating, "I am convinced that digital learning is the most important innovation in education since the printing press" (2013, p. 54).

Thirdly the purpose for this study is to identify and design a training/development model(s) that adapt(s) to limited resources and increased expectations that exist for local government. Government agencies are challenged with limited resources and elevated

expectations. Other significant challenges include increased diversity and evolving service expectations. Local governments are experiencing ethnic, generation, and expectation changes in the citizen base. Agencies that are required to do "more with less" and adjust to an evolving client base must be provided the essential training and development to ensure they can meet citizens' needs.

There is considerable literature examining the advantages and disadvantages of e-learning as compared to traditional learning in educational institutions. However, there is limited research available that evaluates its effectiveness in local government organizations. This analysis is important to the field in evaluating the pros and cons of each type and whether implementation could improve training and simultaneously provide cost savings in local government organizations.

Ensuring local governments meet customers' changing needs is an important factor (Training Industry Report, 2010; Brobeck and Goodman, 1997; and Kaplan, 2012). Training and development is critical for all local government employees to meet citizens' needs. However, the need for research in this area is extended due to gaps that will open in the government workforce in the next 10 to 15 years. Reid (2012) explains that we will move through the "Baby Boomer bulge" as the majority of government employees are age 40 and over. Robey (2018) cautioned that currently one in five workers are age 55 and older and an investment in training employees is critical. The next 10 years are opportunistic and cost beneficial for local government training. Cushman (2017) stated that approximately 10,000 U.S. citizens will turn 65 every day for the next 15 years. It is a time to ensure employee development and training in order for current and new staff to meet future expectations. Parks and Hilvert (2017) further

support that effective training is a key component in not only employee performance but organizational development as well.

Sardar (2010) contends that a systematic approach or [model] for training ensures the most effective training and development needed by employees to better accomplish their job. He additionally suggests that there are growing problems with retention and recruitment [in government]. He supports that job satisfaction and personal development are important factors in countering this problem.

This research most closely aligns to an article prepared by Jacobson and Warner (2008) titled *Leading and Governing: A Model for Local Government Education*. The authors proposed a leadership training program that adapted to the changing nature and complexity of governing. The world in which public leaders lead and govern is complex, and ever changing. Forces such as globalization, multi-sector partnership, and other social transformations have profoundly changed the way the business of governing is conducted (Forrer, Kee, and Gabriel, 2007). A plan and a model is a powerful tool that provides a sense of clarity, identity, and purpose. It allows the ability to make strategic decisions as opportunities arise, to set priorities, plan work, and maximize limited resources (Jacobson and Warner, 2008). The programs focus on education enhancement for front-line supervisors and managers, managers, and elected officials. This study aims to evaluate a program not just for executive leaders, but rather personnel at all layers in local government.

Jacobson and Warner (2008) construct their model reviewing governance, leadership, and public service and the collaboration necessary across the concepts. This research probes deeper and wider uncovering the content and modes of learning that are most effective and cost beneficial. Jacobson and Warner provide some general guidance for a leadership program for

government supervisors. This examination searches in depth to define the specific modality or mix of modalities that are appropriate. It additionally investigates the breadth of learning necessary not only for leadership, but for routine and specific tasks and attitude essential to provide optimum customer service. A concept of the models compared is illustrated in Figure 1.

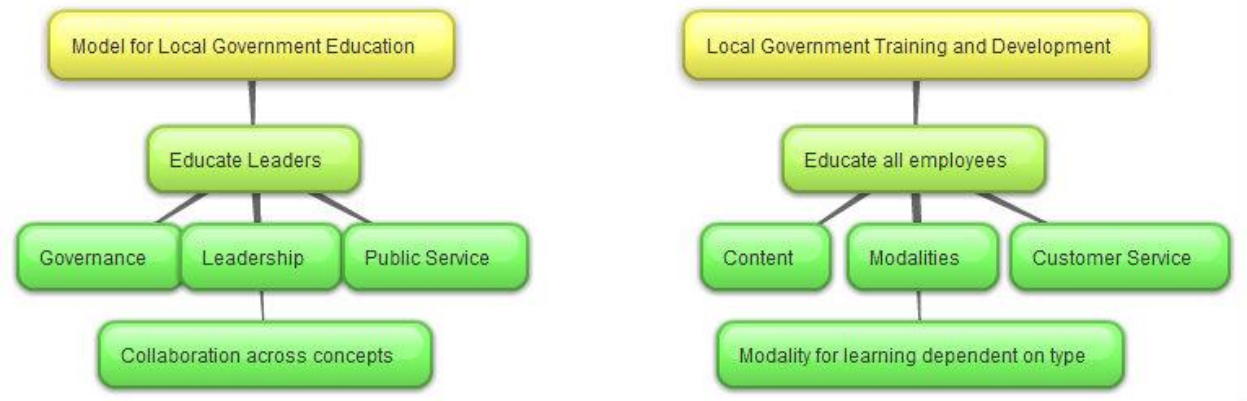

Figure 1. Concept of Models

The study is structured with a literature review, methodology, data analysis and results, and conclusions. The literature review examines the research that currently exists relating to training methods and characteristics that promote effective learning. The methodology describes the techniques used to evaluate the advantages and disadvantages of online vs. traditional learning in an environment of constrained resources and globalization. The investigation includes an analysis of the modalities based on cost, quality, and effectiveness. Data analysis investigates the findings for correlations, similarities, and differences. It searches for significant trends, issues, and commonalities that contribute to the local government environment. The results compile the findings and the conclusion integrates these findings into recommendations. It also includes the effect on American regime values and characters, gaps in the study, opportunities for further research, and the author's intent for continued investigation.

Significance of the Research

The stakeholders in the research are local government agencies that are experiencing limited resources and increased expectations now or anticipate this experience in the future. The only constant in life is change and inevitably local governments will experience one or the other at some point. The stakeholders range from elected to appointed leaders, department heads, street-level leaders, and front-line staff. The research is intended to affect the entire local government agency instead of focusing on savings or efficiencies in an individual department or segment of employees.

The beneficiaries of the outcomes include businesses, agencies, and community constituents (Poister and Thomas, 2013). Well-trained [government] employees are more innovative, productive, and open to change. They offer additional value and contribution to their agency through their attitude of openness and their intellectual agility represented by innovativeness. Their skill improvement provides benefits in four directions affecting society, the economy, employees, and the agency. It benefits society through increased participation and social cohesion. Agencies are provided better services, which translates to efficiency, maximization of opportunities, and public welfare. The economy is strengthened by services that provide increased productivity and competitiveness (Dunleavy and Carrera, 2013). The employees increase their job quality and satisfaction, ability to manage a greater number of tasks, and the local government can achieve enhanced productivity and performance (Wooblekind, 2012; Moise, Mihaela, and Nae, 2010). An illustration of shareholders and beneficiaries is included at Figure 2.

The far-reaching implications of the project findings include a stronger community through cooperation, service, and commitment. It also includes an assurance of a revenue stream

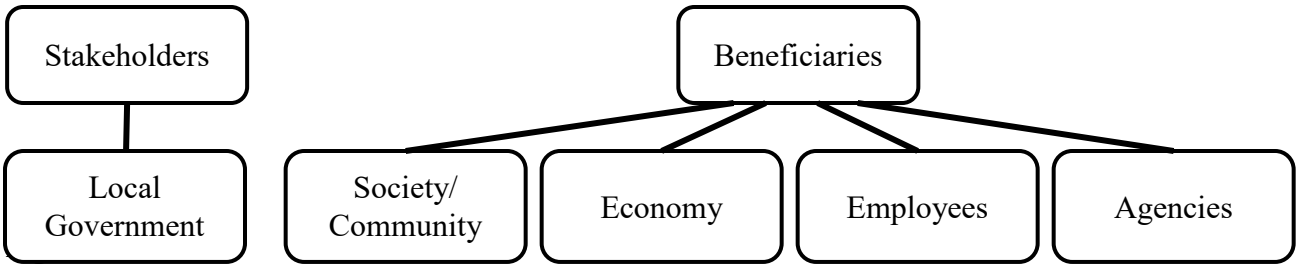

Figure 2. Stakeholders and Beneficiaries

for ensuring government operations. Although local governments vary in their sources of revenue, local governments are dependent on property tax revenue for up to two-thirds of their budget (Desisle, 2010). This funding comes from residential and commercial property values, which are reliant on jobs in the community. Bondigas (2012) reports that one of the key factors in attracting and retaining businesses is the character of the community and friendly and efficient government. This efficiency is enhanced and ensured through a comprehensive employee training and development program.

Research Questions

What are the advantages and disadvantages of e-learning in the form of online learning methods versus traditional face-to-face methods based on limited resources and increased globalization for training employees of local government organizations?

Is emotional intelligence or soft skills a critical issue in training?

Are there overarching differences in training preferences and abilities?

What is/are an appropriate method(s)/model(s) for local government training and development based on limited resources and increased globalization or expectations for appropriate communications and quality service to diverse constituents?

CHAPTER II

LITERATURE REVIEW

Local government is the political administration of the smallest subdivision of a country's territory and population. It is an administrative body for a small geographic area, such as a city, town, county, or state. A local government will typically only have control over their specific geographical region, and cannot pass or enforce laws that will affect a wider area (Bender, 2014, United States Census Bureau, 2015).

Identifying the advantages and disadvantages is important to serve as a foundation for training, particularly in changing environments. Since the mid-1980s, radical global changes that include expanded communications and improved technology have forced organizations to discover the means of harnessing and growing their intellectual capital to achieve competitive advantage and, in turn, long-term survival (Beesley and Cooper, 2008). This trend is more evident today as technology continues to drive competitiveness. Practitioners and academics, although differing in their opinions regarding the exact value, agree that the development of human capital enhances economic growth, living standards, and efficiency. Frank Benest (2011) contends that true learning is especially critical for local governments because those organizations are facing accelerating and discontinuous change.

These two overarching trends, globalization and constrained resources, are present in our current economy. The need for building human capital is essential for growth in our global economy, but the dilemma is meeting this need during periods of constrained resources.

Beesley and Cooper (2008) explained the accelerating significance of global changes since 1980. Improvements in technology and communication have greatly reduced geographic distance challenges. We increasingly expect real time information regardless of space and time

separation. This information assists in making timely decisions that ensure safety, security, and profitability. In an era defined by globalization, technological innovations compress the world in space and time and economies become impelled into a state of interdependence, interconnectedness, and cultural diversity (Stromquist, 2007). Thus, educational institutions across the world are being challenged to follow suit and educational contexts abound with the rhetoric of globalization (Boubsil, Carabajal, and Vidal, 2011). The issue of globalization is not constrained to the educational arena, but to areas like local government. Imbroscio and Williamson (2003) explain that globalization affects communities and it is essential for local governments to accept and adapt policies for coping.

Constrained resources have a more inconsistent trend that is similar to the business cycle filled with peaks and valleys coinciding with economic contraction and growth (Schiller, 2015). In the sense of training and following the business cycle, education is routinely accentuated during times of economic growth and deemphasized in times of contraction. Ammons and Fleck (2010) stated that the arrival of economic contractions and budget constraints leads to the curtailment or removal of training from local government budgets.

Tim Walker (2008) of the National Education Association sees an environment of education and training that has been evolving for years, but has recently experienced a significant challenge. In times of restricted funding, training or education is frequently the easy target, thus jeopardizing organizations' ability to compete in the global economy. David Turner (2010) and Barrett and Greene (2001) argue that economic competitiveness is under threat because employers have reduced training. Institutions including education at all levels, corporations, and the government are seeking more efficient ways to compete.

John Psarras (2006) states that while it is clear that the demand for education and training will increase in the new knowledge-based economy, it is not clear how to best attain these educational objectives. A continuing investment in human capital is critical for not only sustaining our economy, but also cultivating growth. The key is to employ learning methods that efficiently support this investment and maintain our competitiveness. It is particularly important to seek to maintain somewhat consistent education and training throughout the economic cycle to ensure that employees are current with their skill requirements. This consistency will effectively support local government employees' abilities to serve the public.

A History of Trends

Today's environment relies upon innovation and intellectual capital to generate economic value. This differs with the long-established theory that emphasizes the production of goods to stimulate economic growth. Innovation incorporates new products, processes, markets, raw materials and new forms of organization. Training and education is the answer for both today and tomorrow's economy (Beesley and Cooper, 2008; Litz, 2011).

If training and education are the answer, how do we most effectively achieve this? Allen and Seaman (2010) provide categories or styles of learning methods used in training and education. The categories or descriptive variables, used in the study to identify learning methods are listed in Table 1 as: traditional, web facilitated, blended, and online. The traditional method is basically a face-to-face instruction that does not rely on online technology. Web facilitated is face-to-face instruction that is complemented by online technology like Blackboard, Moodle, or other electronic media, categorized by 1 – 29 percent use of online technology. Blended, also referred to as hybrid, is a mix of face-to-face and online instruction, labeled as 30 – 79 percent use of online technology. Face-to-face sessions rely less on blended learning with its increased

dependence on online activity? Online is instruction that is delivered online with little to no face-to-face sessions, grouped as 80 – 100 percent use of online technology.

Regardless of the type of training, investment in training tends to reflect the economic situation. The annual Training Industry Report (2010) provides and describes data on institutions offering training to include educational institutions and corporations with 100 or

Table 1
Learn/Teaching Methods

Method	% of online technology	Description
Traditional	0%	Course with no online technology used – content is delivered in writing or orally.
Web Facilitated	1 – 29%	Course that uses web-based technology to facilitate what is essentially a face-to-face course. May use a course management system (CMS), the use of email, blackboard, or other electronic media to post items like the syllabus and assignments.
Blended/Hybrid	30-79%	Course that blends online and face-to-face delivery. Substantial proportion of the content is delivered online, typically uses online discussions and typically has a reduced number of face-to-face meetings.
Online	80-100%	Course where most or all of the content is delivered online. Typically have no face-to-face meetings.

more employees. Although it does not include agencies of the federal, state, or local government, this data illustrates the effect that the economic situation and constrained resources have on training. The 2014 report illustrates the trend for training expenditures over the last 20 years. The amount invested in training decreased as the economy contracted. These expenses are reflected in Figure 3. There was a steady increase in spending in the 1990s until the

technology crash in 2000 and fear following the 9-11 crisis in 2001. Training expenditures remained relatively flat for three years before considerably increasing again in 2007. Expenditures fell in 2009 due to the Great Recession that started the year before. Training investment increased slightly from 2009 to 2011 as the economy started to recover. Training investment continued to increase with economic growth through 2016, rising from an average of $1,075.00 per employee in 2008/2009 to $1,273.00 in 2016 (2017 Training Industry Report; Association for Training Development, 2017; Statista.com, 2017). This increase is about 2.3 percent per year.

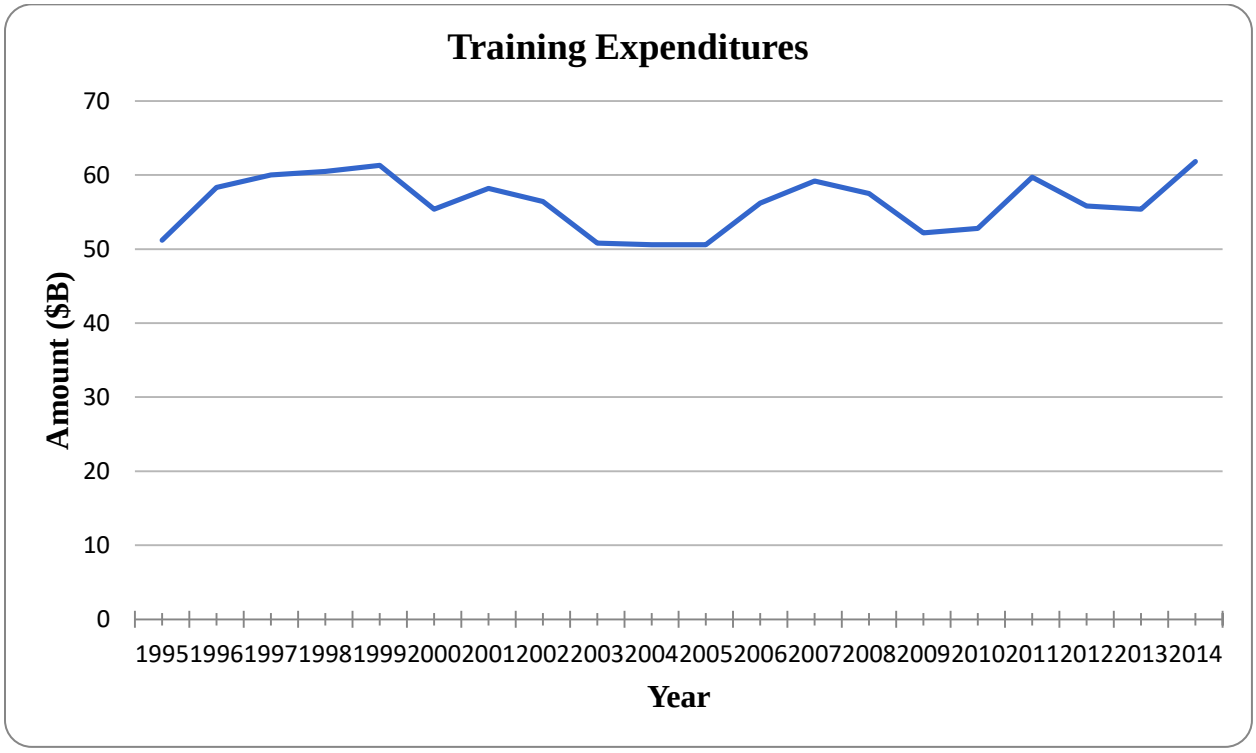

Figure 3. Twenty Year Trend in Education and Training Expenditures (Inflation Adjusted) Source: Training Industry Report (2011, 2014).

David Turner (2010) considers this corresponding decrease in training expenditures as risking economic vitality and compounding the problem of economic downturns. An organization's capacity to learn is a sustainable competitive advantage. Individuals and companies are obliged to focus on maintaining and enhancing their knowledge capital in order to innovate, adapt and change, and sustain their ability to learn (Madalina, 2009; Psarras, 2006).

Figures 4 and 5 illustrate unemployment and inflation trends for the twenty year period from 1995 – 2014. Generally, training expenditures have an inverse relationship with unemployment and inflation. Training expenditures rise as unemployment and inflation decrease. This can be explained by additional workers on the job for training and a lower inflation rate that makes education more affordable.

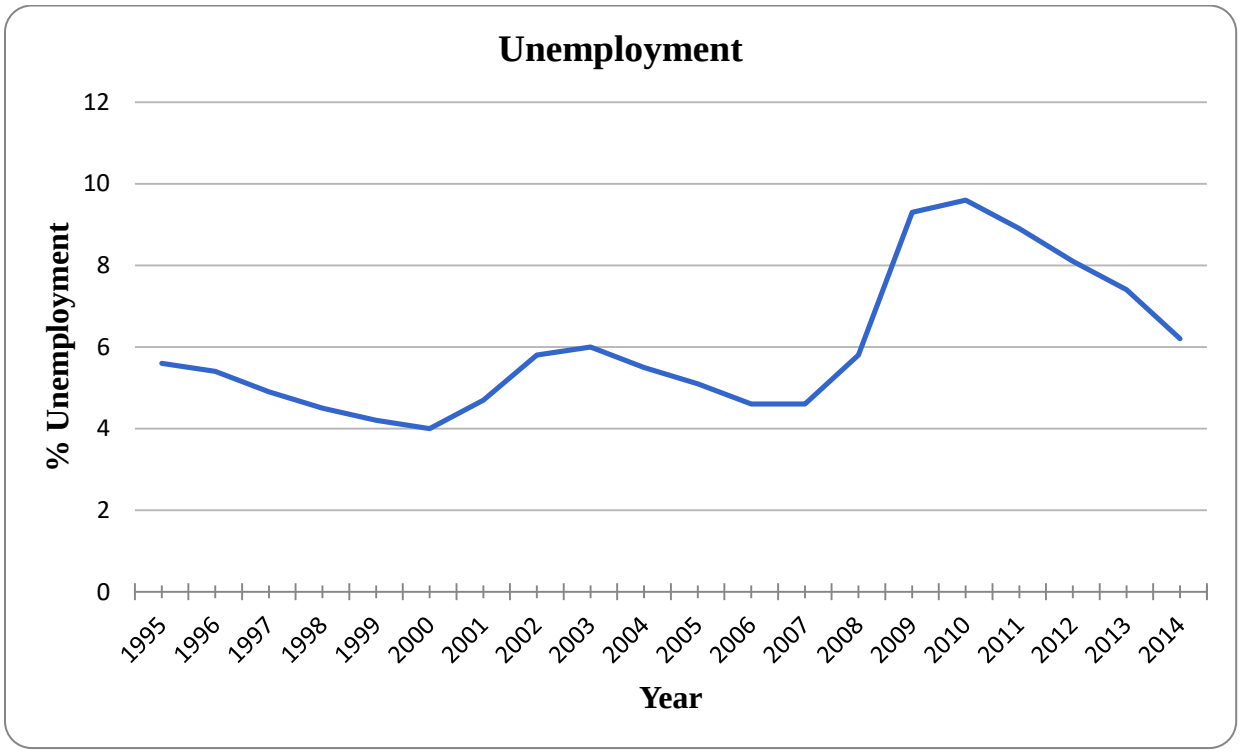

Figure 4. Twenty Year Trend in Unemployment
Source: United States Department of Labor Bureau of Labor Statistics (2016)

Wong-MingJi (2007) describes globalization as the process of integration across societies and economies. It encompasses the flow of products, services, labor, finance, information, and ideas moving across national borders. Globalization is a culmination of complex activities that include degree of geographical integration, inequalities, financial flows, labor and work, technological innovations, environmental sustainability, cultural dynamics, and organizational strategies for global competition.

Globalization is the increasing integration and interdependence among countries resulting from the modern flow of people, trade, finance and ideas from one nation to another. Given a

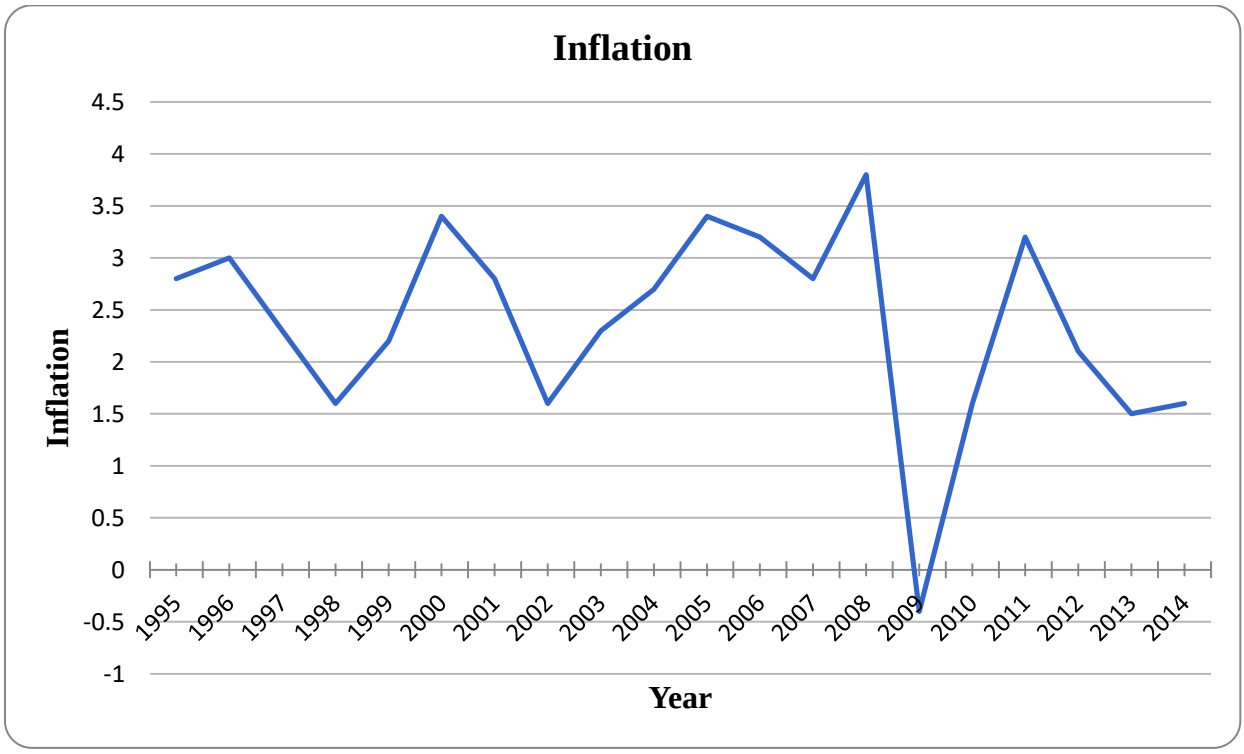

Figure 5. Twenty Year Trend in Inflation
Source: US Inflation Calculator (2016)

historical perspective, globalization has fluctuated over time and many indicators support a trend of increasing globalization since the 1980s.

While the United States is the dominant superpower in the global economy, the rise of both China and India is an important consideration for international business. The United States' Gross Domestic Product (GDP) is $19,485,400 million while China's is $12,000,000 million (Countyeconomy.com, 2017). Global managers have options for strategies and structures and must work to develop these options. One of the most significant options is training and human capital development. In sum, globalization creates a competitive arena where [local governments] evolve into networks with collaboration and controversial differences as necessities to sustain a competitive strategy (Bishop, Reinke, & Adams, 2011).

Green and Baer (2000) explain globalization in the educational context as the ability to deliver a product outside the campus environment, crossing disciplines, and crossing borders. Such activities may include attracting international students, research collaborations, or marketing and providing distance learning to students around the world.

Kumur (2011) describes globalization's effect on local government as the integration of cultures. It calls for different services based on different demographics. Harris and Brookes (2003) support that globalization is important to local government and should be incorporated into its agenda and policies. Communities are increasingly diversified with populations consisting of unique cultures and different expectations. The ability to understand these expectations is essential to effective public service.

Training Types

The training types differ in their advantages and disadvantages. A considerable amount of research suggests that online is the trend, but doesn't necessarily indicate if this choice is

appropriate in terms of specific variables such as cost, quality, and effectiveness. A large part of the research bases the assessment of quality on faculty and student opinions. The training effectiveness of the various options is discussed in the following paragraphs.

Traditional Learning

Traditional learning is the anchor of education, delivering face-to-face learning that has served to educate and train many learners. Motah (2007) describes this style as the talk and chalk method that is routinely followed by demonstrations, discovery, discussions, observations, and research work. He notes that a majority of teachers believe that this is the most appropriate teaching method, engaging and delivering the most interaction between the instructor and the student.

Web Facilitated Learning

Web facilitated learning complements traditional learning. It can be used to organize and facilitate learning. For example, *Blackboard* is a reference area for information such as the syllabus, grades, and assignments. Platt (2011) explains that through the integration of technology and web facilitated instruction, teachers can create greater learning and educational opportunities, and, therefore, a stimulated and active learning environment. The influences related to the use of online technology may work as a catalyst to improve learning. For example, more and more people are learning and enjoying advanced technology, thus the opportunity to enhance learning through this medium.

Blended Learning

Blended or hybrid learning was first used in the corporate world to refer to a course designed for workers to both continue in the workplace and study. It was adopted in part as a cost-saving measure that combines the best elements of online and face-to-face learning

(Sharma, 2010; Driscoll, 2002; Watson, 2008). The authors think that it will emerge as the predominant model of the future and will be more common than either one alone. Their opinion is that although online training will continue to grow, those seeking a fully distance-based education will remain relatively low. Instead they will seek a combination that offers them the best of both worlds.

Blended training has increased its presence in education. For example, Central Florida University, one of the nation's largest post-secondary schools with 56,000 students is changing the traditional student status as more than half of the students are taking an online or blended class. The University System of Maryland requires undergraduates to take 12 credits in alternative learning modes, including blended and online. The Bill and Melinda Gates Foundation made blended learning a cornerstone of its new $20-million education-technology grant program (Parry, 2010).

Online Learning

The most popular form of distance learning today is online learning, a rapidly growing trend in instructional technology. According to the United States Distance Learning Association and the Hale Group's report on distance learning, more than 96 percent of U.S. colleges and universities now offer some form of online learning (U.S. Department of Education, 2010). Online learning is noted for its popularity due to perceived advantages such as cost and flexibility.

However, the literature is mixed on cost. For example, a private study reported that the standard instructor-led training time is 34:1 for traditional or face-to-face learning and 220:1 for standard e-learning (Chapman, 2007; Biegel, 2018). This ratio is development or design time to one hour of training time.

Flexibility has a more consistent record with the literature concluding that faculty and students can teach from geographically dispersed locations with both synchronous and asynchronous learning. The learner is not constrained by time or place, with practically 24/7 access regardless of location. Obviously, there are a few limitations, such as downtime for site maintenance and internet availability.

The 2010 Training Industry report notes that traditional training dropped approximately 19 percent from 2009 to 2010, yielding to other methods like online and blended training. Muilenburg and Berge (2005) conducted a large scale (n=1,056) study that found eight barriers to online learning. The eight factors found were administrative issues, social interaction, academic skills, technical skills, learner motivation, time and support for studies, cost and access to the Internet, and technical problems. The highest rated barrier found was the lack of social interaction and the second was learner motivation. Suzanne Ebbers (2007) noted that affiliation and interaction is a mechanism for learner motivation. Her research concluded that unmet needs can result in anxiety and poor performance. Social interaction and thus learner motivation is more difficult in an online learning environment. However, Ebbers also found that these eight barriers diminished as an individual participated in more online classes.

Comparisons

The U.S. Department of Education (2010) found in an analysis of older learners that instruction combining online and face-to-face elements had a larger advantage relative to purely face-to-face instruction or purely online instruction. This is reasoned to the discipline of older learners to act independently, yet enjoy and depend somewhat on face-to-face interaction. Russell (1999) cataloged 335 comparative studies in distance education between 1928 and 1996 and argued that no one method of delivering instruction is more effective than any other. Others

to include Finlay, Desmet, and Evans (2004), Liu (2007), and Sweat-Guy and Wishart (2008) have also found no significant evidence in their studies; this is known as the no significant phenomenon. However, some like Robertson, Grant, and Jackson (2005) reviewed students' perceived quality of the learning experience in online as compared to face-to-face learning. They stated that the students perceived the quality of online as superior to classroom based training. Guiller, Durndell, and Ross (2008) conducted a study that engaged students in critical thinking activities for online and classroom based education. Their study concluded more evidence of critical thinking for the online students, and that students preferred the online option.

The bulk of the literature focuses on a comparison of traditional and online learning with blended and web facilitated offering a compromise. The expression of "Sage on the Stage vs. Guide on the Side" was discovered frequently in the literature, referring specifically to traditional vs. online learning.

Modern Trends

Massive open online courses or MOOCs have recently received considerable consideration due to the increasing number of participants. One MOOC provider, Udacity, boasts up to 300,000 participants. MOOCs are defined as training by professors or experts open to a large or unlimited number of participants at little to no cost. Georgia Tech introduced a master's program in computer science in 2014 that embraced the MOOC system. The tuition fees are a fraction of the traditional program costs (Wulf, Blohm, and Brenner, 2014).

There are some who contend that participation is not a concern, but rather the type of participation. For example, Daphne Koller of Coursera has stated that the majority of their students have already achieved a bachelor's degree, citing 42.8 percent of participants, and 36.7 percent and 5.4 percent, respectively, with masters and doctoral degrees (Koller & Ng, 2013).

Furthermore, even with advanced education the completion rate is low. A survey conducted in 2013 by the Chronicle of Higher Education stated that the average MOOC enrollment was 33,000 students with an average of 7.5 percent completing the course (Kolowich, 2013). Haynie (2015) reported that the proportion of academic leaders who believe that MOOCs represent a sustainable method for offering online classes dropped by 18.7 percent in 2015.

How We Learn

There is significant literature addressing the manner in which we learn. For example, Benedict Carey (2015) explains that self-motivation to learn is essential as self-learners learn better. The same is true for those who are genuinely interested in the subject. Carey goes on to state that collaborative learning and sharing what you have learned with others enhances understanding. Other learning experts like David Kolb suggest that there are different learning styles and Malcolm Knowles contends that adults learn differently than children. Recently, discussions have evolved around the generational differences in learning.

Learning Styles

Carey (2015) offers the following elements which strengthen learning:

- "You will naturally learn better when you're truly interested in the subject."
- "The achievement of learning something new is reward in itself."
- "Learn with others. Collaborative learning is easier and more fun."
- "Tell others what you're learning – it will enhance your learning and understanding."
- "Change your learning style and learn in different environments." (p. 1)

Experiential Learning

Kolb (1984) provides a useful model of adult learning which suggests that there are four stages in learning which follow from each other. Atherton (2013) and McLeod (2015) explain

these stages as a concrete experience of an encountered situation that is followed by a personal reflection and understanding of that experience. The experience is then described, understood, or conceptualized and followed by an active experimentation or constructing ways to modify the next occurrence of the experience. McLeod (2015) illustrates this model in Figure 5. He goes on to explain that effective learning is experienced when a

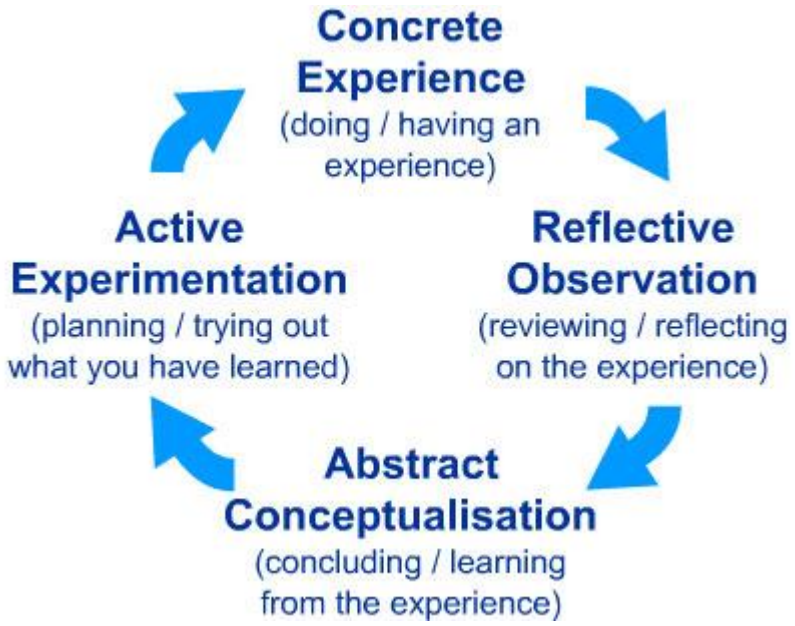

Figure 6. Kolb Model of Adult Learning
Source: McLeod (2015).

person progresses through the cycle and provides a simplified description of this process in Figure 7. Kolb (1974) perceives learning as an integrated process, thus learning is maximized by transitioning through the four stages. However he suggests that one can enter at any stage but learning is greatest when someone progresses through all the stages.

Atherton (2013) and McLeod (2015) discuss Kolb's further extension of learning styles as depicted in Figure 8. This extends to a north-south perception continuum and an east-west processing continuum. Subsequently, the quadrants are divided into diverging, assimilating, converging, and accommodating. The diverging learners tend to absorb information and use

innovative thinking to solve problems. They are sensitive and view things in a different perspective. They have broad cultural interests, prefer to work in groups, and are interested in people and different ideas. The assimilating learners are less interested in people and more

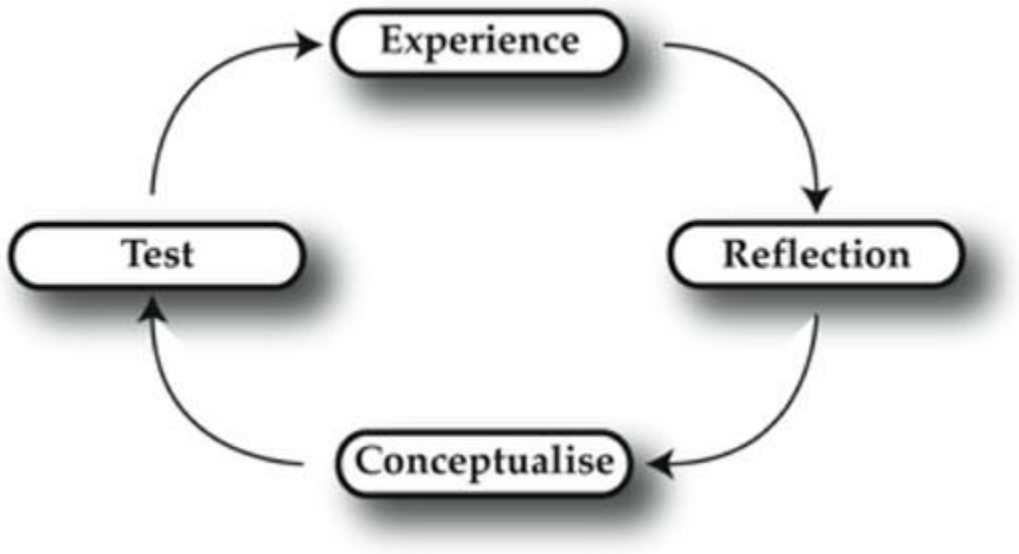

Figure 7. Effective Learning
Source: McLeod (2015)

interested in facts, concepts, and information. They prefer to receive information and analyze the data provided and arrive at solutions through logically sound theories. Assimilating learners enjoy lectures, readings, and evaluating models. Converging learners prefer technical tasks and tend to find solutions to practical issues. They find practical uses for theories or ideas. These learners like to work with simulations and new ideas to arrive at logical solutions. Accommodating learners rely on hands-on and intuition. They prefer a practical, experiential approach and commonly act on gut instinct. They rely on others for information to conduct their own analysis.

Educational Implications

McLeod (2015) contends that an understanding of a learner's stage and cycle can benefit the instructor in arranging learning to exploit the strengths and minimize the weaknesses. Instruction should be structured to take the learner through the process and capitalize and their abilities.

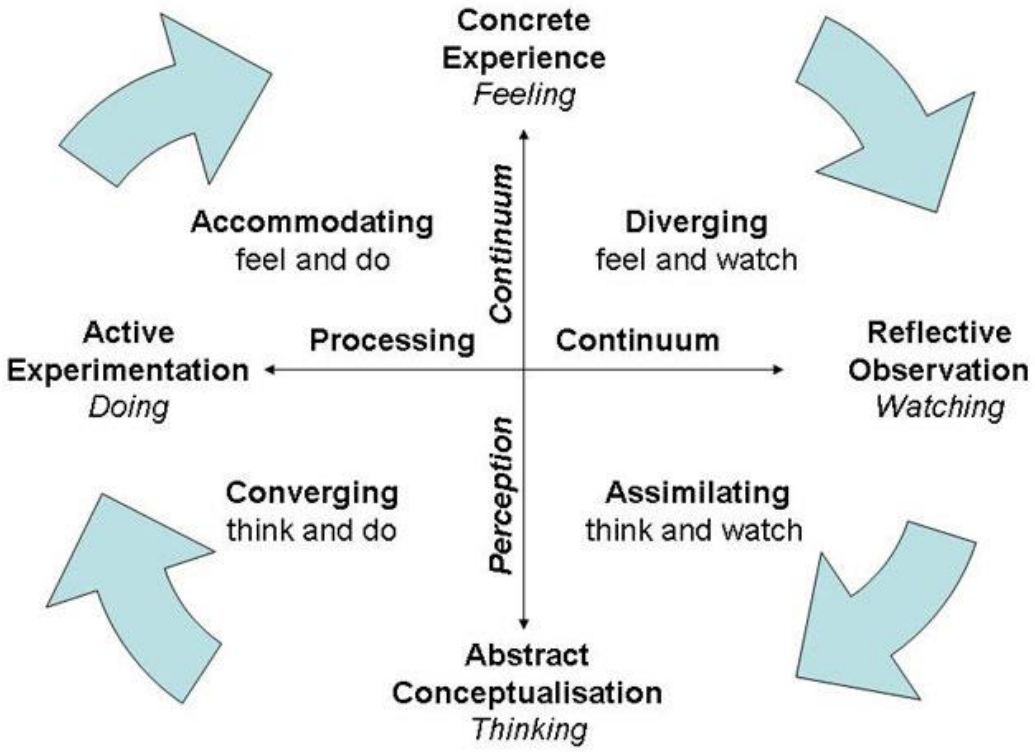

Figure 8. Kolb Model of Continuums

Source: McLeod (2015)

Adult Learning

Malcolm Knowles made a distinction between child learning, or pedagogy and adult learning, or andragogy. He proposed that adult learners process information differently and thus have a distinct learning technique. Knowles' contention is based on age suggesting that adults had much more experience which framed their learning. Knowles, Holton III, and Swanson (2015) explain the anagogical model as follows:

1. The need to know. Adult learners want to know why they need to know something and what value it has in their life. This is important to the instructor as learning should be structured to introduce and explain to the learner the benefits of the education. Frequently, this is designed to describe the gap that exists between where someone is now and where they want to be. Effective instruction is a bridge to negotiate this gap.
2. The learner's self-concept. Adults have the concept of being responsible and thus should direct their learning. Once they perceive that someone is imposing their will on them they think back to their days of lectures and requirements and having little input in their education. Thus, they may tend to minimize their involvement and orient to rote memory or meeting minimum requirements. It is important for instructors to pursue techniques that promote self-directed learning.
3. The role of the learner's experience. Adult learners come with more experiences and exposure, if not only due to having lived longer. They have a different volume and quality of experience than younger learners. They are also a more heterogeneous group with different learning styles, and interests. This provides for a rich resource of information and experiences that can enhance learning. It also has a negative effect as their experiences can bias their interpretations and learning. If the instructor(s) ignore

this experience, it will be challenging to engage the adult to maximize learning

4. Readiness to learn. Adults come with a readiness to learn that is connected to their life-stage. There is a readiness to learn as the adult progresses to meet the next developmental stage. The timing of education to closely coincide with these stages facilitates learning.

5. Orientation to learning. Adults are orientated to learning that is life-centered. This is in contrast to younger learners whose orientation is to complete learning or meet a requirement. They retain a certain portion of their learning and discard or file away the other portion and move to the next requirement.

6. Motivation. Adults are responsive to external motivators like promotions, better salaries or another job opportunity. The most significant motivators are internal like the desire for quality of life and self-esteem. Tough (1979) added that adults are motivated but experience obstacles such as time constraints or accessibility of opportunities or resources affect the motivation.

Educational Implications

Knowles, Holton III, and Swanson (2015) contend that adults learn best when the teacher is the facilitator of learning. The instructor should use the existing knowledge, experiences, and motivation of the students to shape the learning. Essentially, learning and making things happen occurs by releasing the energy of the adult students. The instructor should endeavor to connect the instruction with previous experiences, thus building on them to enhance learning. This constructivist approach maximizes adult learning.

Generational Learning

Ginsburg (2016) claims that there has never been a workforce so diverse in race, gender, ethnicity, and generational affiliation as we have today. She cites four or more generations that are working side-by-side in the workplace for the first time in history. Levonius (2015) defines these workplace generations:

- The Silent Generation (born mid-1920s to early 1940s)
- Baby Boomers (born early 1940s to early 1960s)
- Generation X (born early 1960s to early 1980s) -
- Millennials (born early 1980s to early 2000s)

Ginsburg (2016) refers to four or more generations. Reeves and Oh (2007) conducted a literature review of distinguishing the generations and found that there is some difference of opinion in exact dates, thus supporting Levonius (2015) broader definitions, e.g., mid to early characterizations. Generational labeling and dates as gathered by Reeves and Oh (2007) and included in the Handbook of Research on Educational Communications and Technology (Spector, Merrill, van Merriënboer, and Driscoll, 2007) is illustrated in Table 2. Oblinger and Oblinger (2005) acknowledge the fifth generation as the Post-Millennials. According to their definition the Post-Millennials are already in the workplace with those that entered following high school. The Post-Millennials that choose college are entering the workplace in the next couple of years.

Educational Implications

Johnson and Romanello (2005) claim that age diversity is significant in today's learning environment. This diversity presents important teaching and learning considerations. Understanding generational differences can help design and organize instruction effectively to

Table 2
Generational Learning Styles and Activities

Generation	Learning Style/Preferences/Characteristics	Examples of Generation-appropriate Learning Activities
Baby Boomers (1943-1960)	- Contact with faculty - Lecture - Learn best when their wealth of personal experience can be tied to the subject matter - Want to learn in an open environment - Enjoy positive reinforcements for efforts	- Lecture - Detailed handouts - Note-taking - Write a personal story related to content
Generation X (1961-1981)	- Learn quickly and efficiently - Only want to learn what will benefit them directly - Do better when learn on own terms - Enjoy flexible learning times - See class assignments as something necessary to obtain their degree but it is necessary to get the job they desire	- Distance learning courses - Programmed instruction done independently, at own pace, at own time - Detailed study guides and test reviews that focus on what they will be tested
Millennials (1982-2002)	- Enjoy working in group; teamwork - Use technology whenever possible - Experiential activities - There is zero tolerance for delays - Strengths are multitasking, goal orientation, positive attitudes, collaborative style - Learn immediately from their mistakes (as they do from playing their video games)	- Simulations with immediate effect on how the student did - Group activities; solving a problem or answering questions to a case study in a small group - Creative, innovative exercises - A Jeopardy style game for a test review

Source: Handbook of Research on Educational Communications and Technology

maximize learning. Their defined generations and their learning styles and examples of appropriate learning activities are included in Table 3.

Kriegel (2013) and Schumaker (2004) claimed that effective employee training is essential to keep pace with an ever changing economy and environment. It is important to

Table 3
Generational Labels and Dates Reported in Different Sources

Howe & Strauss, 1993	Silent Generation 1925-1943	Boom Generation 1943-1960	13th Generation 1961-1981	Millennial Generation 1982-2000	
Lancaster & Stillman, 2002	Traditionalists 1900-1945	Baby Boomers 1946-1964	Generation Xers 1965-1980	- Millennial Generation - Echo Boomers - Generation Y - Baby Busters - Generation Next 1981-1999	
Martin & Tulgan, 2002	Traditionalists 1925-1942	Baby Boomers 1946-1960	Generation X 1965-1977	Millennials 1987-2000	
Oblinger & Oblinger, 2005	Matures <1946	Baby Boomers 1947-1964	Gen-Xers 1965-1980	- Gen Y - Net Gen - Millennials 1981-1995	Post-Millennials 1995-Present
Tapscott, 1998		Baby Boom Generation 1946-1964	Generation X 1965-1975	Digital Generation 1976-2000	
Zemke, Raines, & Filipczak, 1999	Veterans 1922-1943	Baby Boomers 1943-1960	Gen-Xers 1960-1980	Nexters 1980-1999	

Source: Generational Diversity (2005)

recognize and accommodate the generationally diverse employee population to maximize training efficiency.

CHAPTER III

METHODOLOGY

Overview

The methodology has two components and two parts. The components and parts are listed in Table 4. The first component is content or document analysis. An analysis was conducted in 2012 of documents that opined about online learning. This review served as a basis for institutional opinions about variations of online learning. An analysis of the document

Table 4
Methodology Components and Parts

Components	Content Analysis	Survey
Parts	2012 Review	General

review yielded expectations or insight into online vs. traditional learning. A survey of selected municipal leaders was conducted in 2018. This study compares the findings in 2012 to the survey results in 2018. The survey is the culmination of the dissertation and used to gauge the. most effective and efficient perceived learning method and model.

Research Design

A grounded theory type approach was used to analyze the advantages and disadvantages of e-learning and traditional learning modalities for local governments in an environment of constrained resources and increased globalization. According to McMillan (2000), "The intent of a grounded theory study is to discover or generate a theory." Creswell (2007) stated that the purpose of grounded theory is to develop a theory for an action or process that is "grounded" in the viewpoints of the participants. The participants are chosen by theoretical sampling of 20 –

30 participants to help the researcher form the best theories. The analysis normally includes interviews, observations, physical artifacts, and document review. A content analysis was conducted in 2012 to compare perception and use. The emphasis in grounded theory is on depth and quality rather than population size (Eisenhardt, 1989). There is no magic or prescribed number of documents to review, but rather the analyst should strive for an appropriate sampling (Gibbs, 2012). This sampling is achieved through a review that ensures triangulation (Strauss and Corbin, 1990). This is termed as theoretical saturation, or a point at which a conscious evaluation is made that a theory is established and continued review would not present another variation. (Gibbs, 2012; Strauss and Corbin, 1990). A sampling of 40 documents was conducted before making this conscious decision. The documents were chosen based on keyword criteria. These keywords included cost, budget, value, quality, effectiveness, global reach, technology, convenience, and flexibility. The intent of the review was to get an equitable number of documents that discussed each of the modalities: traditional, web-facilitated, blended, and online. Additionally the review aimed for a fairly equitable distribution across the institutions: education, business, military, and government. The documents fairly addressed three of the modalities: traditional, blended, and online. There was little available on web-facilitated as this modality seems to be morphed into the traditional modality. The majority of the documents that address online also discuss traditional methods. The documents varied in length from a minimum of two pages to well over 230 pages and included newspaper articles, journal articles, reports, theses, dissertations, and books. There was no criteria applied for length of the document, but rather if it met the criteria of the keywords previously listed. There were no criteria applied for a document to contain a set number of keywords, although more is better. A list of the document

titles, type of document, and year is listed at Appendix A. A reference list of the documents reviewed is included at Appendix B.

Creswell (2007) also wrote that a primary reason for a researcher to select a qualitative study is because the study is exploratory. In other words, a smaller amount of research is available concerning the topic of study. This is the case with my study as there is limited research of the advantages and disadvantages of online and traditional learning applicable to local governments in an environment of constrained resources and increased globalization.

Variables

Outcome variables were used in the study to determine the advantages and disadvantages of learning methods. These variables and their definitions are listed in Table 5.

These variables were chosen as they address the issues of constrained resources and increased globalization. Cost has the most significant relationship to constrained resources, effectiveness has the most significant relationship to convenience, global reach, and technology reach, and quality relates nearly equally to both.

Data Sources and Search Strategies

Relevant studies were located through a search of publicly available literature. Using a common set of keywords, searches were performed in five electronic databases: ERIC, Social Science Citation Index, ProQuest, Power Search, and Google Scholar. Examples of journals reviewed include the Quarterly Review of Distance Education, International Review of Research in Distance and Open Education, The Chronicle of Higher Education, the Journal of State and Local Review, the Journal of Public Affairs Education, and the Journal of Asynchronous Learning Networks.

Table 5
Outcome Variables

Variable	Description
Cost	The actual fiscal cost of the learning. This is a comprehensive cost to include instructor, media, materials, utilities, and forgone revenue. This is an average cost per type course.
Quality	Faculty and student satisfaction with the method. Perceived quality of instruction.
Effectiveness	Learning effectiveness, flexibility, and access to the material and learning.
Global Reach	The ability to reduce geographic limitations and expand global training opportunities.
Technology Range	The ability to extend the use of technology to enhance learning.

Screening

Screening of the research studies obtained through the search process described above was conducted based on the content of the information. The articles contained information related to one of the variables previously presented. Additionally, they included elements of cost, quality, effectiveness, global reach, and technology range.

Analysis

Stringer (2007) stated:

> Analysis is the process of distilling large quantities of information to uncover significant features and elements that are embedded in the data. The end result

of analysis is a set of concepts and ideas that enable the participants to understand more clearly. (p. 95)

Stringer suggested that the two main phases of analysis are categorizing and coding and gathering and interpreting the data to make meaning. This provides stakeholders with new ways of thinking or viewing the situation.

Coding

The information was coded according to the outcome variables and associated with the four institutional categories of education, business/corporation, military, and government. Color-coded tabs were used to distinguish between the four institutional categories and then coded again based on the four teaching approaches or delivery methods of traditional, web facilitated, blended, and online. The information was coded a third time based on cost, quality, effectiveness, global reach, and technology range. Several articles contained multiple variables. For example, an article addressed education and business and discussed quality and effectiveness of traditional and online learning.

Interpreting

A 1-5 Likert scale (Trochim, 2006) was used to interpret the documents, with 5 indicating strong support, 3 indicating weak support, and 1 indicating non-support. As an example, if an article strongly considered that online education is effective, it was assigned a 5; if it considered that online training was effective, it was assigned a 4; if the article did not consider that online education is effective, it was assigned a 2; if the article strongly considered that online education is not effective it was assigned a 1; and if it was neutral it was given a 3. Several keywords were reviewed to justify whether a learning method was supported. Table 6 summarizes examples of these keywords. A 1-5 Likert scale was also used for the strength of the article. For example, a

dissertation or report with strong qualitative or quantitative support was assigned a four or five; a news report or article expressing an opinion with limited support was assigned a one or two. These two evaluations were then multiplied to arrive at a numerical assessment. The final assessments were added and divided by the total number of documents in that category to arrive at a mean or average.

Table 6
Interpreting Keywords

Variable	Keywords
Cost	Expensive, inexpensive, costly, value
Quality	Value, reputation, academic rigor, applicable,
Effectiveness	Student satisfaction, faculty satisfaction, flexible, convenient, interaction, motivation
Global Reach	Space, time, reach
Technology Range	Versatile, limited, extensive, diversified,

Focusing

The literature concerning the advantages and disadvantages of online and traditional learning is primarily devoted to education. I reviewed this literature and focused the findings, in conjunction with less available literature on business, military, and government, to local government. There is relatively limited literature available on local government. Additionally, there are differences in the resources and culture of local government organizations.

Addressing Bias and Reliability

Because the data was analyzed, bias was avoided by repeatedly asking, "How would this information be assessed, as a decision maker in this type institution?" Is the study and supporting data convincing?

Identifying the pertinent skills is critical for determining the appropriate modality. For example, some skills may be more suited to online learning such as routine, general tasks that are applicable across departments. Other skills including procedures unique to a department may be better suited to face-to-face learning.

Quantitative Method

A survey was conducted in 2018 to determine to determine if there is a difference in the perception of application of learning. The hypothesis is that there will be more acceptance and support of online learning. This comparison is also important in that it may offer insight on different periods in respect to constrained resources and increased globalization.

Guidelines

The following guidelines will be used in administering the survey, adhering to the five c's of clear, concise, contact, confidential, and calculable. First, that it is clear and understandable. Second, the intent is to structure in a manner that ensures that it does not demand more than 15 minutes of the participant's time. Third, the number of contacts in the organization will be limited. Fourth, the communication and information provided will be kept confidential. Fifth, questions will be designed that are calculable and provide meaningful data that can be properly interpreted.

Distribution

The Qualtrics survey software was used to both design and analyze the quantitative survey. The survey was administered to a select group of municipal leaders. For example it was distributed to those leaders at higher executive levels who have daily operational interaction. These include administrators, managers, and finance and human resource officials. These groups were chosen based on their interaction and comprehensive knowledge of employee training concepts. Three associations were used to distribute the survey. These include the Michigan Municipal League, the Michigan Municipal Executives, and the Michigan Association of Counties. The survey was distributed to municipal leaders in the State of Michigan.

Method Integration

The qualitative method will be used to arrive at a satisfactory modality or model for training and developing local government employees. The quantitative method will result in the determination of the appropriate method and/or model for training and developing local government employees.

Summary

The target audience for the survey is public leaders in municipal government. They will be sampled to provide an assessment for the most effective learning modality in an environment of constrained resources and increased globalization.

CHAPTER IV

RESULTS

The analysis indicates that a combination of online and traditional is the most appropriate method in an environment of constrained resources and increased globalization. The analysis of the results of the document analysis is included at Table 7. This table lists the types of each style.

Table 7
Document Review Analysis

Type	Education	Business	Military	Government	Ẍ
Variable*	C Q E	C Q E	C Q E	C Q E	
Traditional	3.42/4.28/3.19	3.27/4.31/3.14	3.57/4.00/3.40	3.50/3.67/3.40	
Ẍ	3.63	3.57	3.66	3.52	3.60
s	.50/.66/1.00	.47/.48/.36	.53/.83.55	.55/.52/.55	
Web Facilitated	3.28/2.57/2.40	3.40/3.80/3.00	2.20/2.80/3.40	2.80/3.40/3.50	
Ẍ	2.75	3.40	2.80	3.23	3.05
s	.49/.53/.55	.55/.45/1.00	1.64/1.09/.55	1.10/.55/.58	
Blended/Hybrid	3.74/3.56/3.64	3.74/3.76/3.90	3.89/3.86/3.33	3.50/3.50/3.44	
Ẍ	3.65	3.80	3.69	3.48	3.66
s	.44/.51/.49	.45/.44/.62	.78/.38/1.80	.51/.52/.51	
Online	2.49/2.98/3.89	2.69/2.64/3.77	2.78/3.29/3.39	3.57/3.29/3.58	
Ẍ	3.12	3.03	3.15	3.48	3.20
s	.95/1.05/.80	.87/.81/76	1.39/.49/1.24	.54/.45/.51	
Total					
Ẍ	3.29	3.45	3.33	3.43	

Note. *C = Cost, Q = Quality, E = Effectiveness, G = Global Reach, T = Technology Range
Ẍ = Sample mean or average, *s* = sample standard deviation

institutions on the horizontal axis and the styles of learning on the vertical axis. Each style of for learning is assessed for cost, quality, and effectiveness, noted as C, Q, and E respectively.

Additionally, the sample mean or average ($\ddot{X}$), and sample standard deviation (*s*) are calculated Table 8 outlines the results of the document review. Specifically, it indicates the results of the review for each style and type. It also displays the percentage of the total for each style and type. For example, information on traditional education appeared in 30% of the documents reviewed; traditional training for all types accounted for 25.8% of the total; and education accounted for

Table 8
Document Review

Style/Type	Education	Business	Military	Government	% of Total
Traditional	30%	23%	25%	17%	25.8%
Web Facilitated	7%	12%	15%	17%	11.2%
Blended/Hybrid	20%	25%	25%	33%	23.7%
Online	43%	40%	35%	33%	39.3%
% of Total	40.2%	25.4%	17.9%	16.5%	100%

40.2% of the types of institutions. Table 9 summarizes the significant advantages of traditional and online modalities.

Table 9
Significant Advantages of Traditional and Online Modalities

Type	Cost	Quality	Effectiveness	Global	Technology
Traditional	Development Class Size	Interaction Motivation Support	Adjust	Limited	Restricted
Online	Travel Time Facility	Synchronous Asynchronous Reflective	Convenience	Flexibility	Expansive

Significant Results

The analysis in Table 8 indicates a preference for online training. Government organizations also present an inclination toward hybrid training, totaling 33 percent for both online and hybrid training. The analysis also indicates that traditional and online learning accounts for the majority of modality training in the four institutions, comprising over 65 percent of the total.

Costs

Surprisingly, online cost savings as shown in Table 7 received the lowest rating for education (2.49) and business (2.69), the second lowest for military (2.78), and the highest rating for government (3.57). Several articles refer to the cost savings associated with online learning (Welsh, 2003; Zhang & Nunamaker, 2003; Burgess & Russell, 2003). A general theme is that online learning is not returning the cost savings as originally anticipated. Analysis of the documents near the turn of the century or the year 2000 noted that authors predicted online learning would completely replace brick and mortar institutions and the traditional method of learning as early as 2010. This has not been the case and documents in the 2010 era indicate there is still a strong presence of traditional learning. The justification for replacement of brick and mortar institutions was primarily based on cost savings. These savings were mainly characterized in the documents as travel, time, and facility. Online instruction reduced the travel time for both the instructor and learner and the learner could study practically anytime or anywhere, maximizing this limited resource. However, time had a disadvantage as stated in the literature review in that the development of an online course was considerably greater than other methods. Finally, online learning reduced the costs associated with facilities by requiring fewer buildings to support classrooms.

Another finding is the argument concerning class size listed in Table 9. Colwell and Jenks (2004) contend there should be a right balance between the economic issues of online instruction and the quality of the educational experience. Although the right balance is a judgment, faculty can face pressures from administration to maximize class sizes in online courses to make them more profitable. Palloff and Pratt (2007) suggest their studies and findings define 12 to 20 students as the optimal online class size. The limitations on class size as compared to traditional learning restrict cost savings.

There were documents that supported cost savings, but these tended to have less qualitative or quantitative support than the documents indicating less of a cost savings. There was a large variance in the military institution, particularly for web facilitated and online, for cost. All indicators as depicted in Table 7 for standard deviation exceeded 1.00. This illustrates the broad range of opinions or findings related to online cost.

Quality

The traditional style was rated as the highest in all institutions for quality. The largest discrepancy appeared in the online method, with disagreement on quality. The standard deviation included in Table 7 was above 1.00. Documents differed greatly in their support of quality. Some touted online as having the same or higher quality than traditional. The analysis supports the literature review that social interaction and learner motivation are the two highest elements in traditional vs. online learning.

Brown (2002) suggested that online integrates multiple elements to include abstract, textual, visual, musical, social, and kinesthetic. Furthermore, it offers a combination of synchronous and asynchronous options and supports deliveries such as movies, webcasts, gaming software, and reflective activities. Some documents supported this and others stated the

opposite. The documents that found traditional quality as superior tended to be based on strong qualitative or quantitative data. For example, Allen and Seaman (2011) found that less than one-third of chief academic officers believe their faculty accepts the value and legitimacy of online education. This percent has changed little over the last eight years.

The documents indicate that several barriers to quality exist, much as suggested by Muilenburg and Berge (2005). The most significant are social interaction and learner motivation. Another finding in the analysis was student support. Both instructors and students indicate that support is higher by the requirement to attend the institution, which exposes them to more support systems. These systems can provide for psychological support for students who need counseling, tutoring, or guidance. Donnovan (2009) notes an area of potential psychological impact with online learning is hurt feelings and disagreements from miscommunication.

An interesting concern addressed with the quality of blended training was the structure of the training. The U.S. Department of Education in the 2008 report on Evaluating Online Learning questioned the value of drop-in programs. These blended programs consisted of online instruction complemented by periodic sessions in which the instructor was available in the classroom. Learners had the option of meeting with the instructor during these sessions to discuss or receive guidance. The concern is the frequency with which the learner would take advantage of the sessions.

Williams (2007) lists student attrition as one of the most significant issues related to quality. She contends that online learning attrition rates are much higher than for traditional learning, with online rates ranging anywhere from 20 percent to 80 percent. She cites the most

important factors affecting the dropout rate as motivation, learning environment, and support. Breaden (2008) states that 70 percent of adult learners do not finish their online courses.

Effectiveness

The online method was rated as the highest for all types of institutions except business, in which it was a close second. The analysis supports the literature review that convenience and flexibility are the strengths to online effectiveness.

Global Reach

Donnovan (2009) suggests that while online deliveries reach a smaller number of learners at a time, they reach learners at a further distance. The lure of convenience and flexibility seems to appeal to a large number of learners. The growth of online learning from 2002 to 2010 is 18.3 percent. This compares to an annual growth rate for all education of just over two percent for this same time period. The proportion of all higher education students taking at least one online course has grown from less than ten percent in 2003 to 31 percent in 2011. Schlag (2008) adds that online learning can be efficient in reaching large numbers of people, provides reusable instructional materials, and overcomes the obstacles of space.

There were considerable discrepancies for military blended learning effectiveness. This appeared to be differences in the type of learning. For example, many military tasks require hands on learning that are life and death situations. The fear is that students will not receive the maximum learning in a hybrid situation, and the online learning portion may not adequately address a live learning situation. At the other end of the spectrum, military personnel are deployed and frequently separated from learning institutions. In these instances, online learning allows for them to further their education while fulfilling their career responsibilities.

Picciano (2006) states online learning is a significant component of corporate training because it reduces the costs and time of moving people from offices and headquarters to colleges, universities, and training centers around the country. The costs and time reductions are further realized as institutions expand their educational presence globally.

Technology Range

Bunting (2003) asserts that while opponents of online learning note the increased costs of technology, the benefits include convenience and flexibility. However, costs have been decreasing as technology improves. Kuhlmann (2010) contends that online learning improves training costs. He discounts the higher design time required for online instruction by offering that producing learning content is time consuming regardless of the learning modality. There are savings achieved through decreased travel and reduced material. Schlag (2008) adds that online education is effective because it combines the aspects of previous technology and supports Kuhlmann's claim that it provides reusable instructional materials.

Kuhlmann (2010) suggests that a significant cost savings is standardization. He explains that some classes may have a great facilitator, but there is no guarantee that the courses are presented the same across sessions. E-learning allows you to create a standardized process and consistency in the delivery of content leading to a significant advantage to the traditional method. Online courses tend to offer the ability to work at your own pace allowing learners to move around within the course. This limits the ability to incorporate new changes or findings that occur during the period of the course, although advancing technology is improving this ability. Traditional learning provides greater flexibility in adapting and adjusting content and a greater opportunity to integrate current events into the instruction.

Meyers (2008) advocates that online courses have the opportunity to use internet tools that are not available for face-to-face instruction, thus extending the technology range. He adds that faculty can have students discuss information in the classroom or online and supplement this learning through several internet tools, including weblogs, wikis, and information feeds. This expands the opportunities for cooperation, involvement, and collaboration.

Johnson, Smith, Willis, Levine, and Haywood (2011) provide a brief explanation of the future technology range for online learning in the 2011 Horizon Report titled The New Media Consortium. These are described as cloud computing, mobile technology, gaming, open content, learning analytics, and personal learning environments (PLEs). Cloud computing is using web-based tools so students and educator can collaborate online. This is considered a significant cost-saving tool. Mobile technology is providing options that are less expensive than most laptops and requires less infrastructure to support. Examples of this technology are the iPhone or iPad. Gaming allows for experimentation, the exploration of identities, and even failure. Open content provides for sharing of learning as opposed to authoritative repository content. Learning analytics aims to harness the power of advances in data mining, modeling, and interpretation to improve understandings of teaching and learning. Early alert systems can identify which students might learn best with alternative strategies, such as a manipulative, or visual approach. Personal learning environments are processes that are individualized by design and different from person to person.

Summary

The document review concluded a preference for traditional and blended learning. Government organizations tend to present an inclination for traditional training, while traditional and blended training comprised over 65 percent of the total. Blended learning was tied for first

in government training. Cost savings from online training was rated as the highest for government as compared to education, business, and military. However, literature indicates that online learning is not returning the cost savings as originally anticipated. The analysis indicated that there is a broad range of opinions on cost savings.

Quantitative Method

A survey was conducted in 2018 to determine to determine if there is a difference in the perception of application of learning. The hypothesis is that there will be more acceptance and support of online learning. This comparison is also important in that it may offer insight on different periods in respect to constrained resources and increased globalization.

Guidelines

The following guidelines will be used in administering the survey, adhering to the five c's of clear, concise, contact, confidential, and calculable. First, that it is clear and understandable. Second, the intent is to structure in a manner that ensures that it does not demand more than 15 minutes of the participant's time. Third, the number of contacts in the organization will be limited. Fourth, the communication and information provided will be kept confidential. Fifth, questions will be designed that are calculable and provide meaningful data that can be properly interpreted.

Distribution

The Qualtrics survey software was used to both design and analyze the quantitative survey. The survey was administered to a select group of municipal leaders. For example it was distributed to those leaders at higher executive levels who have daily operational interaction. These include administrators, managers, and finance and human resource officials. These groups were chosen based on their interaction and comprehensive knowledge of employee training

concepts. Three associations were used to distribute the survey. These include the Michigan Municipal League, the Michigan Municipal Executives, and the Michigan Association of Counties. The survey was distributed to municipal leaders in the State of Michigan.

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The qualitative method will be used to arrive at a satisfactory modality or model for training and developing local government employees. The quantitative method will result in the determination of the appropriate method and/or model for training and developing local government employees.

Summary

The target audience for the survey is public leaders in municipal government. They will be sampled to provide an assessment for the most effective learning modality in an environment of constrained resources and increased globalization.

Comparison

The quantitative survey consisted of 28 questions. The 29th question asked if participants wanted a copy of the survey and well over half of the participants requested a copy of the results. Descriptive statistics were used to conduct the comparison from the document analysis and survey in a manner to answer the five research questions.

Survey Overview

The majority of the 93 participants represented cities and counties at 40 and 39 percent respectively. The other participants represented villages and townships. The total response rate was approximately 32 percent. Most of the participants were city managers at 41 percent and county administrators at 39 percent. Others were assistant managers, assistant administrators, controllers/finance directors, or human resource managers. Over 80 percent served in municipalities with a population base of 1-50,000 citizens. More than 80 percent of the

municipalities in which the respondents worked had 250 or fewer employees. Approximately 68 percent were male and 32 percent female with more than 73 percent in the age group 46-65. Over 90 percent of the employees in the organization were in the age group 36-50. The survey is at Appendix C and the results are at Appendix D. The informed consent is at Appendix E.

Research Question 1

The first question is what are the advantages and disadvantages of e-learning in the form of online learning methods versus traditional face-to-face methods based on limited resources and increased globalization for training employees of local government organizations? Respondents were instructed to base their answers on limited resources and increased globalization for training employees of local government organizations. Questions 9-17 and 19-22 provide data to assist in answering this question. Asked what modality their organizations use a great deal of the time, the participants reported traditional learning at almost 75 percent, online training at over 37 percent, and blended over 26 percent. Asked what modality they never or rarely use, 9 percent reported traditional learning, 28 percent noted online learning, and 42 percent cited blended learning. Over 70 percent of the respondents indicated that interaction with other students or the instructor were advantages to traditional learning. Structured time for learning and motivation represented over 17 and 9 percent respectively. Disadvantages to traditional learning included inflexibility, travel requirement, and cost at more than 98 percent. The advantages to online learning were cited as convenience, cost savings, flexibility, reduced travel, and the ability to complete at your own pace at over 97 percent. Interesting, quality was less than 3 percent. Participants listed lack of interaction and lack of structured time away from the job and home requirements as the primary disadvantages at over 86 percent. Motivation was less than 11 percent. Respondents cited the main advantage to blended learning as convenience

combined with the opportunity for interaction at over 31 percent. Over 88 percent of the participants noted blended learning disadvantages as requiring adaptability to two different learning techniques and requiring more time to set-up and coordinate. The majority or over 98 percent of participants felt like learners would get their questions answered by asking either the instructor or other students in a traditional learning environment. However, over 62 percent of the participants felt like learners would get their questions answered through the internet or additional readings in an online environment. Over 78 of the respondents believed that had adequate and functioning equipment and internet access to support online or blended learning. Participants were asked to rank on a scale of 1-7, with 1 being the lowest and 7 the highest, how well their government entity's professional development methods adequately met the needs of the employees to provide high levels of service to a diverse population of constituents. The result was a mean score of 4.29. Participants were asked to rank on a scale of 1-7, with 1 being the lowest and 7 the highest that if they move to more online learning how valuable for the organization and its employees are several listed benefits. The largest response to each question: Reduced cost of training – 6, improves employee's ability to provide services to a diverse population of citizens – 4, improved computer skills – 5, better quality training – 4, greater flexibility for employees – 6, greater deal of convenience – 6, better return on investment returns – 4, greater use of social media – 4, quicker onboarding of new employees – 4, a recruiting incentive for new employees – 4. Participants believed that online training was best suited for the clerk, finance, administration, payroll/accounts payable, and treasurer departments. Respondents believed online learning is less suited for fire, jail/corrections, maintenance, register of deeds, and roads/utilities. Participants noted that they use organizational online courses like International City/County Management Association (ICMA) or Michigan Association of

Counties (MAC) offerings. More than 88 percent of participants reported that they are likely to use online training in their organization in the next two years.

Research Question 2

The second question inquires as to whether emotional intelligence or soft skills is a critical issue in training. Survey questions 24-28 provide insight into this question. Over 97 percent either strongly agree or agree that soft skills are an asset in working with employees in their organization or working with clients. More than 89 percent report that they evaluate an individual's soft skills during their interview process. Over 65 percent believe that soft skills can be developed or improved through online training. 80 percent of the participants supported that they believe that soft skills can be developed better through traditional training than through online training.

Research Question 3

The third question asks if there are overarching differences in training preferences and abilities? Question 18 addresses this issue. More than 78 percent of respondents noted that either definitely or probably yes that they believe younger employees in their organization are more open and skilled in participating in online learning than are older employees in their entity.

Research Question 4

> The fourth question asks what is/are an appropriate method(s)/model(s) for local government training and development based on limited resources and increased globalization or expectations for appropriate communications and quality service to diverse constituents? The data throughout the survey supports that traditional and online learning is preferred. Additionally, emotional intelligence or soft skills are considered a critical component of training.

CHAPTER V

CONCLUSION

Applicability

Ammons, Smith, and Stenberg (2011) explain that the United States and world economies took an enormous hit in the 2008 downturn, which led to severe revenue reductions for U.S. local governments. These reductions challenge infrastructure, maintenance, and service capabilities. Local governments, in addition to smaller revenues, tend to have smaller staff and are closer to the citizens of the community. As an example, Batavia township in Michigan has a staff of seven part-time employees with a budget of less than $350,000.00 (Michigan Department of Treasury, 2015). How does local government respond to constrained resources and increased globalization? These appear to be competing demands. For example, should local governments spend resources on increased technology that enhances employees' abilities to learn online or should those resources be devoted to maintenance, infrastructure, or staffing?

Figone, Walesh, Danaj, and Benest (2011) propose that the answer is increased spending on technology and further forecast an emerging model of a more disciplined government that focuses on core businesses and makes greater use of technology than in the past. Cronin, Morath, Curtin, and Heil (2006) support that the use of technology in training is even more commonplace today. It certainly appears that more citizens are demanding technological services. Governor Snyder signed into law the Economic Vitality and Incentive Program (EVIP) in 2011, which changed the way that Revenue Sharing was distributed to local units throughout the state of Michigan. One of the items necessary to receive EVIP funds requires local governments to make available to the public a performance dashboard or a financial summary of it local finances (Anonymous, 2011), normally presented on a web site.

Local governments are unique in services and resources. Havenga (2003) discusses that local government's success depends on the participation of citizens and the openness to innovation. This suggests that local government employees must maintain a close relationship with its citizens and also stay current on developing technologies. Lucas (2011) describes the recent difficulty with revenues due to the 2007-2009 recession, which significantly reduced the tax revenues of local governments. Over the year from the second quarter of 2008 to the second quarter of 2009 these revenues fell nine percent. The local government's ability to add equipment and training is obviously challenged in a fiscally constrained environment. The need for prioritization of purchases is utmost, and decisions on staff or equipment is a sensitive issue. Is it possible to maintain Havenga's prescription for government success? There are some issues to consider if learning is to be effective and meet Havenga's criteria in an environment of constrained resources and globalization. These issues include people, type, function, and design.

People

Local government employees span the educational, generational, and cultural spectrum and have different capabilities. Meyers (2008) stated that he was naive about the fact that people do not learn the same way or have equal abilities to learn. However, people are different in the abilities to understand information and training. Rita Lazzarini, organizational effectiveness specialist in Arlington, Virginia County's Office of Training and Organization Development explains the difference in abilities with the challenge of online learning (Isaacs, 2003):

> The challenge is knowing whether or not you're the type of person that can learn effectively in an online environment. It can be static. Although there may be pictures and people talking, you still have to be someone who's self-motivated and can push yourself to get through the class.

It's just a very different way to learn. (p. 45)

Issacs (2003) maintains that local governments have found that employees who are independent learners and those familiar with computers perform well in online courses. Edith Blydenburgh, director of training and development for the city of Charlotte, NC describes learners:

> I think, in a lot of cases, particularly if you're a self-starter, independent learner, if you're familiar with technology, you can probably get on and learn what you need a little faster than you can sit through a classroom. You have to be the right kind of learner. (p. 45)

Not everyone learns with the same methods or at the same pace. Typically, online courses feature a lot of reading material and tests to measure comprehension. However, some people prefer to learn by listening to an instructor or watching a demonstration (Isaacs, 2003). The key is to offer a program, if the capability is available, that is right for every learner.

Type

Isaacs (2003) explains that the flexibility of online training appeals to many organizations, but some question whether online courses train employees as well as traditional courses. Those who have researched both modalities have reached conflicting results. Some studies indicate that online training is just as effective as traditional training, while others found that it is either more or less effective. The analysis of the 40 documents in this study confirmed this finding. Byron Brown and Carl Liedholm (2002), professors of economics at Michigan State University in East Lansing, found that online courses were effective at delivering basic concepts, but classroom instruction was more effective at delivering complex concepts. "For delivering simple information, the two [delivery methods] seem to be as good," Brown says.

"But for teaching people how to solve difficult analytical problems, [online courses are] not as good."

Functions

In addition to a diversified population of employees, local governments have a broad range of disciplines. They include law and safety enforcement, code compliance, courts, clerk records, dispatch operations, corrections, human resources, finance, payroll, planning, engineering, and counseling, just to name a few. There is an opportunity in each discipline to offer a combination of both types of training. Some of these functions lend themselves better to online training rather than traditional training. Others demand more traditional training than online training. For example, functions like human resources, payroll, finance, planning, and engineering tend toward online learning. Law enforcement, corrections, and counseling tend toward traditional learning. Again, there is opportunity for training in both modalities in all disciplines.

Design

Blydenburgh contends that “even if employees are highly motivated, independent learners who are familiar with technology, online learning will not be useful if it cannot hold their attention.” (p. 45). Online courses should be well-designed from an instructional design perspective (Isaacs, 2008). Gibson and Dunning (2012) explain that an online course design cannot simply be moving the material from the lectern to the computer screen. The structure of an online course, including the navigational interface, visual design of materials and information, as well as the communication tools to facilitate learning, can have a significant impact on students, instructors, programs and organizations (Lee, Dickerson, and Winslow, 2012) in various ways. Therefore, it is important to construct a proper and effective course design. An

up-front investment is essential to ensure learning. Instructions must be clear and understandable and technical support throughout the course is critical to success (Gibson and Dunning, 2012).

Discussion

The results reveal that a combination of online and traditional modalities is critical to learning in an environment of constrained resources and globalization. It allows for the potential to maximize learning and cost savings. Isaacs (2003) feels that most local governments are using online courses to supplement, rather than replace, traditional learning sessions. Marsan (2009) explains that the return on investment is time savings and the ability to get information that you wouldn't have access to otherwise. Lazzarini says, "We try to offer a wide variety of ways for people to learn, both traditional and nontraditional, so they will be encouraged to more forward and take on a learning journey approach." (Isaacs, 2003, p. 45). The key is for human resource departments to become more responsive, flexible, and efficient [in their training] (Lavigna, 2002).

Grounded Theory Elements

The significant grounded theory type approach uncovered theory elements to include cost, interaction, innovation, creativity, motivation, flexibility, convenience, space, time, and retention. These seemed to surface in considerable amounts in comparing online to traditional modalities, with the benefits of the elements being attributed to one or the other or both. Th overall resulting theory is that local governments primarily employ blended learning. However, further research into local government training indicates that human interaction and emotional labor are essential for effectiveness.

Survey Results

The survey results yielded some differences in what the document analysis revealed in respect to advantages and disadvantages to traditional and online learning. For example, the document analysis indicated that quality has mixed reviews and cost savings were inconclusive for online training. However, it was clear from the survey that quality was perceived as less of an advantage to online learning and cost savings was more significant. Table 10 indicates the

Table 10
Document Review vs. Survey Results

<u>Document Review</u>	Advantages	Disadvantages
Traditional Learning	Interaction	Flexibility
	Quality	Cost
	Exchange	Travel
	Motivation	
Online Learning	Convenience	Interaction
	Flexibility	Motivation
	Cost	
<u>Survey</u>		
Traditional Learning	Interaction	Travel
	Exchange	Flexibility
	Structured Learning Time	Cost
Online Learning	Convenience	Interaction
	Flexibility	Exchange
	Travel	Structured Learning
	Work at own pace	Time
	Quality	

findings from the document review to the survey. The farther the advantage or disadvantage is aligned to the left the more prominent it is. The document review also provided that blended training was perceived to be more preferred in government. The survey supported that blended

training was less desired, instead either traditional or online but not a combination of the two. Based on the document review the researcher predicted that government organizations primarily used blended training followed by traditional training. This was tested using the survey data. Question eight of the survey asked municipal participants to rank how much they used each modality based on five levels, never, rarely, sometimes/occasionally, moderate amount, and a great deal. Based on the document review the researcher predicted that 75 percent of respondents would indicate that they used blended learning a moderate amount or a great deal, 60 percent would indicate that they used traditional learning a moderate amount or a great deal, and 40 percent would indicate that they use online learning in the same manner. Thus, the null and alternative hypothesis is listed below.

H_o = Learning used a moderate amount or a great deal: Blended learning = 75 percent

Traditional learning = 60 percent

Online learning = 40 percent

H_A = The responses would not reasonably follow the predicted distribution.

Table 11 illustrates the expected values, based on the predicted percentages, to the observed values based on the survey. Table 12 shows the chi-square calculation that yields the chi-square statistic and p-value. The acceptable p-value is set at .05. Table 13 demonstrates whether to accept or reject the null hypothesis. In this case, we fail to reject the null hypothesis as the prediction made based on the document review is a reasonable distribution of the participants' use of modalities in local government. Although, blended training is used much less as indicated by the survey, the traditional and online were better predicted.

Table 11
Expected to Observed Values

Predicted	Blended	Traditional	Online
Moderate Amount A Great Deal	60	51	32
Observed			
Moderate Amount A Great Deal	21	62	32

Table 12
Chi-Square Calculation – Expected to Observed Values

Results	Blended	Traditional	Online
Predicted	60 (44.90) [5.08]	51 (62.63) [2.16]	32 (35.47) [0.34]
Observed	21 (36.10) [6.32]	62 (50.37) [2.69]	32 (28.53) [0.42]

The chi-square statistic (x^2) = 17.0102. The p-value = .000202. The result is significant at $p < .05$.

Table 13
Null Hypothesis – Expected to Observed Values

df = 2

CV = 5.991

x^2 (17.0102) > p-value, so fail to reject the null hypothesis

Emotional Intelligence

Norris and Moon (2005) identify local government as America's grassroots government. Local government is the closest and delivers the greatest number of services directly to the

people, thus it is important due to its potential reach, cost, and impacts. Cox, Gabris, and Levin (2010) contend that there never has been a time when the need for professional and effective government has been more apparent than the present.

> Local government is the most dynamic, innovative, and organizationally diverse level of government in the United States. It employs more persons, is the provider of more direct services, and is the most likely point of contact between government and citizens. Citizens depend on the effectiveness and quality of local government to make their lives safer, healthier, and more livable. (p. 326).

Mastracci, Newman, and Guy (2010) offer that those educated in public administration often indicate that their training fails to adequately prepare them for the human processes involved in the delivery of public service. The authors state that "few professions demand more emotion work from their employees than public service." (p. 124). It is critical in local government to understand both your emotional condition and the emotional state of those you are dealing with. Counselors work with parents and children in distressed family environments, law enforcement personnel interact with people in stressful situations, and clerks may have to deal with citizens upset about taxes or other government requirements. This type of work demands a daily interaction between employees and customers delivering a service that many may question or even protest.

Jaeger (2004) supports that emotional intelligence is of greatest value to organizations' effectiveness and efficiency. She cites Abraham (2000) and Ashforth and Humphrey (1995) for presenting research producing evidence that "general intelligence, which is typically associated with success, may be less important to effective worker performance than is the employee's

emotional intelligence." (p. 43). Sadri (2012), Guy and Lee (2015) further support that emotional intelligence is a key indicator of leadership and career success. Jaeger also cites Mayer, Salovey, and Caruso (2000) as stating that "emotional intelligence is the ability to recognize the meanings of emotions of their relationships and to reason and problem-solve on the basis of them." (p. 43).

Millennials, or those born between 1980 and 2000, represent the largest potential workforce other than the baby boomers. They are perceived as a group to be technologically proficient multi-taskers capable of contributing significantly to organizations, but limited in communications skills (Hartman & McCambridge, 2011). Often termed the entitlement generation, they seek leisure and intrinsic values. Millennials want to maximize their work productivity in an effort to increase leisure time. Additionally, they want work to be meaningful (Schullery, 2013).

The review of the 40 documents uncovered a theory that a combination of online and traditional modalities was the answer in a local government environment of constrained resources and increased globalization. However, the question now is whether these modalities properly cultivate a local government employee's emotional ability. Conte (2004) offers that in times of constrained resources more and more training hours are dedicated to certification and recertification skills and less to the so-called "soft skills" of communication and relationship. Conte, in this article, was referring to corrections officers who are consistently faced with confrontational situations. Although in a possibly less threatening sense, practically all local government employees experience confrontational situations. The "soft skills" are necessary to negotiate or defuse these situations.

Jaeger (2004) supports that emotional intelligence is not set at birth, but rather can be developed through education, training, and life experiences, which differs from personality and intelligence. Skills such as writing, quantitative, and critical thinking are frequently emphasized in online and traditional learning. However, as Jaeger (2004) points out, while these skills are valuable, the ability to work collaboratively, self-understanding, listening, and empathy are critical [in local government]. Olannye (2014) concluded from a study of 130 local government leaders that emotional intelligence is an essential element to leadership performance. It drives commitment and loyalty which enhances successful outcomes.

The survey only served to strengthen the belief that emotional intelligence or soft skills are a critical component to local government training. Employees are progressively dealing with a more diverse population with even more diverse expectations.

Based on the document review the researcher predicted that participants would respond that they agree or strongly agree 80 percent of the time with the questions about soft skills, questions 24-25. Questions 24 and 25 asked respondents to rank how much they agreed to the question that soft skills were an asset in their organization working with other employees and clients, respectively. The five interval likert scale ranked responses from strongly disagree to strongly disagree. Thus, the null and alternative hypothesis is listed below.

H_o = Soft skills are an asset ranked agree or strongly agree 80 percent.

H_A = The responses would not reasonably follow the predicted distribution.

Table 14 illustrates the expected values, based on the predicted percentages, to the observed values based on the survey. Table 15 shows the chi-square calculation that yields the chi-square statistic and p-value. The acceptable p-value is set at .05. Table 16 demonstrates whether to accept or reject the null hypothesis. In this case, we fail to reject the null hypothesis as the

prediction made based on the document review is a reasonable distribution of the participants' opinion of soft skills.

Table 14
Expected vs. Observed Values – Soft Skills

Predicted	Agree/strongly agree	Somewhat agree/disagree/strongly disagree
Soft skills are asset	69	17
Observed		
Soft skills are asset	84	2

Table 15
Chi-Square Calculation – Soft Skills

Results	Agree/Strongly Agree	Somewhat Agree/Disagree/Strongly Disagree
Predicted	69 (76.50) [0.74]	17 (9.50) [2.16]
Observed	84 (76.50) [0.74]	2 (9.50) [2.16]

The chi-square statistic (x^2) = 13.3127. The p-value = .000264. The result is significant at $p < .05$.

Table 16
Null Hypothesis – Soft Skills

df = 1

CV = 3.841

x^2 (13.3127) > p-value, so fail to reject the null hypothesis

Generational Learning

Understanding how generations learn is pivotal to ensuring success. Although individuals within generations differ on their preferred learning styles, it is advantageous to understand the overarching differences to maximize training. Both the literature review and the survey indicate that online learning is more conducive to younger generations. Municipalities can alter their techniques to tailor their training to their audience. It is essential to understand the audience to ensure effectiveness.

Charles (2018) stated that millennial workers will make a career change once every 18 months. This is significant for determining effective local government training. Municipalities must review the significance of tailoring training to a more cost effective method like online training. Not only can it offer cost savings with facility and travel requirements as indicated in the document review and survey, but preserve other resources. For example, it uses less staff to coordinate and train. Additionally, it can expedite the training and more quickly prepare an employee for greater productivity. The advantages identified with online training were noted as convenient, flexible, anytime, and anyplace.

The dedicated employee model of past years is transitioning. Historically, public sector employees viewed government employment as a reasonable job with favorable benefits like a defined benefit plan. This model has changed with the industry offering more portable plans like a defined contribution plan, thus allowing for movement without penalty.

Organizations should also consider generational differences in training. For example, younger generations may be more apt to embrace online training as they grew up with technology. The more senior generations may be more comfortable with face-to-face training.

Obviously, there will be those in each generation that defy the norm. It is important for municipalities to understand generational differences and how they affect training effectiveness.

Pedagogical Model

In an effort to develop a linkage to the significance of emotional intelligence in government and methods of learning, Killian's (2004) pedagogical approach was reviewed. He examined the design and delivery of courses that integrated the pedagogical approaches of traditional classroom training, distance learning, and service learning. Killian concluded the examination by finding that the combination of traditional, online, and service learning was more effective based on favorable student perceptions. Killian (2004) summarized by stating:

> ….that it provides creative ideas for integrating several pedagogical techniques, demonstrates interactive utilization of technology in the learning environment, promotes increased student responsibility for learning, provides students with real-world experience that applies acquired knowledge and skill in ways that benefit their local community, and contributes to enhanced understanding of the significance of linking institutions of higher education with the world beyond the campus. (p. 222)

This three-pronged pedagogical technique of integrating traditional, distance, and service learning presents a creative idea for addressing local government's issue of the soft skills. Grounded theory is about reviewing and examining documents and artifacts and developing theories from the evaluation. In this study, the issue of emotional intelligence in local government was uncovered. Based on the study, the theory is that a combination of online and traditional learning is the best method in a local government environment of constrained resources and globalization. However, this potentially fails to adequately address the revealed

"soft skills." A third leg should be added to the local government model to include emotional or relationship training. Thus, the model that will best serve local government training in an environment of constrained resources and globalization is a combination of online, traditional, and emotional training.

Figure 9 illustrates Killian's pedagogical model and a proposed local government pedagogical model. The local government model is similar to Killian's model in that there are three elements, online, traditional, and emotional learning instead of service learning. The intent of service learning was to incorporate or put into practice the online and traditional learning. The concept is similar in the local government model with the addition that the departments must take more responsibility for emotional learning. This learning must be applied in the departments through an interaction with employees and constituents.

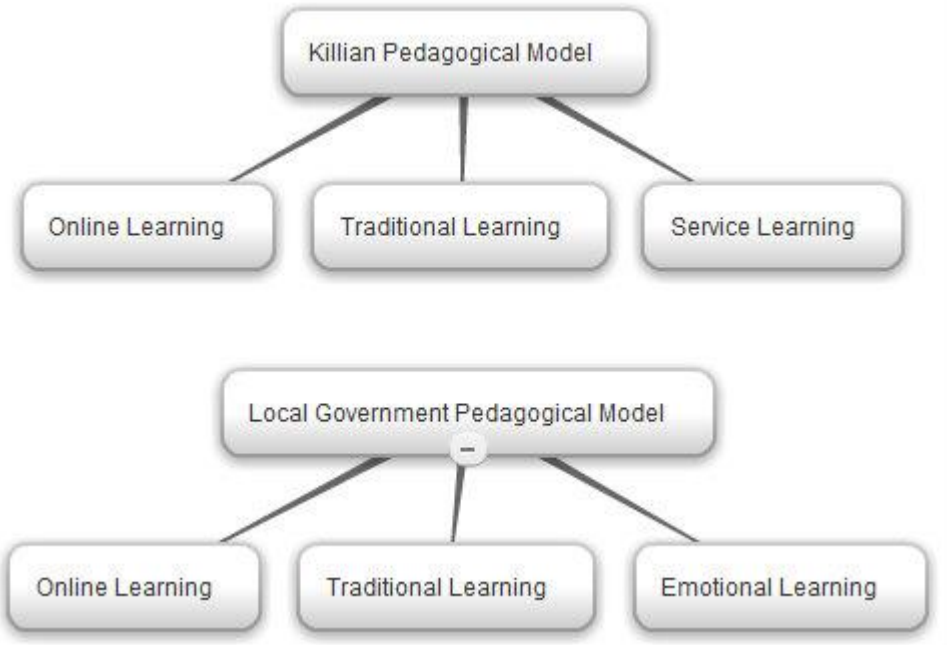


Figure 9
Comparison of Killian (2004) Pedagogical Model to Example of Local Government Pedagogical Model Incorporating Emotional Learning with Online and Traditional Learning

Another learning theory that developed from the grounded theory type approach is connectivism. Neubauer, Hug, Hamon, and Stewart (2011) explain that education is a service in the midst of transformation. The present model of the traditional classroom is being challenged on multiple fronts. Students generally no longer tolerate long periods of instruction after having been conditioned by the media for short attention spans due to sound bites and multitasking (Carr, 2010). Knowledge now is more "just-in-time" and at the student's fingertips. Therefore, the theory is that knowledge is distributed across networks of connections. These networks connect learners to nodes of learning, whether it is instructors, other students, blogs, or websites. The focus is more on connecting for learning, as opposed to lecturing for learning.

Applicability

A combination of online, traditional, and emotional training is the most effective method in an environment of adequate technology. All teaching technologies, traditional, online, or other modalities, benefit some learners in some ways and pose problems for others. Therefore, Deleon and Killian (2000) emphasize the value and employment of mixed methods as opposed to questioning the value of a given modality. Rahm, Reed, and Rydl (1999) identify the issue of distance education as interaction, but also discuss intimidation and neglect. They offer that interaction is frequently a concern in online modalities. Additionally, some students may be intimidated with the technology and feel neglected by not having a face-to-face instructor to discuss their learning. Rahm, et. al (1999) support a mixed approach that allows for meeting the needs of different learners.

This study concludes that neither the online or traditional method provides a single learning solution. There are advantages and disadvantages to both modalities that apply to local governments. A combination of the two increases interaction and contact among students and

between students and instructors (Granham and Kaleta, 2002). Students are more motivated and engaged in learning activities (Barrett, Rubaii-Barrett, and Pelowski, 2006) and empirical studies have shown its pedagogical and learning effectiveness (Aycock, Garnham, and Kaleta, 2002; Burgon and Williams, 2003; Christensen, 2003; Cottrell and Robison, 2003; Garnham and Kaleta, 2002). Additionally, the blended model not only provides greater access and a higher quality learning experience, it also has the potential to reduce costs (Story and DiElsi, 2003). However, many local governments lack the essential infrastructure, training, or expertise to conduct online learning. In this instance, traditional is the answer until technology availability allows for the supplementation of online learning.

E-learning enhances the ability to deliver training globally. The extensive amount of information that may be available offers more openness and transparency and strengthens the employee's ability to gather information and understanding the benefits of electronic media. Merely taking courses online to save travel funds may not be the most cost effective if the training will not enhance the capability of the employee to properly deliver services.

American Regime Values and Character Traits

An individual can go online, coordinate classes, and assume individual responsibility. This begs the question of whether this tends to promote individualism. Does online learning support the concept of a rugged individual with the ability to increase flexibility to take courses when and where they want to take them? Is individualism enhanced or at least not as damaged as traditional? Online demands individual motivation, independence, and to a certain extent direction. Traditional learning provides a teacher who interacts physically with the student, assuming part of the responsibility for motivation and direction. The traditional modality also provides an increased mechanism for student dependency.

An individual can go online and explore at their own leisure similar to surfing the net with an online modality. Does this support acquisitiveness, allowing for an individual to obtain more knowledge and expand their awareness? An individual does not have to wait until the next class to have their questions answered or to investigate another part of the course. Kuhlmann (2010) pointed out that online training tends to provide cost savings due to standardization. However, this may impede the ability to incorporate current events into the instruction. Is this then restricting acquisitiveness?

An individual explores and learns in a less directed environment with online learning. Does this concept detract from the concept of institution, for example, less opportunity for supervisor expectations, organizational peculiarities, procedures, or nuances? Does this modality cultivate human interaction and customer service? Are we transitioning to electronic communication and action and should we be doing this? Will online supplement or break down the institution? These are questions that are significant in local government where the institution is frequently the citizen's first encounter with government. A transition to online involvement must be carefully orchestrated in a manner that maintains the institution's character and values of providing services to its constituents.

Does choosing either of the learning modalities meet an individual's needs and provide equal opportunity for learning? Does it support equality and diversity? America's demographics are changing and English is not the native language for an increasing percentage of our population. Can online learning adapt to different capabilities and recognize cultural and interpretation differences?

This study indicates that there are some economic savings and improved efficiency and effectiveness. However, local government can be different than the other organizations examined

in this paper. Would online learning adequately address the departmental issues and procedures or would it detract from efficiency or effectiveness?

The goal for local governments is to be responsive and for the greatest good. Would online training create an employee who is responsive, or would it encourage more system time and less human interaction and client responsiveness? Some fear that the expansion of global educational offerings will diminish the variety of approaches to subject matter that now occurs, homogenizing, or ignoring differences among, learning styles and cultural perspectives (Green & Baer, 2000). Do institutions need to consciously protect against this? Can we maintain the greatest good or be sustainable with a certain learning modality? Do we need to privatize or outsource training to make it sustainable?

Change is inevitable in every institution, and change has been particularly evident in local government in the last few years. Is this change, if it includes a shift toward online learning, the direction we should be taking? Are we transitioning to electronic communications and actions and will an increase in online learning displace physical human interaction? Are we encouraging less physical interaction and how does this affect our character? If local government adopts a complete online modality, does that have an effect on American regime and political character traits?

Policies and Effect on Public Administration

Local government is the first responder, a citizen's first encounter. Many of the duties such as fire, safety, and social services require extensive human interaction and hands-on training. The situations vary and while many can be simulated in online training, others require mentor or face-to-face interaction. Online training is a tool that supplements learning and should be integrated with traditional learning. Online learning reduces time and space limitations and is

appropriate for tasks that are standardized, repetitive, and predictable. Examples are human resources, payroll, finance, public works, or planning and development. It is less effective for non-routine, infrequent, and less predictable tasks. Examples are corrections officers, firefighters, or public safety.

Training policies should allow for an integration of both modalities that encourage timeliness in training, yet provides for an employee to learn from a mentor. This will ensure effective client service. Even more essential is ensuring the employee's ability to react appropriately emotionally in service situations; soft skills training can be accomplished in various modalities.

Gaps in the Study

The analysis resulted in the blended method proving the best alternative, however at a narrow margin. All the methods listed in Table 7 achieved a sample average in excess of 3.00, with blended the highest at 3.66. The traditional method was a close second at 3.60. This could tend to support the no significant difference phenomenon. Anderson (2008) suggests that there is no perfect learning environment for all learners. Learners come to the learning environment with varying degrees of ability and understanding.

The breadth of the articles limited the depth and focus of the analysis. The reviews included journal articles, news articles, studies, reports, dissertations, and a thesis. The volume of the reviews ranged from one page to well over 200 pages. Due to the volume of material, the reviews were conducted over a period of time, which could limit the focus or challenge the momentum. Distractions were not totally controlled, and interruptions in conducting the analysis were restricted, yet periodically present.

Table 8 illustrates that the largest sample included online education. A significant amount of studies address online education and several of these studies label it as the training trend. Fewer studies in the sample address web facilitated learning, accounting for only 11.2 percent of the sample. The Sloan-C definition limits traditional learning to no more than one percent use of technology. The analysis assumed that studies that used the word traditional fell in this range, when realistically they could have fallen in the web facilitated category.

The variables of cost, quality, effectiveness, global reach, and technology range were equally weighted in this study. The variables were, however, weighted on the evaluation of qualitative and quantitative support. Schanlaub (2009) contends that quality and effectiveness should be the focus of learning, and cost a secondary concern.

There was limited literature available for local government. This study examined modalities in different settings such as education, business, military, and federal and state government. The intent was to review literature available and apply the findings to the peculiarities of the local government in an attempt to bridge this gap.

There is a significant gap between the content analysis and the survey. For example the content analysis was conducted in 2012 and the survey was in 2018 which is a six-year separation. The content analysis was used as a foundation for constructing the survey as well as assumptions about learning modalities. In essence each was a snapshot of opinions, preferences, and application at the time. In a perfect environment a closer timeframe for the two would serve for more accurate comparisons.

Opportunities for Future Research

Traditional and web facilitated learning, by the definitions, are now closely related and it seems that traditional may be non-existent in a sense. There is limited literature on web

facilitated learning. This may be due to the fact that many instructors and students do not perceive a difference between the two. The Sloan-C definition is strict in limiting traditional learning to only oral and written instruction with no technology used. There could be a study that investigates whether there is a new traditional that merges the web facilitated.

This study revealed some interesting findings about cost to include limited class size and amount of time required to devote to online learning. Further research could investigate whether this has changed as more online learning is available. For example, are templates and lessons learned decreasing the time allocation? Is technology allowing for increased class size?

Social interaction, learner motivation, and student support were listed as the most significant issues separating online from traditional learning methods. Technological advancements could be improving social interaction. Facebook, although not without concerns, is an example of enhanced social interaction. Are institutions adequately using these new advances to address the issues of social interaction, learner motivation, and student support?

The literature review indicated a direct relationship with limited resources and training expenditures. Additionally, training expenditures have an inverse relationship with unemployment and inflation as depicted in Figures 1 - 3. Training expenditures rise as unemployment and inflation decrease. Additional research could compare these findings to the current environment or the most recent Great Recession. During the Great Recession, many unemployed workers returned to school to gain skills that expanded their employment possibilities. This is counter to the literature supporting the inverse relationship of training expenditures to unemployment.

This study addressed limited resources as well as increased globalization. An area that was not addressed in any detail is changing demographics. Residents of many countries are now

taking classes with non-native language instruction, thus potentially making online learning more challenging. A further study could research the best training method for local government based on changing demographics.

Keifer, et al. (2015) conducted a longitudinal field study of employees in public sectors in the United Kingdom to determine the impact of substantial fiscal reductions on employee attitude. The study suggested that an announcement and implementation of fiscal reductions had a negative effect on employees. However, the effect was either minimized or a positive employee effect was experienced when an innovation-related change accompanied or followed the fiscal reduction. Training can be a positive component in the organizational change. A further study could review the impact of training as a counter-balance to cyclical or unexpected changes in other areas.

The issue of distractions using online learning surfaced in the survey. Although online learning is convenient by offering the ability to participate anywhere at almost any time there are interfering elements. The disadvantage is allocating resources like time and place to specific training. Routinely, online training can be interrupted by phone calls, office visits, crisis intervention, children's needs at home, or a number of other competing responsibilities. Traveling away from home physically removes the learner from this environment. Although there will still be calls and text messages and responsibilities the learner is in an environment designed for and dedicated to learning. Further analysis of this impact would not only be interesting but could contribute to local governments' decisions on learning modalities.

The study used simple statistics such as percentage of participants in the survey that responded to certain questions. Shavelson and Towne (2004) caution that the research questions direct the research statistics used not that the research statistics direct the research questions.

Accordingly, the data gathered from the survey is ripe for examining relationships and comparisons or a multi-variant/correlational analysis of the survey.

The continuing development of artificial intelligence or AI is having an effect on learning. Sources like YouTube are frequently used to educate individuals or groups on how to perform activities or projects. When posed with a difficult question people resort to googling it for further explanation. The use of AI in online learning could yield an immediate answer to a specific question similar to asking a human subject matter expert. An analysis of this trend would be not only interesting but contribute to the research of online learning and its impact on local government.

This study focused on four research questions that were answered based on descriptive statistics, document review, and the literature. The survey is rich with data from a select population of municipal leaders. The data offers immense possibilities beyond the scope of this study, e.g., other dissertation topics or research. This research could conduct relationships between variables or questions in the survey to yield interesting results.

An intriguing learning concept is "Just in Time Learning." This approach to learning gives employees the needed information exactly when they need it: the right information, at the right place, and at the right time. It works best with learners who have limited time to spend in front of a computer (Andriotis (2018); Admin (2018)). Pappas (2016) adds that the resources for this type of online learning or training must be convenient, quick, and targeted to the specific needs of the employees. Freifeld (2019) supports "Just in Time Learning" stating that it cultivates diversity of exposure, multiple skill sets across disciplines, and allows employees to learn quickly. Research into this concept could provide valuable insight and options to maximize [government] training.

Recommendations

This study offers several recommendations to the field of training and education. Training is important to all four of the institutions reviewed and this is evidenced by the annual training expenditures, which have exceeded $50 billion for the last 20 years (Figure 1). However, these recommendations focus on local government.

The first recommendation is for local government to exploit leverage and flexibility. Burns (2007) reported that the state of North Carolina effectively solved geographic and diverse population challenges by combining training modalities. The state integrated the benefits of traditional and online learning in an effort to create an optimal learning culture. This resulted in a flexible program that ensured consistent skills. Ann Cobb, North Carolina's Office of State Personnel Managing Partner stated, "[Combining] learning [modalities] enables organizations to leverage technology and economies of scale to make essential training and development available to more employees." At the same time, learners can study in their own space and time and confirm their learning in a classroom setting. Ms. Cobb adds that "the web-based tools are available and there is classroom coaching afterwards."

Walters (2009) shares that according to a Pew Internet and American Life Project study, 70 percent of working Americans now use internet on the job. Workers of all age groups are now more comfortable with technology. The younger workers have different expectations about technology, and can offer creative alternatives to technology in the workplace. Thus, local government can leverage these assets.

The second recommendation is to review the institution's resources to ensure a proper fit. The success of online or traditional learning is contingent on available resources. An adequate technology infrastructure is mandatory to ensure successful learning. This study demonstrates

that both online and traditional learning is most effective for constrained resources and increased globalization. However, it is essential to have the appropriate technological support.

The third recommendation is to consider the most significant findings of this study when implementing the appropriate learning modality. The most significant themes identified throughout the documents were interaction, motivation, support, convenience, and flexibility. The first three are maximized in the traditional method and the last two are optimized in the online method. Given available resources, the blended learning method offers the best combination of cost, quality, and effectiveness.

The fourth recommendation is to avoid attempting to design a comprehensive approach. Diversification is an advantage, but to a limited extent. It is difficult to be all things to all learners. Additionally, Burns (2007) suggests that given the diverse challenges and the various individual learning styles, it is impossible to design a one-size-fits-all approach. A combination of online and traditional modalities enables institutions to configure, design, and adjust to the changing environment and adapt to constrained resources and globalization. It fills the gaps presented in the other methods to provide the learner with a combination that ensures effective learning. It does not maximize the benefits of each learning method, but rather optimally integrates the most significant advantages of each learning method.

The fifth recommendation is to structure a learning program for maximum effectiveness. The U.S. Department of Education in the 2008 report on Evaluating Online Learning suggests that drop-in programs may fail to offer optimal quality. In a program of this type the instructor is available at certain times for the learner to drop-in and discuss or receive guidance. A program of this type could tend to discourage classroom attendance, thus reducing the advantages of

interaction, motivation, and support. A structured program that relies on both online and classroom combined with emotional learning ensures the best integration of benefits.

The sixth recommendation is to evaluate and accommodate. A local government organization should evaluate its ability, both of equipment and personnel to embark on an online learning approach. It should also evaluate its ability to sustain this approach. The local government should accommodate its learner to maximize training. It should, given assets available, train employees accordingly. For example, as mentioned earlier, training functions like human resources and planning and development using online methods while employing more traditional learning for firefighting and public safety. There is also a need to accommodate both modalities within each discipline as there are repetitive and unique tasks within each.

The Next Steps

This study revealed significant findings associated with the advantages and disadvantages of online and traditional learning, constrained resources, increased globalization, and emotional intelligence. However, there is more to learn, investigate, and determine as was discussed in opportunities for further research. The author of this research, and hopefully committee members, will have the opportunity to share the findings of this study with numerous local government related agencies in Michigan. The Michigan Municipal Executives have inquired about a presentation at their 2019 conference. The Center for Local, State, and Urban Policy at the University of Michigan and the Center for Local Government Finance and Policy at Michigan State University have asked for a presentation of the findings. The International City County Management Association has expressed interest in broadening the survey administrated at a state level to administration at a national level. The author also intends to share the findings

at several other conferences and events state-wide and nationally to encourage discussion and innovation in local government learning.

REFERENCES

Abraham, R. (2000). The role of job control as a moderator of emotional dissonance and emotional intelligence - outcome relationships. *Journal of Psychology, 134*(2), 169-185.

Admin. (2018). Is Your Company Embracing Just-In-Time Learning? *Disruptive Learning*. Retrieved from https://www.shiftelearning.com/blog/just-in-time-learning

Allen, I., and Seaman, J. (2010). *Class differences: Online education in the united states, 2010.* Wellesley, MA: Babson Survey Research Group. (2010).

Allen, E. & Seaman, J. (2011). *Going the distance: Online education in the united states*. 2011. Babson Survey Research Group: Wellesley, MA.

Ammons, D. & Fleck, T. (2010). *Budget balancing tactics in local government*. University of North Carolina School of Government.

Ammons, D., Smith, K., & Stenberg, C. (2011). Proceedings from Big Ideas: The Future of Local Government: *Local governments in the wake of the great recession: Are big changes ahead?* Fort Collins: CO.

Anderson, T. (2008). *The theory and practice of online learning*. Canada: AU Press.

Andriotis, N. (2018). What is Just-In Time Learning (and the Best Practices to Adopt it for your Business). *Elearning*. Retrieved from https://www.efrontlearning.com/blog2017/10/just-time-training-best-practices-adopt-business.html

Anonymous. (2011). Local government dashboards. Department of Treasury. Retrieved from http://www.michigan.gov/treasury/0,4679,7-121-1751_2197_58826_60161---,00.html

Anonymous. (2010). Training industry report. *Training Magazine*. Retrieved from http://www.cedma-europe.org/newsletter%20articles/Training%20Magazine/2010%20Training%20Industry%20Report%20%28Nov%2010%29.pdf

Anonymous. (2014). Training industry report. *Training Magazine*. Retrieved from https:??trainingmag.com/sites/default/files/magazines/2014_11/2014-Industry-Report.pdf

Ashforth, B., & Humphrey, R. (1995). Emotions in the workplace: A reappraisal. *Human Relations, 48*(2), 97-125.

Atherton, J. (2013). *Learning and Teaching; Experiential Learning*. Retrieved from http://www.learningandteaching.info/learning/experience.htm

Aycock, A., Garnham, C. & Kaleta, R. (2002). Lessons learned from the hybrid course projects. *Teaching with Technology Today, 8*(6). Retrieved from http://www.uwsa.edu/ ttt/articles/garnham2.htm

Barrett, K., & Greene, R. (2001). Bad-news budgeting. *Governing Magazine*. Retrieved from http://www.lexisnexis.com.libproxy.library.wmich.edu/hottopics/lnacademic/?verb= sr&csi=7579

Barrett, S., Rubaii-Barrett, N., & Pelowski, J. (2006). Preparing for and responding to student incivilities: Starting the dialogue in public affairs education. *Journal of Public Affairs Education, 16*(2), 143-160.

Beesley, G., & Cooper, C. (2008). Defining knowledge management activities: Towards consensus. *Journal of Knowledge Management, 12*(3), 48-62.

Begiel, S. (2018). Proceedings from AS 2018: *Government eLearning Seminar*. Lansing, MI.

Benest, F. (2011). Learning with intent. *Public Management,* 93*(9), 18-21*.

Bishop, T., Reinke, J., & Adams, T. (2011). Globalization: Trends and perspectives. *Journal of International Business Research, 10*(1), 117-130.

Boubsil, O., Carabajal, K., & Vidal, M. (2011). Implications of Globalization for Distance Education in the United States. *American Journal of Distance Education, 25*(1), 5-20.

Breaden, M. (2008). Adult online learning. *Education Week, 2*(26), 5.

Brown, B., & Liedholm, C. (2002). Can web courses replace the classroom in principles of microeconomics? *American Economic Review, 92*(2), 444-448.

Brown, J. (2002). Growing up digital: How the web changes work, education, and the ways people learn. *United States Distance Learning Association Journal 16*(2). Retrieved November 16, 2011 from ProQuest.

Bunting, K. (2003). *Military personnel*: *Perceptions of their experiences with online learning*. (Doctoral Dissertation). Retrieved from ProQuest Dissertations and Theses. (3102777).

Burgess, J., & Russell, J. (2003). The effectiveness of distance learning initiatives in organizations. *Journal of Vocational Behavior, 63*(2), 289-303.

Burgon, H., & Williams, D. (2003). Bringing off-campus students on campus: An evaluation of a blended course. *Quarterly Review of Distance Education, 4*(3), 235-260.

Burns, J. (2007). Using blended learning to develop leaders: A case history. *Development Dimensions International*, 1-3.

Carey, B. (2015). *How we learn: The surprising truth about when, where, and why it happens*. New York: Random House.

Carr, N. (2010). *The shallows: What the Internet is doing to our brains*. New York: W. W. Norton.

Chapman, B. (2007). Estimating cost and time in instructional design. *E-Learning*.

Charles, E. (2018, March). Generational differences in the workplace. 2018 Risk Management Workshop, Lansing, MI.

Christensen, T. (2003). Finding the balance: Constructivist pedagogy in a blended course. *Quarterly Review of Distance Education, 4*(3), 235-243.

Colwell, J., & Jenks, C. (2004). *The upper limit: The issues for faculty in setting class*

size for online courses. Retrieved from http://www.ipfw.edu/tohe/Papers/.../015__the %20upper%20limit.pdf

Conte, C. (2004). The training line. *Governing Magazine*. Retrieved from http://www.lexisnexis.com.libproxy.library.wmich.edu/hottopics/lnacademic/?verb=sr&csi=7579

Cottrell, D, & Robison, R. (2003). Blended learning in an accounting course. *Quarterly Review of Distance Education, 4*(3), 261-269.

Cox, R., Gabris, G, & Levin, M. (2010). Educating local government managers for the twenty-first century: A preface to the symposium. *Journal of Public Affairs Education, 16*(3), 325-336.

Creswell, J. (2007). *Qualitative inquiry & research design: Choosing among five approaches*. Thousand Oaks, CA: Sage Publications, Inc.

Cushman, C. (2017). Key retirement income-related dates for baby boomers. *County News, 49*(14), 18.

Deleon, L., & Killian, J. (2000). Comparing modes of delivery: Classroom and on-line (and other) learning, *Journal of Public Affairs Education*, *6*(1), 5-18.

Donnovan, R. (2009). *Transforming online learning*. (Master's Thesis). Retrieved from ProQuest Dissertations and Theses. (978-0-494-52127-4).

Driscoll, M. (2002) Blended learning: Let's not go beyond the hype. *LTI Newsline.* Retrieved from http://www.ltinewsline.com/ltimagazine/article/articleDetail.jsp?id=11755

Ebbers, S. (2007). *The impact of social model agent type and social interaction type on learner motivation, attitudes, social comparisons, affect and learning performance*. (Doctoral dissertation). Retrieved from ProQuest Disserations and Theses. (07092007).

Eisenhardt, K. (1991). Better stories and better constructs: the case for rigor and comparative logic. *Academy of Management Review*, 16(3), 620-627.

Figone, D., Walesh, K., Danaj, M., & Benest, F. (2011). Proceedings from Big Ideas: The Future of Local Government: "What's the Future of Local Government? An Alliance White Paper Intended to Provoke a Needed Conversation," Fort Collins: CO.

Finlay, W., Desmet, C., & Evans, L. (2004). Is it the technology or the teacher? A comparison of online and traditional english composition classes. *Journal of Educational Computing Research , 23*(1), 163-180.

Free Dictionary. (2012). Local government. Retrieved from http://encyclopedia2. thefreedictionary.com/local+government

Freifeld, L. (2019). Learning Just In Time. *Training*. Retrieved from https://trainingmag.com/ content/learning-just-time

Garnham, C., & Kaleta, R. (2002). Introduction to hybrid courses. *Teaching with technology today, 8*(6). Retrieved from www.uwsa.edu/ttt/articles/garnham.htm

Getha-Taylor, H., Fowles, J., Silvia, C., & Merritt, C. (2015). Considering the effects of time on leadership development: A local government training evaluation. *Public Personnel Management, 44*(3), 295-316.

Gibbs, G. (2012, April 6). Grounded theory – core elements [Part 2]. *Grounded Theory*. Lecture retrieved from http://www.youtube.com/results?search_query=grounded+theory+ elements &oq=grounded+theory+elements&aq=f&aqi=&aql=&gs_nf=1&gs_ l=youtube.3... 1134.11266.0.11654.43.43.10.3.4.0.214.3171.9j20j1.30.0

Gibson, P., & Dunning, T. (2012). Creating quality online course design through a peer-reviewed assessment. *Journal of Public Affairs Education, 18*(1), 209-228.

Ginn, Martha H. & Hammond, A. (2012). Online education in public affairs: Current state and

emerging issues. *Journal of Public Affairs Education, 18*(1), 247-270.

Ginsburg, D. (2016). *Teaching across the generations: Challenges and opportunities for Preceptors* [PowerPoint slides]. Retrieved from http://pharmacy.utah.edu/pharmacotherapy/adjunct/pdf/Ginsburg_Generation_Preceptor_Presentation_Utah.pdf

Green, M. & Baer, M. (2000). What does globalization mean for teaching and learning? Retrieved from http://joevans.pbworks.com/f/GreenBaerGlobalizationTeaching Learning.pdf

Guiller, J., Durndell, A., & Ross, A. (2008). Peer interaction and critical thinking: Face-to-face or online discussion? *Learning and Instruction, 18*, 187-200.

Guy, M. & Lee, H. (2015). How emotional intelligence mediates emotional labor in public service jobs. *Public Personnel Administration, 35*(3), 261-277.

Harris, J., & Brookes, J. (2003). Why globalization matters to local government. Retrieved from http://business.highbeam.com/2211/article-1G1-110220865/why-globalization-matters-local-government

Havenga, B. (2003). *The role and purpose of local government*. (Thesis). Retrieved from http://upetd.up.ac.za/thesis/submitted/etd-06222005-135528/un restricted/03 chapter3.pdf. (06222005).

Haynie, D. (2015). Study shows sluggish learning growth for second year. *U.S. News & World Report Education*. Retrieved from https:www://USNews.com

Howe, N., & Strauss, W. (1993). *13th gen: Abort, retry, ignore, fail*? New York: Vintage Books.

Isaacs, L. (2003). Online lessons. *The American City and County, 118*(3), 40-45.

Jacobson, W. & Sowa, J. (2015). Strategic human capital management in municipal government: An assessment of implementation practices. *Public Personnel Management, 44*(3), 317-339.

Jaeger, A. (2004). The place for emotional growth in professional education. *Journal of Public Affairs Education, 10*(1), 43-65.

Johnson, S., & Romanello, M. (2005). Generational diversity: *Teaching and learning approaches, 30*(5), 212-216.

Johnson, L., Smith, R., Willis, H., Levine, A., & Haywood, K. (2011). *The 2011 Horizon Report.* Austin, Texas: The New Media Consortium. Retrieved from http://search.proquest.com.libproxy.library.wmich.edu/pqrl/docview/62341515/131DA8514AC4FDFAB5B/36?accountid=15099

Kiefer, T., Hartley, J., Conway, N., & Briener, R. (2015). Feeling the squeeze: Public employees' experience of cutback- and innovation-related organizational changes following a national announcement of budget reductions. *Journal of Public Administration Research and Theory, 25*(4), 1279-1305.

Killian, J. (2004). Pedagogical experimentation: Combining traditional, distance, and service learning techniques. *Journal of Public Affairs Education, 10*(3), 209-244.

Knowles, M., Holton III, E., & Swanson, R. (2015). *The adult learner: The definitive classic in adult education and human resource development* (8th Ed.). New York: Routledge.

Kolb, D. (1984). *Experiential learning: Experience as the source of learning and development* (Vol. 1). Englewood Cliffs, NJ: Prentice-Hall.

Kolb, D., & Fry, R. (1974). *Toward an applied theory of experiential learning*. MIT Alfred P. Sloan School of Management.

Kolowich, S. (2013, March 21). The professors who make the MOOCs. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com/article/The-Professors-Behind-the-MOOC/137905/#id=overview

Kriegel, J. (2013). *Differences in learning preferences by generational cohort: Implications for instructional design in corporate web-based learning*. (Doctoral Dissertation). Retrieved from idea.library.drexel.edu/islandora/object/idea%3A4100/datastream/OBJ/download

Kuhlmann, T. (2010, February 2). Why e-learning is so effective. Retrieved from http://www.articulate.com/rapid-elearning/why-e-learning-is-so-effective

Kumur, D. (2011). What is the impact of globalization on local urban government? Retrieved from http://www.preservearticles.com/2011100514748/what-is-impact-of-globalization-on-urban-local-government.html

Lancaster, L., & Stillman, D. (2002). *When generations collide. Who they are. Shy they clash. How to solve the generational puzzle at work*. New York: Collins Business.

Lavigna, R. (2002). Best practices in public-sector human resources. *Human Resource Management, 41*(3), 369-384.

Lee, C., Dickerson, J., & Winslow, J. (2012). An analysis of organizational approaches to online course structures. *Online Journal of Distance Learning Administration, 15*(1). Retrieved from http://www.westga.edu/~distance/ojdla/

Levinous, D. (2015). Generational differences in the classroom. Association for Talent Development Retention. Retrieved from https:www://td.org

Litz, D. (2011). Globalization and the changing face of educational leadership: Current trends and emerging dilemmas. *International Education Studies, 4*(3), 20.

Liu, Y. (2007). A comparative study of learning styles between online and traditional students. *Journal of Educational Computing Research, 37,* 41-63.

Lucas, J. (2011). US state and local government finances: From recession to austerity. *Conjoncture*. Retrieved from http://economic-research.bnpparibas.com/applis/www/recheco.nsf/ConjonctureByDateEN/50295B95134B87D7C125786F00439852/$File/C1104_A1.pdf

Madalina, C. (2009). Knowledge management: Focus on innovation and labor productivity in a knowledge-based economy. *Journal of Knowledge Management*. Retrieved from http://www.allbusiness.com/technology/software-services-applications/16434433-1.html

Mandelker, D., et. al. (2014). *State and local government in a federal system* (8th ed.). Washington, DC: Matthew Bender.

Marsan, C. (2009). Unlocking ideas. *Government Executive, 41*(4), 55-56,58.

Martin, C., & Tulgan, B. (2002). *Managing the generational mix*. Amherst, MA: HRD Press.

Mastracci, S., Newman, M, and Guy, M. (2010). Emotional labor: Why and how to teach it. *Journal of Public Affairs Education, 16*(2), 123-141.

Mayer, J, Salovey, P., & Caruso, D. (2000). Emotional intelligence as zeitgeist, as personality, and as a mental ability. In R. Bar-On and J.D. A. Parker, eds., *The Handbook of Emotional Intelligence.* San Francisco: Jossey-Bass, 92-117.

McLeod, S. A. (2013). *Kolb - Learning Styles*. Retrieved from www.simplypsychology.org/learning-kolb.html

McMillian, J. (2000). *Educational research: fundamentals for the consumer*. Addison Wesley Longman.

Meyers, S. (2008). Using transformative pedagogy when teaching online. *College Teaching, 56*, 4, 219-224.

Michigan Department of Treasury. (2015). Retrieved from https://treas-secure.state.mi.us/LAFDocSearch/tl41R01.aspx?&lu_id=559&doc_yr=2014&doc_code=AUD

Motah, M. (2007). Proceedings of the 2007 Computer Science and IT Education Conference: *Learning, Types of Learning, Traditional Learning Styles and the Impact of E-Learning on the Performance of Secondary School Students – The*

Perception of Teachers. Pointe aux Sables: Mauritius.

Muilenburg, L., & Berge, Z. (2005). Student barriers to online learning: A factor analytic study. *Distance Education, 26*(1), 29-48.

Norris, D., & Moon, M. (2005). Advancing e-government at the grassroots: Tortoise or hare? *Public Administration Review, 65*(1), 64-75.

Neubauer, B., Hug, R., Hamon, K., & Stewart, S. (2011). Using personal learning networks to leverage communities of practice in public affairs education. *Journal of Public Affairs Education, 17*(1), 9-25.

Nollenberger, K. (2015). Comparing alternative teaching modes in a masters program: Student preferences and perceptions. *Journal of Public Affairs Education, 21*(1), 101-114.

Oblinger, D., & Oblinger, J. (2005). *Educating the Net Gen*. Washington, DC: EDUCAUSE.

Olannye, P. (2014). An assessment of the effect of emotional intelligence on leadership performance in local government administration. Journal of Emerging Trends in Economic and Management Sciences, (5)1, 44.

Palloff, R., & Pratt, K. (2007). *Building on-line learning communities*. San Francisco: Jossey-Bass.

Pappas, C. (2016). 8 Best Practices for Just-In-Time Online Training. *Corporate Elearning*. Retrieved from https://elearningindustry.com/best-practices-just-in-time-online-training

Parks, J., & Hilvert, C. (2017). Maximizing employees' performance. *Public Management, 99*(8), 10-14.

Parry, M. (2010). Gates announces $20-million for new education-technology program. *The Chronicle of Higher Education*. Retrieved from http://chronicle.com/blogs/

wiredcampus/gates-announces-20-million-for-new-education-technology-program/27654

Picciano, A. (2006). Online learning: Implications for higher education pedagogy and policy. *Journal of Thought*, *41*(1), 75-94.

Platt, T. (2011). *Exemplary high school teacher's utilization of web-facilitated instruction: A multiple case study*. (Unpublished doctoral dissertation). University of Nebraska, Lincoln.

Police Executive Research Forum. (2010). Critical issues in policing series: Is the economic downturn fundamentally changing how we police? Washington, DC: Police Executive Research Forum.

Psarras, J. (2006). Education and training in the knowledge-based economy. *VINE*, *36*(1), 85-96.

Rahm, D., Reed, B., & Rydl, T. (1999). Internet mediated learning in public affairs program: Issues and implications. *Journal of Public Affairs Education, 5*(3), 213-223.

Reeves, T., & Oh, E. (2007). Generation differences and educational technology research. In J. M. Spector, M. D. Merrill, J. J. G. van Merriënboer, & M. Dirscoll. (Eds.) *Handbook on educational communications and technology* (p. 295-303). Mahwah, NJ: Lawrence Erlbaum Associates.

Russell, T. (1999). *The no significant difference phenomenon.* Chapel Hill: North Carolina State University.

Robertson, J., Grant, M., & Jackson, L. (2005). Is online instruction perceived as effective as campus instruction by graduate students in education? *Internet and Higher Education, 8,* 73–86.

Sadri, G. (2012). Emotional intelligence and leadership development. *Public Personnel Management, 41*(3), 535-548.

Schanlaub, R. (2009). Online training. *Law & Order*, *57*(4), 36-40, 43.

Schiller, B. (2015). *The economy today*. McGraw-Hill/Irwin: New York, NY.

Schlag, P. (2008). Learning comes to camp. *The Camping Magazine, 81*(5), 40.

Schullery, N. (2013). Workplace engagement and generational differences in values. *Business Communication Quarterly*, *76*(2), 252-265.

Schumaker, A. (2004). Prediciting perceived effectiveness of training in local government: A study of a Municipal clerks training program. *Public Performance & Management Review*, *27*(3), 51-59.

Sharma, P. (2010). Blended Learning. *ELT Journal, 64*(4), 456-458.

Shavelson, J. & Towne, L. (2011). What Drives Scientific Research in Education? *Association for Psychological Science*.

Slack, J. (1990). Local government training and education needs for the twenty-first century. *Public Productivity & Management Review, 13*(4), 397-404.

Spector, J., Merrill, M., van Merriënboer, J., Dirscoll, M. (Eds.). (2007). *Handbook on educational communications and technology* (p. 295-303). Mahwah, NJ: Lawrence Erlbaum Associates.

Story, A., & DiElsi, J. (2003). Community building easier in blended format. *Distance Education Report*, *2*:7.

Strauss, A. & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Sage: Newbury Park, CA.

Stringer, E. (2007). *Action Research* (3rd ed.) Thousand Oaks, CA: Sage.

Stromquist, N. (2007). Internationalization as a response to globalization: Radical shifts in university environments. *Higher Education, 57*(1), 81–105.

Sweat-Guy, R., & Wishart, C. (2008). A longitudinal analysis of the effects of instructional strategies on student performance in traditional and e-learning formats. *Issues in Informing Science and Information Technology* (5), 149-163.

Sydney-Agbor, Ngozi, et al. (2014). Influence of Emotional Intelligence and Gender on Job Satisfaction among Local Government Employees." *Research in Psychology and Behavioral Sciences*, *2*(4), 86-89.

Tapscott, D. (1998). *Growing up digital: The rise of the net generation*. New York: McGraw Hill.

Tough, A. (1979). *The adult learning projects*. Toronto: Ontario Institute for Studies in Education.

Turner, D. (2010). Training cuts seen as risk to economy. *Financial Times*. Retrieved from http://www.ft.com/intl/cms/s/0/1bf721fc-31b-11df-b40c-144feabdc0.html

Trochim, W. (2006). Likert scaling. *Social Research Methods*. Retrieved from http://www.socialresearchmethods.net/kb/scallik.php

United States Census Bureau. (2015). Local government. Retrieved from http://www.census.gov/newsroom/cspan/govts/20120301_cspan_govts_def_3.pdf?cssp=SERP

United States Department of Education. (2008). *Evaluating online learning: Challenges and strategies for success* (Publication No. ED004344P). Washington, DC: U.S. Government Printing Office.

United States Department of Education. (2010). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*. (Contract number ED-04-CO-0040). Washington, DC: U.S. Government Printing Office.

United States Department of Labor. (2016). *Bureau of labor statistics*. Retrieved from http://data.bls.gov/timeseries/LNU04000000?years_option=all_years&periods_option=specific_periods&periods=Annual+Data

US Inflation Calculator. (2016). *Historical inflation rates*: *1914-2016*. Retrieved from http://www.usinflationcalculator.com/inflation/historical-inflation-rates/

Walker, T. (2008). Preparing our schools for tomorrow's world. *NEA Today, 26*(6), 20.

Walters, J. (2009). The millennial in the cubicle. *Governing Magazine*. Retrieved from http://www.lexisnexis.com.libproxy.library.wmich.edu/hottopics/lnacademic/?verb=sr&csi=7579

Watson, J. (2008). Blended learning: The convergence of online and face-to-face education. *The North American Council for Online Learning*.

Welsh, T., et. al. (2003). E-learning: Emerging uses, empirical results and future directions. *International Journal of Training and Development*, *7*(4), 245-258.

Williams, D. (2007). *Online learning: Student perceptions of variables that impact learning performance*. (Doctoral Dissertation). Retrieved from ProQuest Dissertations and Theses. (3271914).

Wong-MingJi, D. (2007). International cultural differences. (2007). *In Encyclopedia of Business, 2nd ed*. Retrieved from http:www.referenceforbusiness.com/management/Gr-Int/International Cultural-Differences.html

Zemke, R., Raines, C., & Filipczak, B. (2000). *Generations at work: managing the class of veterans, boomers, x-ers, and nexters in your workplace*. New York: AMACON.

Zhang, D. & Nunamaker, J. (2003). Powering new learning in a new millennium: An overview of e-learning and enabling technology. *Information Systems Frontiers, 5*(2), 207-218.

Appendix A

Documents

Document	Type	Year
A comparative analysis of student engagement, learning, and satisfaction in lecture hall and online learning settings	Article	2009
Adult Online Learning	Article	2008
Benefits of Online Learning	News Article	2010
Blended Learning for Compliance Training Success	Article	2002
Class Differences: Online Education in the United States	Report	2010
Cost Effectiveness and Cost Efficiency in E-learning	Book	2005
Distance Education and Blended Learning Seminars	Article	2010
Distance Learning: Marinenet' Reaches out to Deployed Troops	Article	2006
Distance Learning Story	Article	2010
Effectively Evaluating Online Learning Programs	Article	2006
Elements of Quality Online Education	Book	2003
Establishing Military Remote Learning Centers	Article	2009
Evaluating Online Learning	Report	2008
Going Online to Make Learning Count	Article	2011
Going the Distance: Online Education in the United States 2011	Report	2011
Interactivity Boosts Learning Curve	Article	2009
Learning How to Engage Students Online in Hard Times	Article	2005
Learning Online	Article	2006
Learning Online may be better	News Article	2009
Online	Article	1983
Online Learning Barriers	Article	2010
Online Learning Effectiveness	Article	2004
Online learning: Implications for higher education pedagogy and policy	Article	2006
Online Learning: Quality benchmarks	Dissertation	2010
Online Learning: Student Perceptions of Variables That Impact Learning Performance	Dissertation	2007
Online Learning vs. Print Learning: Which Provides the Better Result?	Article	2006
Online Training	Article	2009
Online-U	Article	2011
Learning Leadership	Article	2011
Louisiana Offers Online Study to Military Personnel	Article	2003
Military Online Learning Management System Sought by U.S. Army	News Article	2001
Military personnel: Perceptions of their experiences with online learning	Dissertation	2003
More are studying online	Article	2007
Quality Framework for Online Education	Report	2011
Student Barriers to Online Learning: A factor analytic study	Article	2005

Document	Type	Year
The Future of Online Teaching and Learning in Higher Education: The Surveys Says…	Article	2006
The Present and Future State of Blended Learning in Workplace Learning Settings in the United States	Article	2008
Transforming Online Learning	Thesis	2009
Tuition Pricing for Online Learning	Article	2008
Blending Face-to-Face and Online Learning	Article	2012

Appendix B

References for Document Review

References

Allen, I., and Seaman, J. (2010). *Class differences: Online education in the united states, 2010.* Wellesley, MA: Babson Survey Research Group. (2010).

Allen, E. & Seaman, J. (2011). Going the distance: Online education in the united states, 2011. Babson Survey Research Group: Wellesley, MA.

Anonymous. (2009). Interactivity boosts learning curve. *Signal*, *63*(9), 10.

Altland, J. (2010). Benefits of online learning. *FEW's News*, *41*(4), 21-22.

Bourne, J., & Moore, J. (Eds.). (2003). Elements of quality online education. Boston, MA: SCOLE.

Breaden, M. (2008). Adult online learning. *Education Week*, *2*(26), 5.

Brigham, C., & Klein-Collins, R. (2011). Going online to make learning count. *International Review of Research in Open and Distance Learning*, *12*(1), 111-115.

Bunting, K. (2003). *Military personnel*: *Perceptions of their experiences with online learning*. (Doctoral Dissertation). Retrieved from ProQuest Dissertations and Theses. (3102777).

Carnevale, D. (2003). Louisiana offers online study to military personnel. *The Chronicle of Higher Education*, *49*(32), 40.

Davis, D. (2010). *Online learning: Quality benchmarks*. (Doctoral Dissertation).

Donnovan, R. (2009). Transforming online learning. (Master's Thesis). Retrieved from ProQuest Dissertations and Theses. (978-0-494-52127-4).

Fabby, L. (2010). Distance learning story. *Navy Supply Corps Newsletter*, *73*(4), 49.

Grace, J. (2006). Distance learning: Marinenet' reaches out to deployed troops. *National Defense*, *90*(627), 28-29.

Grossman, R. (1983). Online. *Journal of Learning Disabilities*, *16*(5), 303-305.

Halcom, C. (2007). More are studying online. Crain's Detroit Business, 23(44), 14.

Hartman, J. & McCambridge, J. (2011). Optimizing millennials' communication styles. *Business and Professional Communication Quarterly*, *74*(1), 22-44.

Haskin, D., & Griffin, S. (2010). Distance education and blended learning seminars. *Marine Corps Gazette*, *94*(10), 46, 48-49, 52.

Hjeltnes, T., & Hansson, B. (2005). *Cost effectiveness and cost efficiency in e-learning*. Trondheim, NO: TISIP.

Humiston, G., Rabe-Hemp, C., & Woolen, S. (2009). A comparative analysis of student engagement, learning, and satisfaction in lecture hall and online learning settings. *Quarterly Review of Distance Education*, *10*(2), 207-221.

Kapp, K., & McKeague. (2002). Blended learning for compliance success. *Eduneering*, 2-12.

Kim, K., & Bonk, C. (2006). The future of online teaching and learning in higher education: The survey says… *EDUCASE Quarterly*, *29*(4), 1-7.

Kim, K., Bonk, C., & Oh, E. (2008). The present and future state of blended learning in workplace learning. *Performance Improvement*, *47*(8), 5-16.

Koller, D., & Ng, A. (2013, January 28). *The online revolution: Education for everyone*. Seminar presentation at the Said Business School, Oxford University. Retrieved from

Lohr, S. (2009, August 24). Learning online may be better. *New York Times Company*. Retrieved from http://search.proquest.com.libproxy.wmich.edu/docview/872

Lorenz, D. (2009). Establishing military remote learning centers. *Distance Learning*, *6*(3), 61-65.

Louthan, M. (2011). Learning leadership. *Analysis and Prevention*, *11*(2), 175-176.

Martinez, L. (2006). Learning online. *Law Enforcement Technology*, *33*(5), 84, 86-91.

Muilenburg, L., & Berge, Z. (2005). Student barriers to online learning: A factor analytic study. *Distance Education*, *26*(1), 29-48.

Paulson, K. (2008). Tuition/pricing for online learning. *Journal of Asynchronous Learning Networks*, *12*(2), 61-65.

Picciano, A. (2006). Online learning: Implications for higher education pedagogy and policy. *Journal of Thought*, *41*(1), 75-94.

Schanlaub, R. (2009). Online training. *Law & Order*, *57*(4), 36-40, 43.

Schorr, J., & McGriff, D. (2012). Blending face-to-face and online learning. *The Education Digest*, *77*(5), 30-37.

Sener, J. (2006, May). Effectively evaluating online learning programs. *eLearn Magazine*, *5*, 1-6.

Slotte, V. (2006). Online learning vs. print learning: Which provides the better result? *Development and Learning in Organizations*, *20*(6), 29-31.

Simuth, J., & Sarmany-Schuller. (2010). Online learning barriers. *Technological Developments in Education and Automation*, 109-111.

Struck, M. (2001, June 17). Military online management system sought by u.s. army. *Targeted News Service*. Retrieved from http://search.proquest.com.libproxy.wmich.edu/docview/872

The Sloan Consortium. *Quality framework for online education*. Retrieved from http://www.adec.edu/earmyu/SLOANC~41.html

Tietjen, P. (2005). Online learning effectiveness. *Technical Communication*, *52*(1), 103-104.

U.S. Department of Education. (2008). *Evaluating online learning: Challenges and strategies for success* (Publication No. ED004344P). Washington, DC: U.S. Government Printing Office.

Vandenberg, A. (2005). Learning how to engage students online in hard times. *Education and Information Technologies*, *10*(2), 31-47.

Weiss, S. (2011). Online-u. *State Legislatures*, *37*(5), 26-28.

Williams, D. (2007). *Online learning: Student perceptions of variables that impact learning performance*. (Doctoral Dissertation). Retrieved from ProQuest Dissertations and Theses. (3271914).

Wolf, J., Blohm, I., & Brenner, W. (2014) Massive Open Online Courses. *Business & Information Systems Engineering, 6*(2), 111-114.

Appendix C

Local Government Training Survey

An Assessment of Local Government Training Methodologies

This survey gathers information that may help local governments determine how to allocate funds in their training budgets. We ask about three modes of training - online, traditional, and blended - and the use of soft skills in your organization. These three modalities are defined below and soft skills are defined later in the survey.

As a reward for your participation we will share the results of this survey with you once the data is compiled and analyzed. Please keep limitations and expectations in mind when answering the questions (i.e., limited resources and higher expectations for services from a diverse population of constituents).

Online – Use of online instruction that can include websites, videos, video streaming, or a live instructor who is making the presentation to an individual or group via technology.

Traditional – Live instructor(s) in a face-to-face classroom setting. The learners and/or instructors physically travel to the training environment.

Blended - Combination of online and traditional modalities for instruction.

I am a representative of a:

- ○ City
- ○ County
- ○ Village
- ○ Township
- ○ Other _____

I am a:

- [ ] Council Member
- [ ] Commissioner
- [ ] Manager
- [ ] Administrator
- [ ] Supervisor
- [ ] Assistant Manager
- [ ] Assistant Administrator
- [ ] Human Resource Manager
- [ ] Controller/Finance Director
- [ ] Human Resource Staff
- [ ] Trainer
- [ ] Judge
- [ ] Court Staff
- [ ] Other _____

The population of the community under our jurisdiction is:

- ○ 0-5,000
- ○ 5,001-25,000
- ○ 25,001-50,000
- ○ 50,001-100,000
- ○ 100,001-250,000
- ○ 250,001-500,000
- ○ 500,001+

Our local government employee population in our organization is:

- ○ 0-25
- ○ 26-50
- ○ 51-100
- ○ 101-250
- ○ 251-500
- ○ 501+

What is your gender?

- ○ Male
- ○ Female

What is your age?

- ○ 18-25
- ○ 26-35
- ○ 36-45
- ○ 46-55
- ○ 56-65
- ○ 66+

In which age group are the majority of your employees?

- ○ 18-35
- ○ 36-50
- ○ 51+

For your organization's training, learning, and development, how much do you use each of the following types of learning?

	Never	Rarely	Sometimes/Occasionally	Moderate Amount	A great deal
Traditional	○	○	○	○	○
Online	○	○	○	○	○
Blended	○	○	○	○	○

What do you perceive as the advantages to traditional learning in your local government organization (Check all that apply)?

- ☐ In-person Interaction
- ☐ Motivation
- ☐ Leaner-Instructor Exchange
- ☐ Learning from other students/employees
- ☐ Structured time for learning
- ☐ Other _____

What do you perceive as the disadvantages to traditional learning in your local government organization (Check all that apply)?

- [ ] Travel requirement
- [ ] Scheduling conflicts-inflexibility
- [ ] Cost
- [ ] Other _____

What do you perceive as the advantages to online learning in your local government organization (Check all that apply)?

- [ ] Quality
- [ ] Convenience
- [ ] Cost Savings
- [ ] Flexibility
- [ ] Reduced Travel
- [ ] Complete at own pace
- [ ] Other _____

What do you perceive as the disadvantages to online learning in your local government organization (Check all that apply)?

- [ ] Lack of Interaction
- [ ] Motivation
- [ ] No in-person Learner-Instructor Exchange
- [ ] Learning from other students
- [ ] Lack of structured time away from the job and/or home obligations
- [ ] Other _____

What do you perceive as the advantages to blended learning in your local government organization (Check all that apply) ?

- [ ] Customized learning experience combining traditional and online learning
- [ ] Convenient, yet allows learner-instructor exchange
- [ ] Flexibility
- [ ] Reduction in training costs
- [ ] Other _____

What do you perceive as the disadvantages to blended learning in your local government organization (Check all that apply)?

- [ ] Requires adaptability to two different learning techniques
- [ ] Requires more time to set-up and coordinate
- [ ] Other _____

How do you feel that learners are most likely to get their questions answered (Check all that apply)?

	Ask the Instructor	Ask other learners	Additional readings	Internet	Other
Traditional	○	○	○	○	○
Online	○	○	○	○	○
Blended	○	○	○	○	○

On a scale of 1-7, with 1 being the lowest and 7 being the highest score, how well is your government entity's professional development methods adequately meeting the needs of your employees to provide high levels of service to a diverse population of constituents?

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6
- ○ 7

Do you believe that your local government organization has adequate and functioning technological equipment and internet access to support online learning and/or blended learning?

- ○ Definitely yes
- ○ Probably yes
- ○ Might or might not
- ○ Probably not
- ○ Definitely not

Do you believe younger employees in your local government entity are more open and skilled in participating in online learning than are older employees in your entity?

- ○ Definitely yes
- ○ Probably yes
- ○ Might or might not
- ○ Probably not
- ○ Definitely not

How likely are you to use online learning in your organization in the next two years?

- ○ Very likely
- ○ Likely
- ○ Neutral
- ○ Unlikely
- ○ Very unlikely

On a scale of 1-7, with 1 being he lowest and 7 being the highest, answer the following. If you move to using more online learning how valuable for your organization and its employees do you see the following benefits?

	1	2	3	4	5	6	7
Reduced cost of training	○	○	○	○	○	○	○
Improves employee's ability to provide services to diverse population of constituents	○	○	○	○	○	○	○
Improved computer skills	○	○	○	○	○	○	○
Better quality training	○	○	○	○	○	○	○
Greater flexibility for employees	○	○	○	○	○	○	○
Greater deal of convenience	○	○	○	○	○	○	○
Better return on	○	○	○	○	○	○	○

investment measures							
Greater use of social media	○	○	○	○	○	○	○
Quicker on-boarding for new employees	○	○	○	○	○	○	○
A recruiting incentive for new employees	○	○	○	○	○	○	○

In what departments do you feel online learning is best suited (Check all that apply)?

- [ ] Police/Sheriff
- [ ] Fire
- [ ] Water/Sewer/Drain/DPW
- [ ] Jail/Corrections
- [ ] Courts
- [ ] Prosecutor
- [ ] Clerk
- [ ] Treasurer
- [ ] Land Resource/Equalization
- [ ] Assessing
- [ ] Information Technology
- [ ] Register of Deeds
- [ ] Maintenance
- [ ] Roads/Utilities
- [ ] Administration
- [ ] Finance
- [ ] Payroll/Accounts Payable
- [ ] Other _____

If you use online learning in your organization, what types of training do you use (Check all that apply)?

- ☐ Massive Online Open Courses (MOOCs) such as edX, Coursera, Kahn Academy.
- ☐ Organizational online courses such as International City/County Management Association (ICMA) or Michigan Association of Counties.
- ☐ Private local government training such as Blackboard, Learning Tree, or Skillsoft.
- ☐ Locally developed courses.
- ☐ Other. _____

Employee soft skills are described as an individual's ability to understand and manage others in human relations in a manner that enhances positive interactions. It includes an individual's ability to perceive and recognize others' emotions and concerns and work within that understanding to create a positive situation (Sydney-Agbor, et al., 2014). The following are questions concerning soft skills in your organization. Please rate the extent that you agree or disagree with each statement.

Soft skills are an asset in working with other employees in our organization.

- ○ Strongly agree
- ○ Agree
- ○ Somewhat agree
- ○ Neither agree nor disagree
- ○ Somewhat disagree
- ○ Disagree
- ○ Strongly disagree

Soft skills are an asset in working with clients in our organization.

- ○ Strongly agree
- ○ Agree
- ○ Somewhat agree
- ○ Neither agree nor disagree
- ○ Somewhat disagree
- ○ Disagree
- ○ Strongly disagree

We evaluate an individual's soft skills during our interview process.

- ○ Strongly agree
- ○ Agree
- ○ Somewhat agree
- ○ Neither agree nor disagree
- ○ Somewhat disagree
- ○ Disagree
- ○ Strongly disagree

We believe that soft skills can be developed or improved through online training.

- ○ Strongly agree
- ○ Agree
- ○ Somewhat agree
- ○ Neither agree nor disagree
- ○ Somewhat disagree
- ○ Disagree
- ○ Strongly disagree

We believe that soft skills can be developed better through traditional training that through online training.

- ○ Strongly agree
- ○ Agree
- ○ Somewhat agree
- ○ Neither agree nor disagree
- ○ Somewhat disagree
- ○ Disagree
- ○ Strongly disagree

If you would like to have a copy of the results of this survey, please indicate and type your email below.

- ○ Yes _____
- ○ No thanks

Appendix D

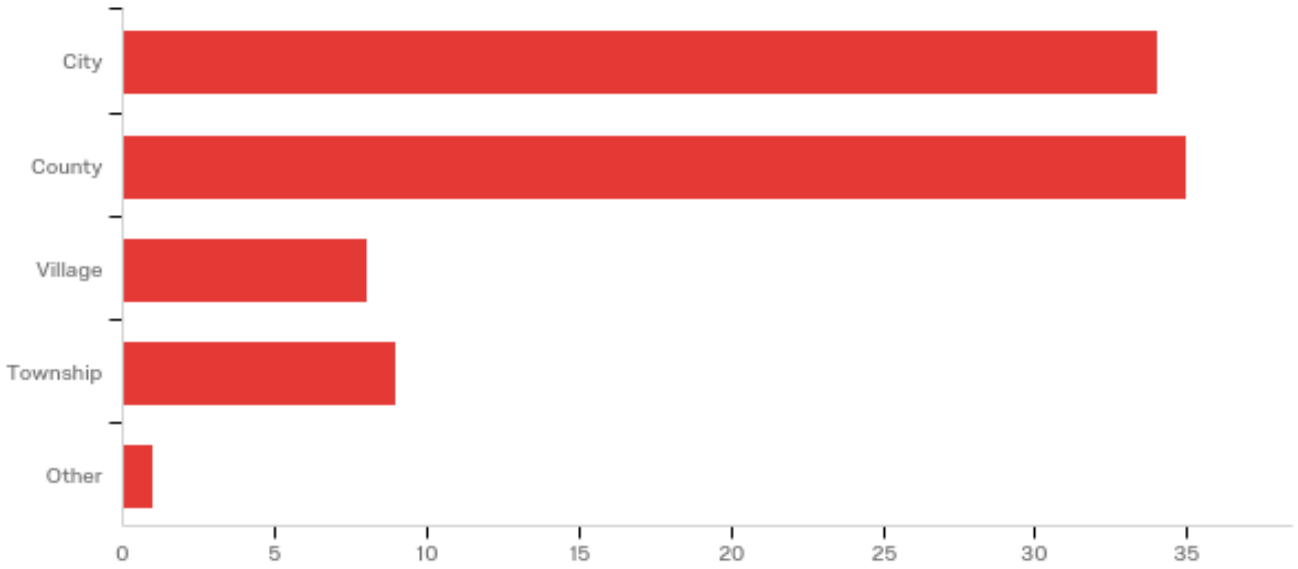
Local Government Training Survey Results

Default Report

An Assessment of Local Government Training Methodologies

August 29th 2018, 2:50 pm MDT

Q1 - I am a representative of a:

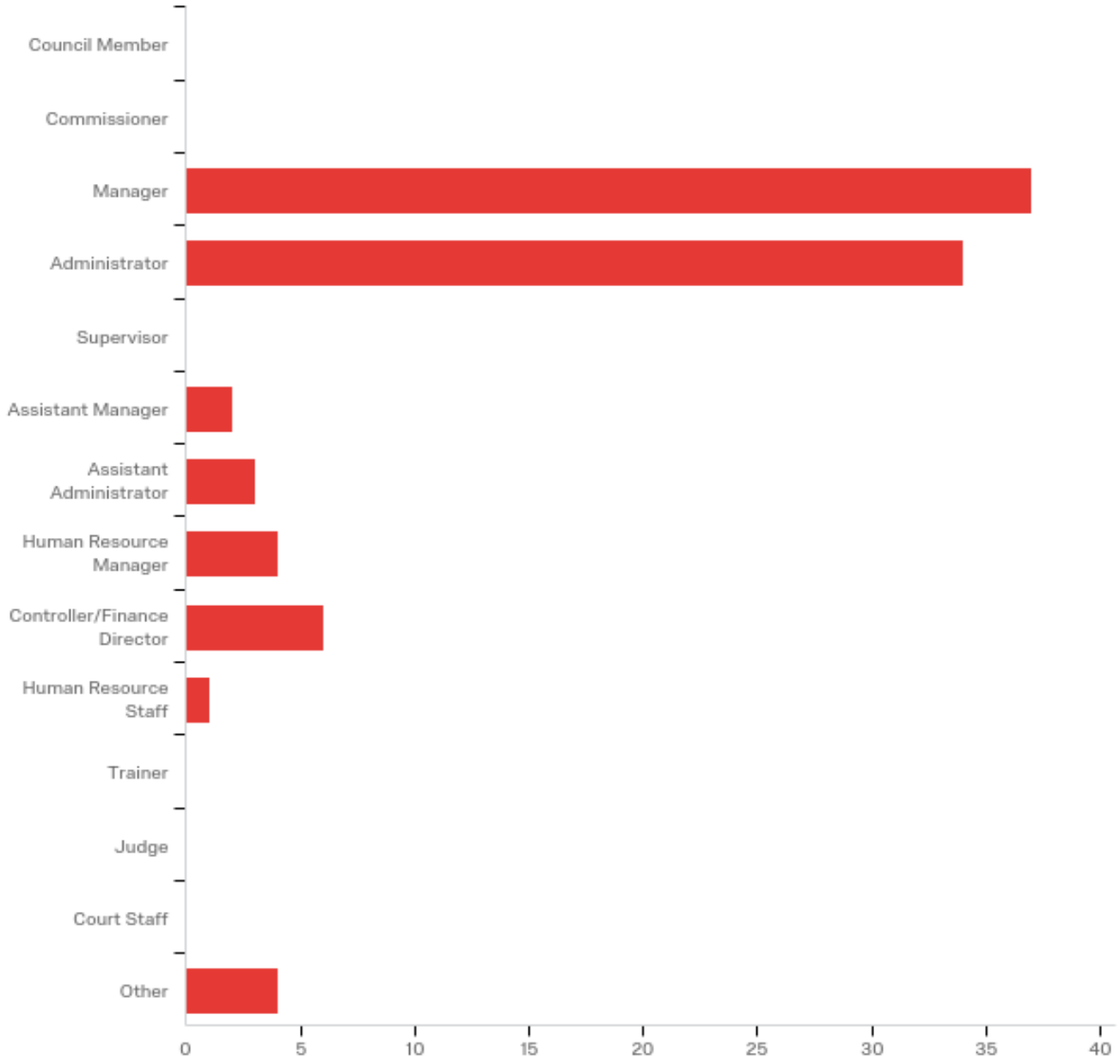


#	Answer	%	Count
1	City	39.08%	34
2	County	40.23%	35
3	Village	9.20%	8
4	Township	10.34%	9
5	Other	1.15%	1
	Total	100%	87

Other

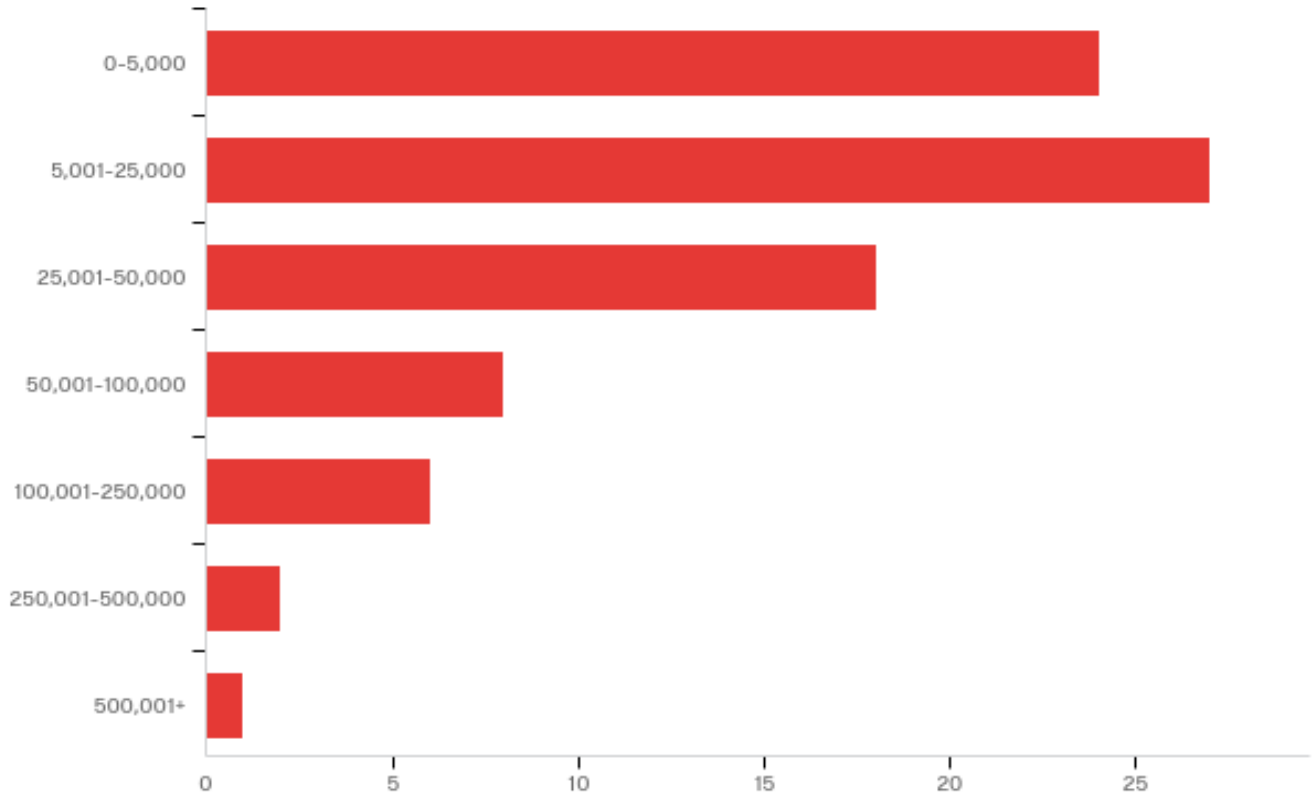
Other - Text
Delta

Q2 - I am a:


Council Member
Commissioner
Manager
Administrator
Supervisor
Assistant Manager
Assistant Administrator
Human Resource Manager
Controller/Finance Director
Human Resource Staff
Trainer
Judge
Court Staff
Other
0
5
10
15
20
25
30
35
40

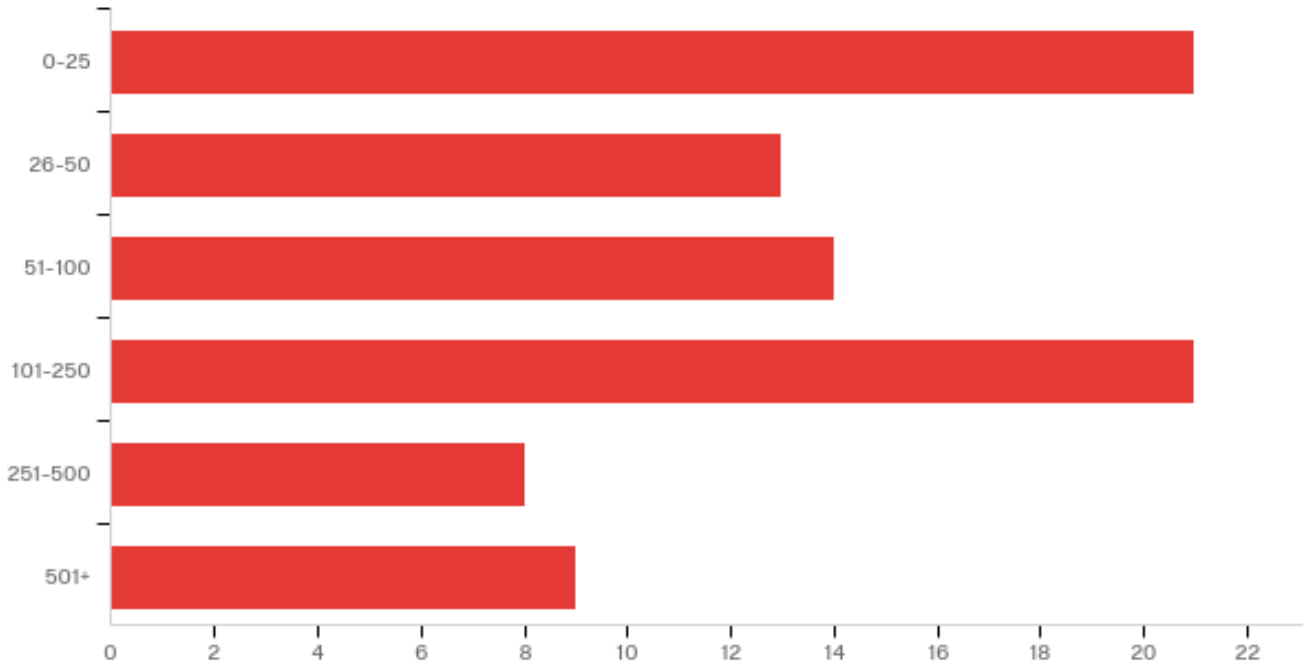
#	Answer	%	Count
1	Council Member	0.00%	0
2	Commissioner	0.00%	0
3	Manager	40.66%	37
4	Administrator	37.36%	34
5	Supervisor	0.00%	0
6	Assistant Manager	2.20%	2
7	Assistant Administrator	3.30%	3
8	Human Resource Manager	4.40%	4
9	Controller/Finance Director	6.59%	6
10	Human Resource Staff	1.10%	1
11	Trainer	0.00%	0
12	Judge	0.00%	0
13	Court Staff	0.00%	0
14	Other	4.40%	4
	Total	100%	91

Q3 - The population of the community under our jurisdiction is:



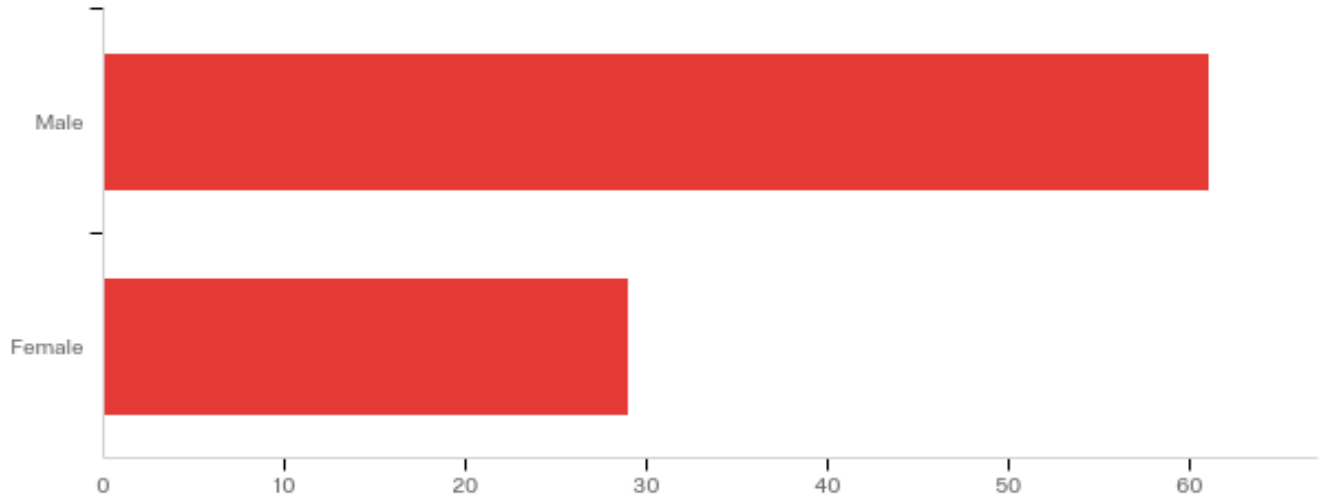
#	Answer	%	Count
1	0-5,000	27.91%	24
2	5,001-25,000	31.40%	27
3	25,001-50,000	20.93%	18
4	50,001-100,000	9.30%	8
5	100,001-250,000	6.98%	6
6	250,001-500,000	2.33%	2
7	500,001+	1.16%	1
	Total	100%	86

Q4 - Our local government employee population in our organization is:



#	Answer	%	Count
1	0-25	24.42%	21
2	26-50	15.12%	13
3	51-100	16.28%	14
4	101-250	24.42%	21
5	251-500	9.30%	8
6	501+	10.47%	9
	Total	100%	86

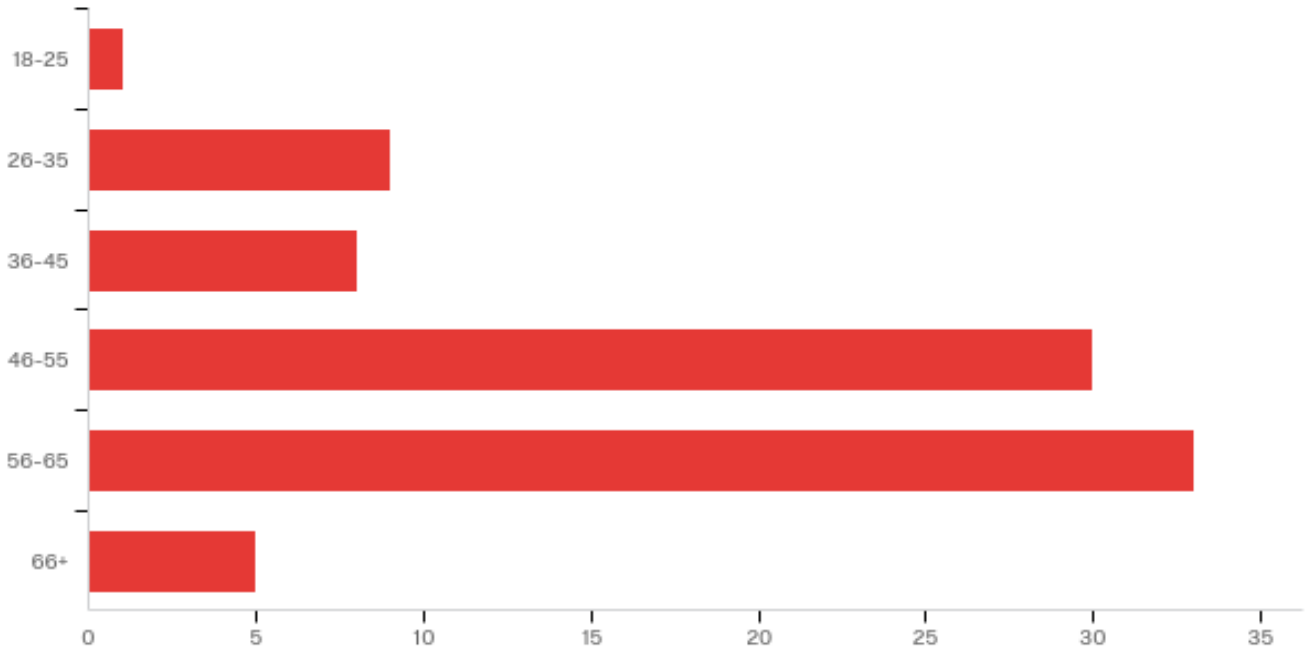
Q5 - What is your gender?



#	Answer	%	Count
1	Male	67.78%	61
2	Female	32.22%	29
	Total	100%	90

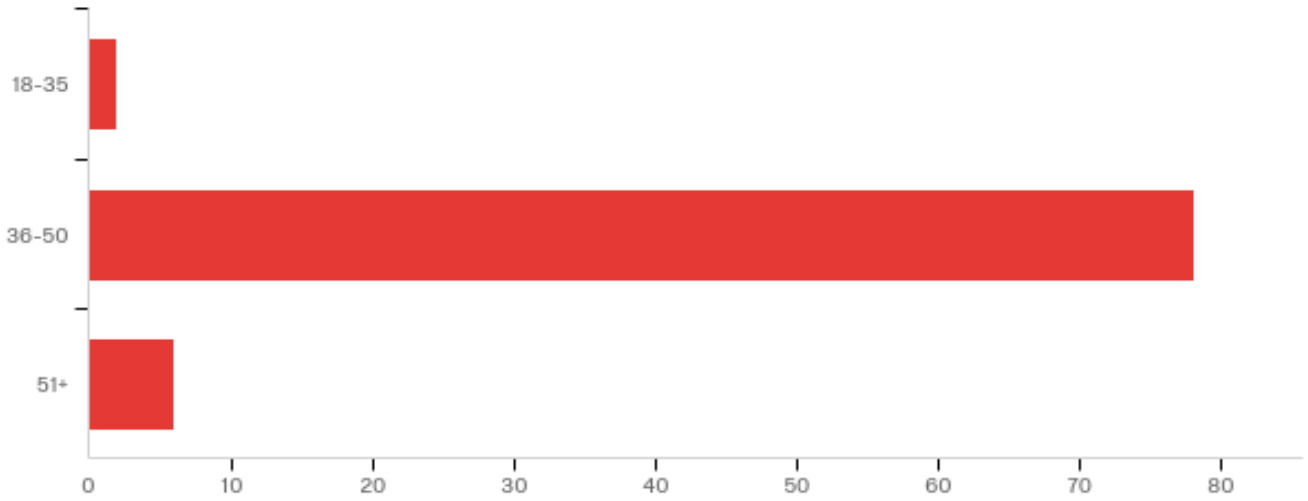
#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What is your gender?	1.00	2.00	1.32	0.47	0.22	90

Q6 - What is your age?



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	What is your age?	1.00	6.00	4.16	1.10	1.21	86

Q7 - In which age group are the majority of your employees?

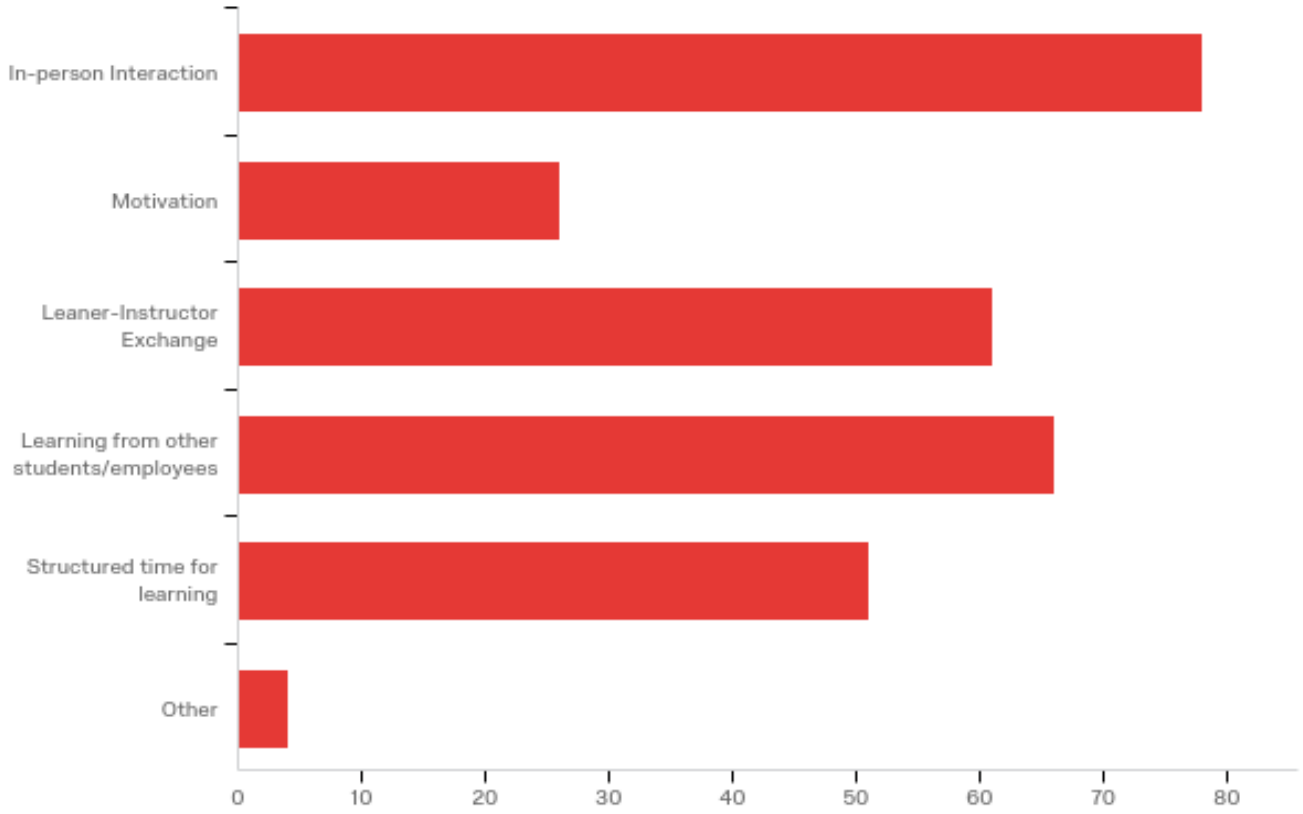


#	Answer	%	Count
1	18-35	2.33%	2
2	36-50	90.70%	78
3	51+	6.98%	6
	Total	100%	86

Q8 - For your organization's training, learning, and development, how much do you use each of the following types of learning?

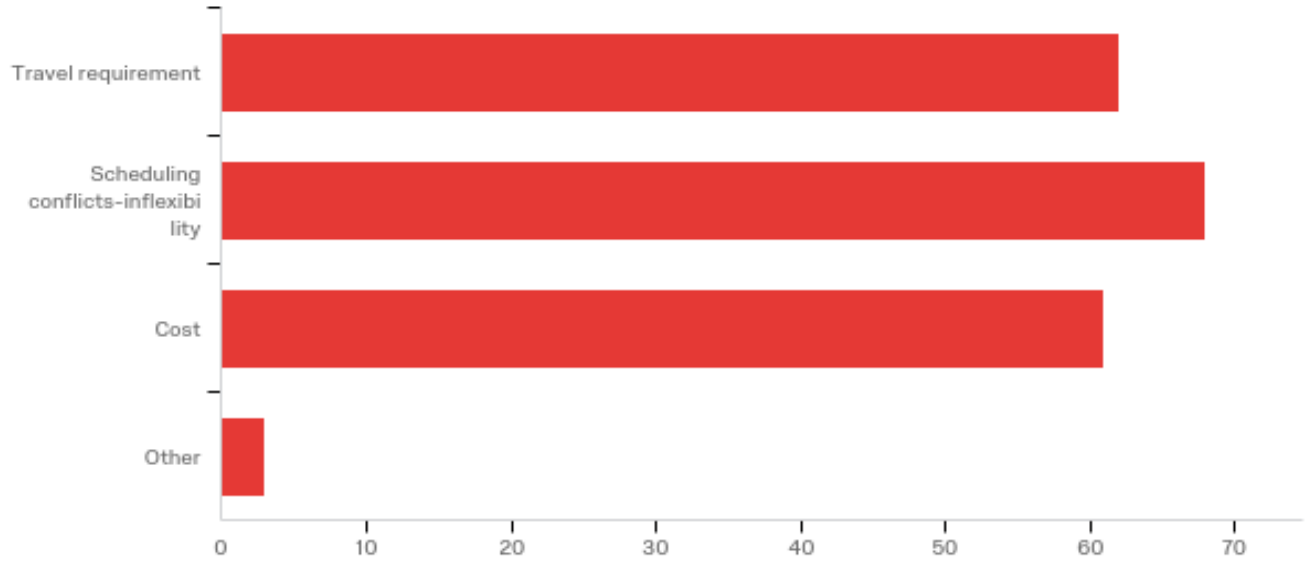
#	Question	Never		Rarely		Sometimes/Occasionally		Moderate Amount		A great deal		Total
1	Traditional	1.18%	1	8.24%	7	17.65%	15	43.53%	37	29.41%	25	85
7	Blended	13.75%	11	28.75%	23	31.25%	25	21.25%	17	5.00%	4	80
6	Online	2.35%	2	16.47%	14	43.53%	37	32.94%	28	4.71%	4	85

Q9 - What do you perceive as the advantages to traditional learning in your local government organization (Check all that apply)?



#	Answer	%	Count
1	In-person Interaction	27.27%	78
2	Motivation	9.09%	26
3	Leaner-Instructor Exchange	21.33%	61
4	Learning from other students/employees	23.08%	66
5	Structured time for learning	17.83%	51
6	Other	1.40%	4
	Total	100%	286

Q10 - What do you perceive as the disadvantages to traditional learning in your local government organization (Check all that apply)?

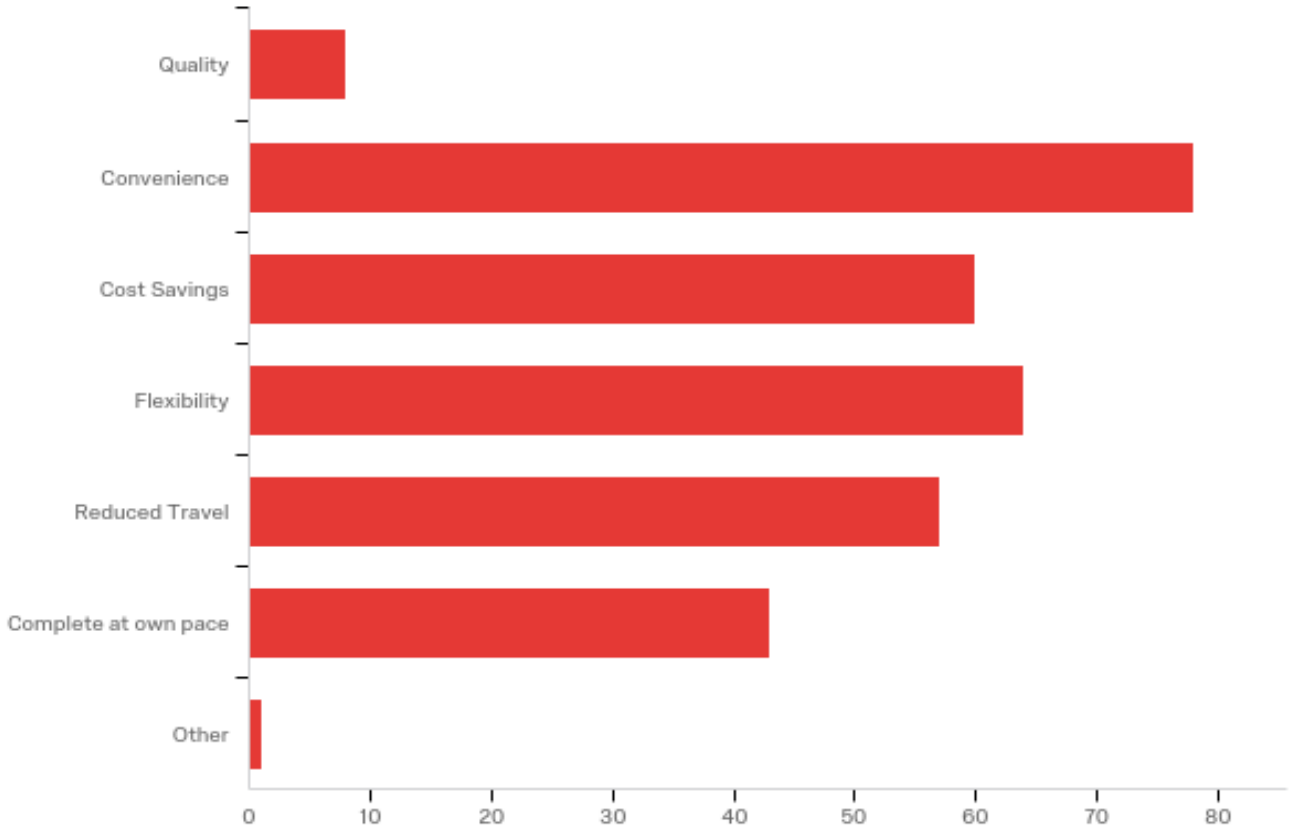


#	Answer	%	Count
1	Travel requirement	31.96%	62
2	Scheduling conflicts-inflexibility	35.05%	68
3	Cost	31.44%	61
4	Other	1.55%	3
	Total	100%	194

Other

Other - Text
The instructors don't give us solutions to our problems- they just create discussion with the hopes that we will figure it out on our own.
Time, facilities, weather can change plans on short notice.
The amount of time it takes to set everything up

Q11 - What do you perceive as the advantages to online learning in your local government organization (Check all that apply)?



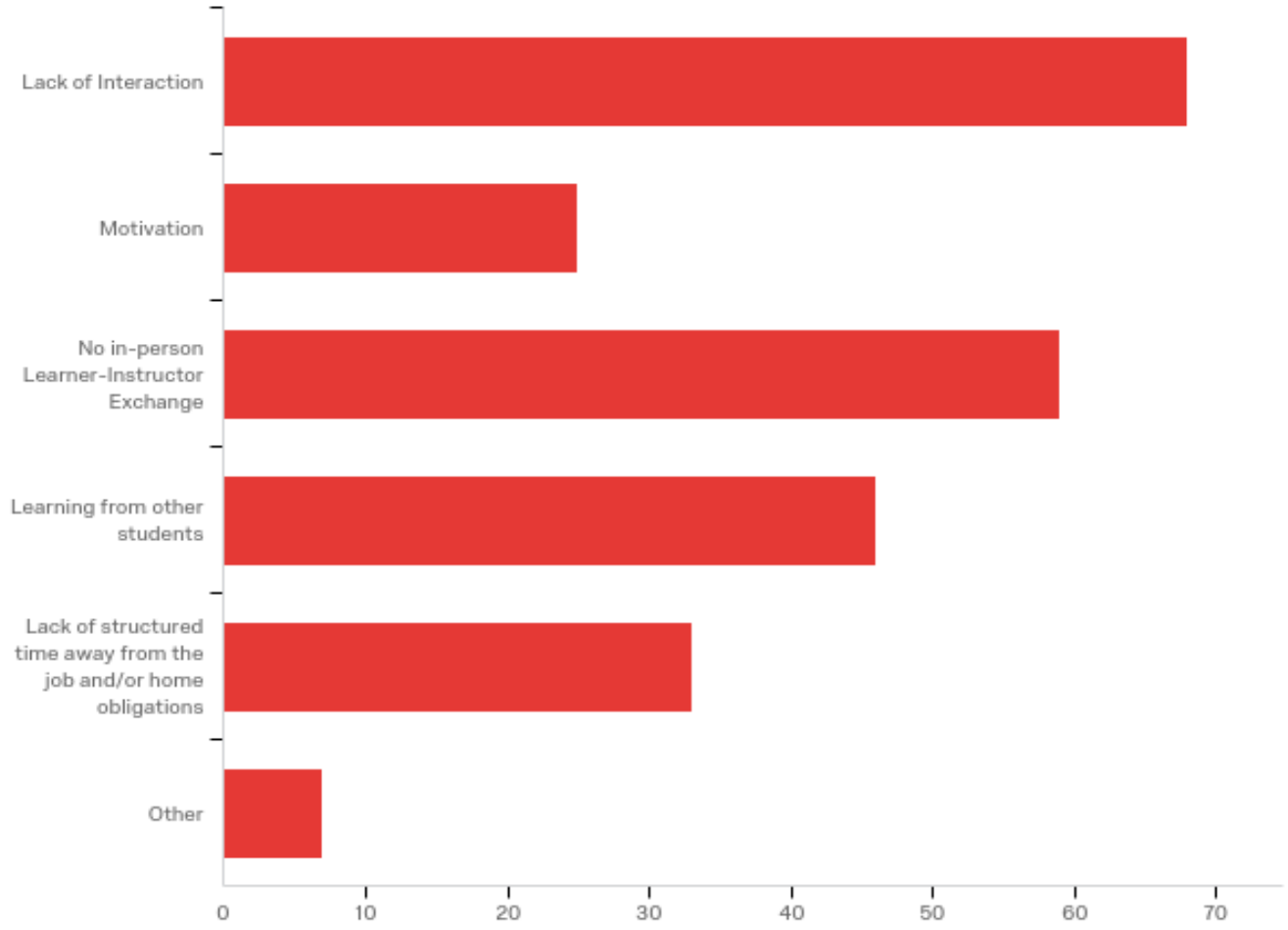
#	Answer	%	Count
1	Quality	2.57%	8
2	Convenience	25.08%	78
3	Cost Savings	19.29%	60
4	Flexibility	20.58%	64
5	Reduced Travel	18.33%	57
6	Complete at own pace	13.83%	43
7	Other	0.32%	1
	Total	100%	311

Other

Other - Text

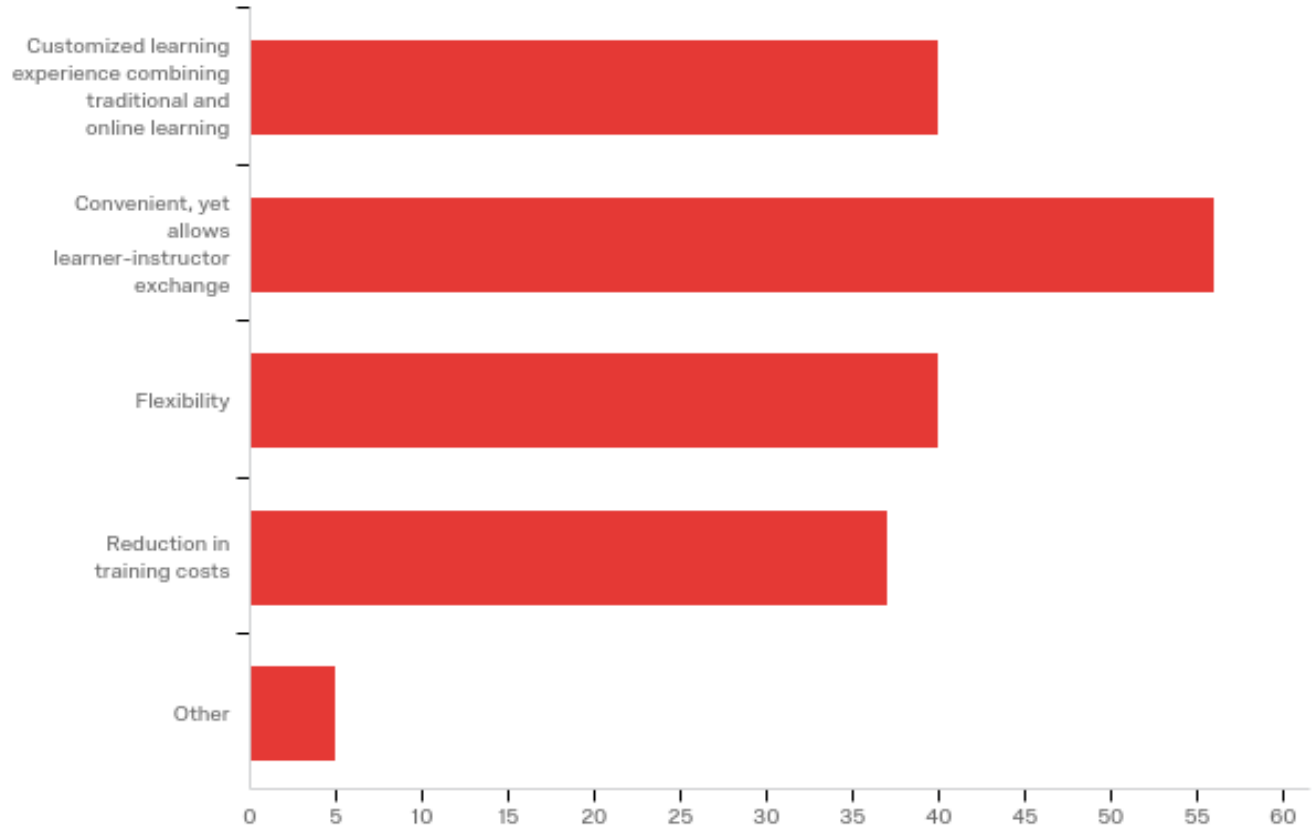
interactive with other employees on site.

Q12 - What do you perceive as the disadvantages to online learning in your local government organization (Check all that apply)?



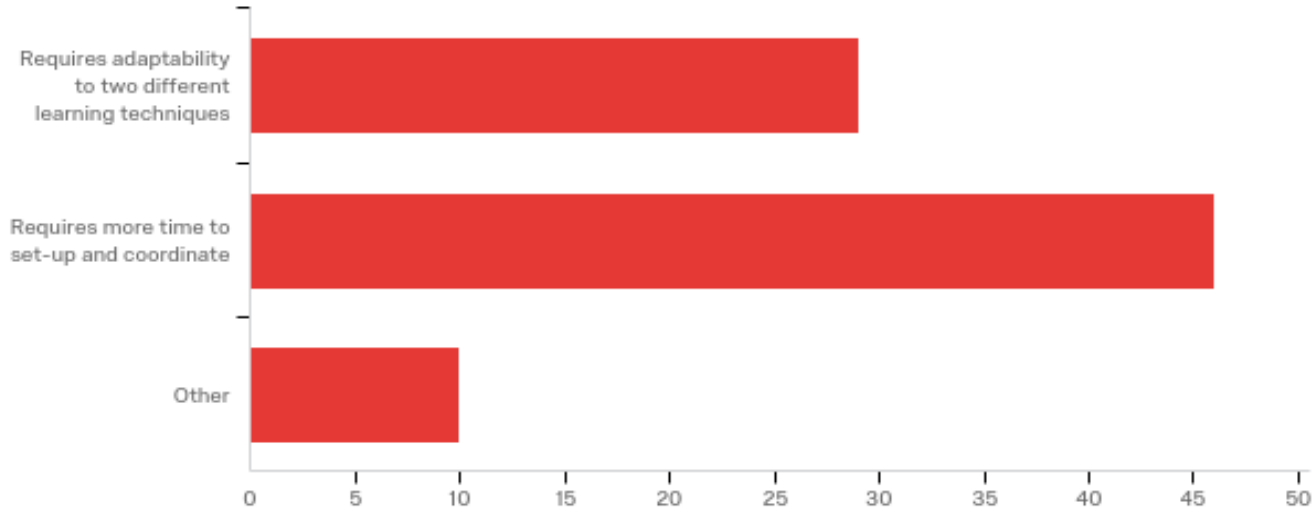
#	Answer	%	Count
1	Lack of Interaction	28.57%	68
2	Motivation	10.50%	25
3	No in-person Learner-Instructor Exchange	24.79%	59
4	Learning from other students	19.33%	46
5	Lack of structured time away from the job and/or home obligations	13.87%	33
6	Other	2.94%	7
	Total	100%	238

Q13 - What do you perceive as the advantages to blended learning in your local government organization (Check all that apply) ?



#	Answer	%	Count
1	Customized learning experience combining traditional and online learning	22.47%	40
2	Convenient, yet allows learner-instructor exchange	31.46%	56
3	Flexibility	22.47%	40
4	Reduction in training costs	20.79%	37
5	Other	2.81%	5
	Total	100%	178

Q14 - What do you perceive as the disadvantages to blended learning in your local government organization (Check all that apply)?



#	Answer	%	Count
1	Requires adaptability to two different learning techniques	34.12%	29
2	Requires more time to set-up and coordinate	54.12%	46
3	Other	11.76%	10
	Total	100%	85

Q15 - How do you feel that learners are most likely to get their questions answered (Check all that apply)?

Data source misconfigured for this visualization

Data source misconfigured for this visualization

Q16 - On a scale of 1-7, with 1 being the lowest and 7 being the highest score, how well is your government entity's professional development methods adequately meeting the needs of your employees to provide high levels of service to a diverse population of constituents?

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	On a scale of 1-7, with 1 being the lowest and 7 being the highest score, how well is your government entity's professional development methods adequately meeting the needs of your employees to provide high levels of service to a diverse population of constituents?	1.00	6.00	4.29	1.45	2.11	85

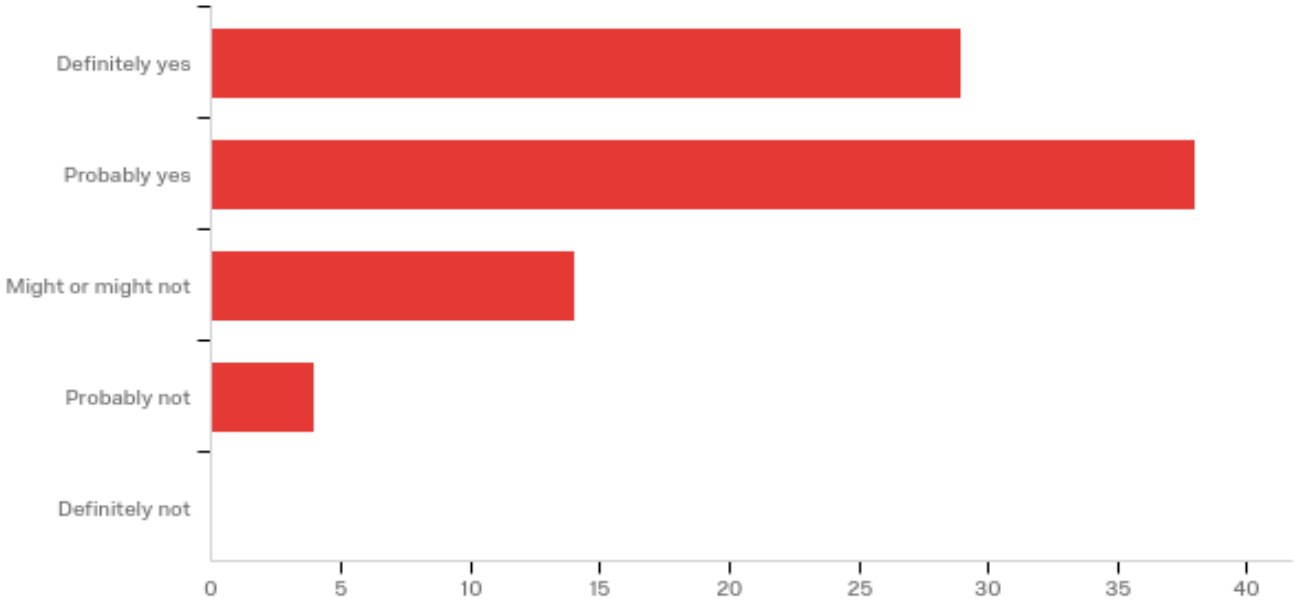
#	Answer	%	Count
1	1	7.06%	6
2	2	5.88%	5
3	3	12.94%	11
4	4	21.18%	18
5	5	30.59%	26
6	6	22.35%	19
7	7	0.00%	0
	Total	100%	85

Q17 - Do you believe that your local government organization has adequate and functioning technological equipment and internet access to support online learning and/or blended learning?

#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Do you believe that your local government organization has adequate and functioning technological equipment and internet access to support online learning and/or blended learning?	1.00	5.00	1.95	0.99	0.99	85

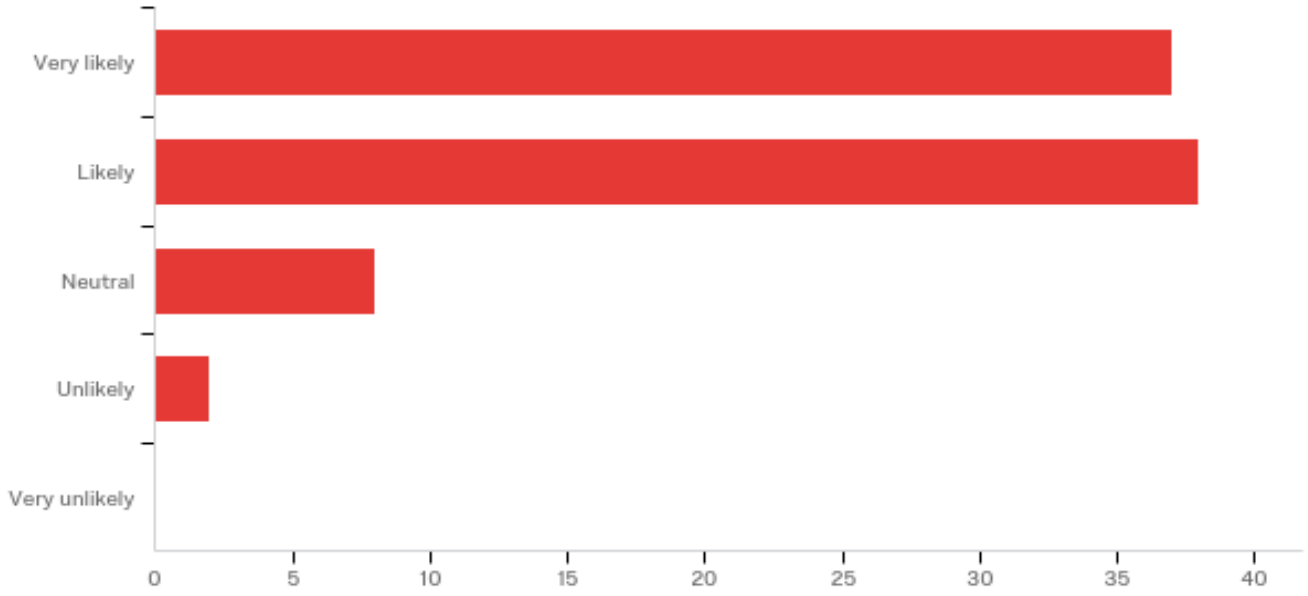
#	Answer	%	Count
1	Definitely yes	37.65%	32
2	Probably yes	41.18%	35
3	Might or might not	11.76%	10
4	Probably not	7.06%	6
5	Definitely not	2.35%	2
	Total	100%	85

Q18 - Do you believe younger employees in your local government entity are more open and skilled in participating in online learning than are older employees in your entity?



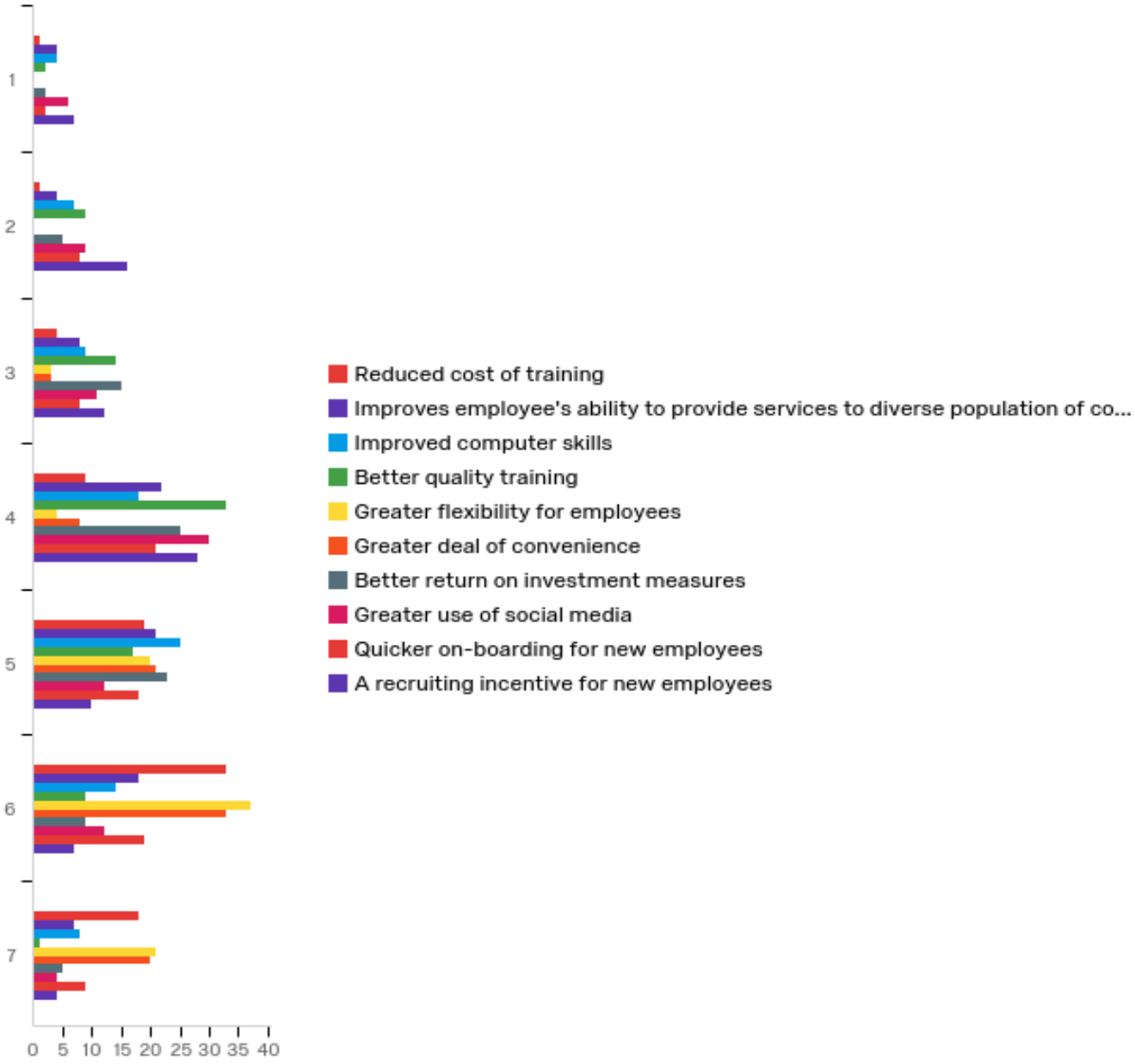
#	Answer	%	Count
1	Definitely yes	34.12%	29
2	Probably yes	44.71%	38
3	Might or might not	16.47%	14
4	Probably not	4.71%	4
5	Definitely not	0.00%	0
	Total	100%	85

Q19 - How likely are you to use online learning in your organization in the next two years?



#	Answer	%	Count
1	Very likely	43.53%	37
2	Likely	44.71%	38
3	Neutral	9.41%	8
4	Unlikely	2.35%	2
5	Very unlikely	0.00%	0
	Total	100%	85

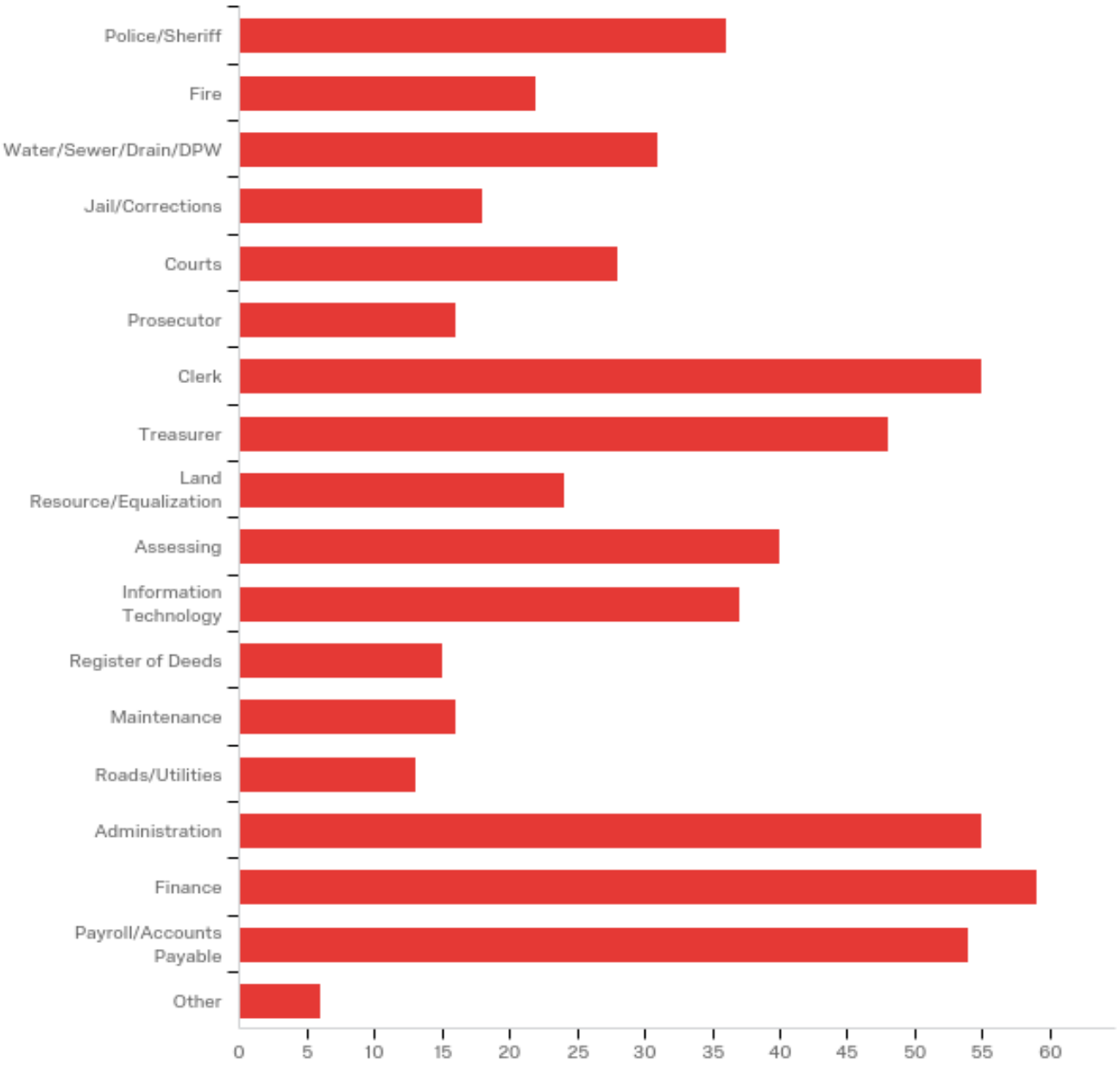
Q20 - On a scale of 1-7, with 1 being he lowest and 7 being the highest, answer the following. If you move to using more online learning how valuable for your organization and its employees do you see the following benefits?



#	Question	1		2		3		4		5		6		7		Total
1	Reduced cost of training	1.18%	1	1.18%	1	4.71%	4	10.59%	9	22.35%	19	38.82%	33	21.18%	18	85
2	Improves employee's ability to provide services to diverse population of constituents	4.76%	4	4.76%	4	9.52%	8	26.19%	22	25.00%	21	21.43%	18	8.33%	7	84
3	Improved computer skills	4.71%	4	8.24%	7	10.59%	9	21.18%	18	29.41%	25	16.47%	14	9.41%	8	85
4	Better quality training	2.35%	2	10.59%	9	16.47%	14	38.82%	33	20.00%	17	10.59%	9	1.18%	1	85
5	Greater flexibility for employees	0.00%	0	0.00%	0	3.53%	3	4.71%	4	23.53%	20	43.53%	37	24.71%	21	85
6	Greater deal of convenience	0.00%	0	0.00%	0	3.53%	3	9.41%	8	24.71%	21	38.82%	33	23.53%	20	85
7	Better return on investment measures	2.38%	2	5.95%	5	17.86%	15	29.76%	25	27.38%	23	10.71%	9	5.95%	5	84
8	Greater use of social media	7.14%	6	10.71%	9	13.10%	11	35.71%	30	14.29%	12	14.29%	12	4.76%	4	84
12	Quicker on-boarding for new	2.35%	2	9.41%	8	9.41%	8	24.71%	21	21.18%	18	22.35%	19	10.59%	9	85

	employees															
10	A recruiting incentive for new employees	8.33%	7	19.05%	16	14.29%	12	33.33%	28	11.90%	10	8.33%	7	4.76%	4	84

Q21 - In what departments do you feel online learning is best suited (Check all that apply)?

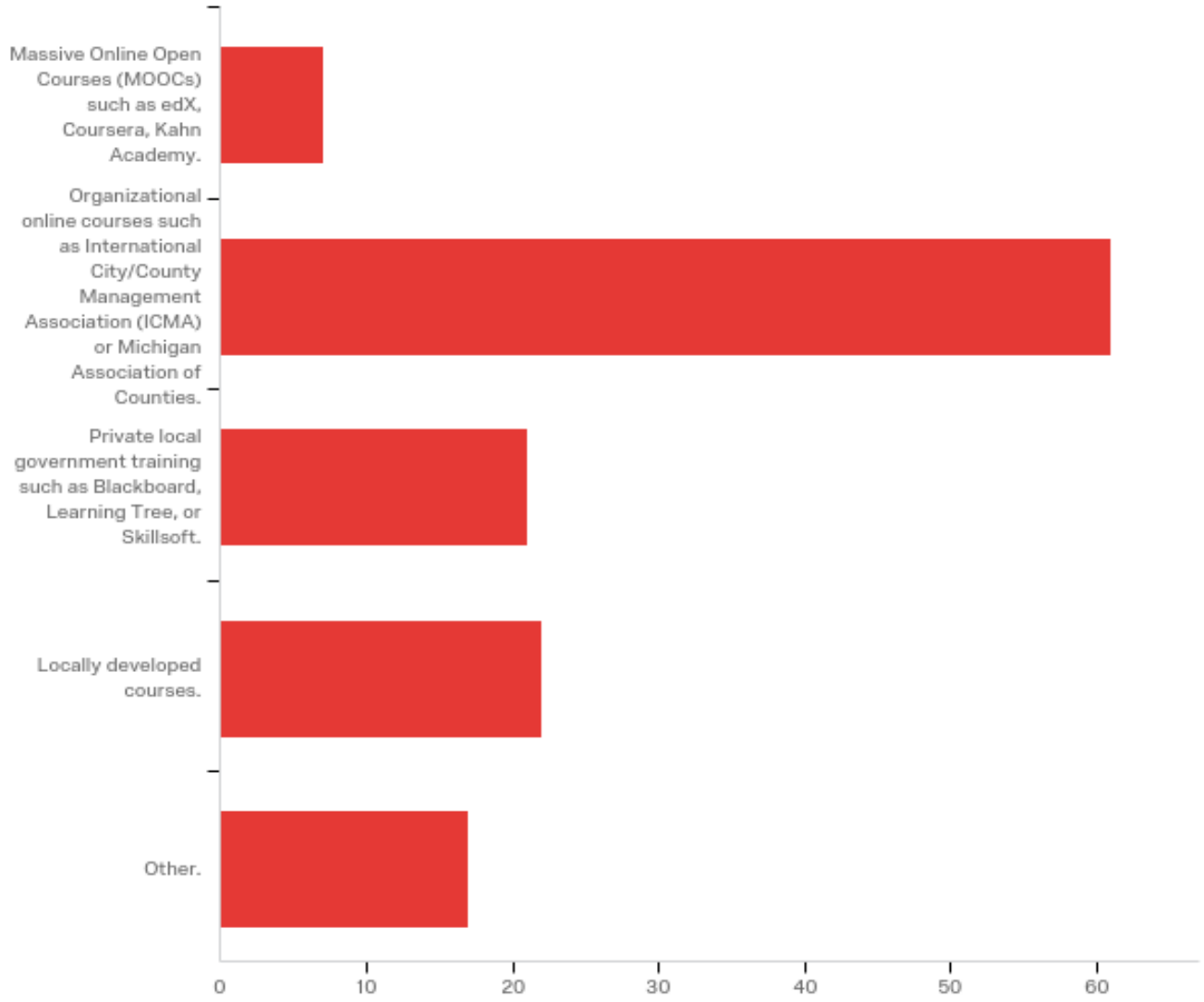


#	Answer	%	Count
1	Police/Sheriff	6.28%	36
2	Fire	3.84%	22
3	Water/Sewer/Drain/DPW	5.41%	31
4	Jail/Corrections	3.14%	18
5	Courts	4.89%	28
6	Prosecutor	2.79%	16
7	Clerk	9.60%	55
8	Treasurer	8.38%	48
9	Land Resource/Equalization	4.19%	24
10	Assessing	6.98%	40
11	Information Technology	6.46%	37
12	Register of Deeds	2.62%	15
13	Maintenance	2.79%	16
14	Roads/Utilities	2.27%	13
15	Administration	9.60%	55
16	Finance	10.30%	59
17	Payroll/Accounts Payable	9.42%	54
18	Other	1.05%	6
	Total	100%	573

Other

Other - Text
Dispatch /911
Don't know.
I don't know
Manager

Q22 - If you use online learning in your organization, what types of training do you use (Check all that apply)?



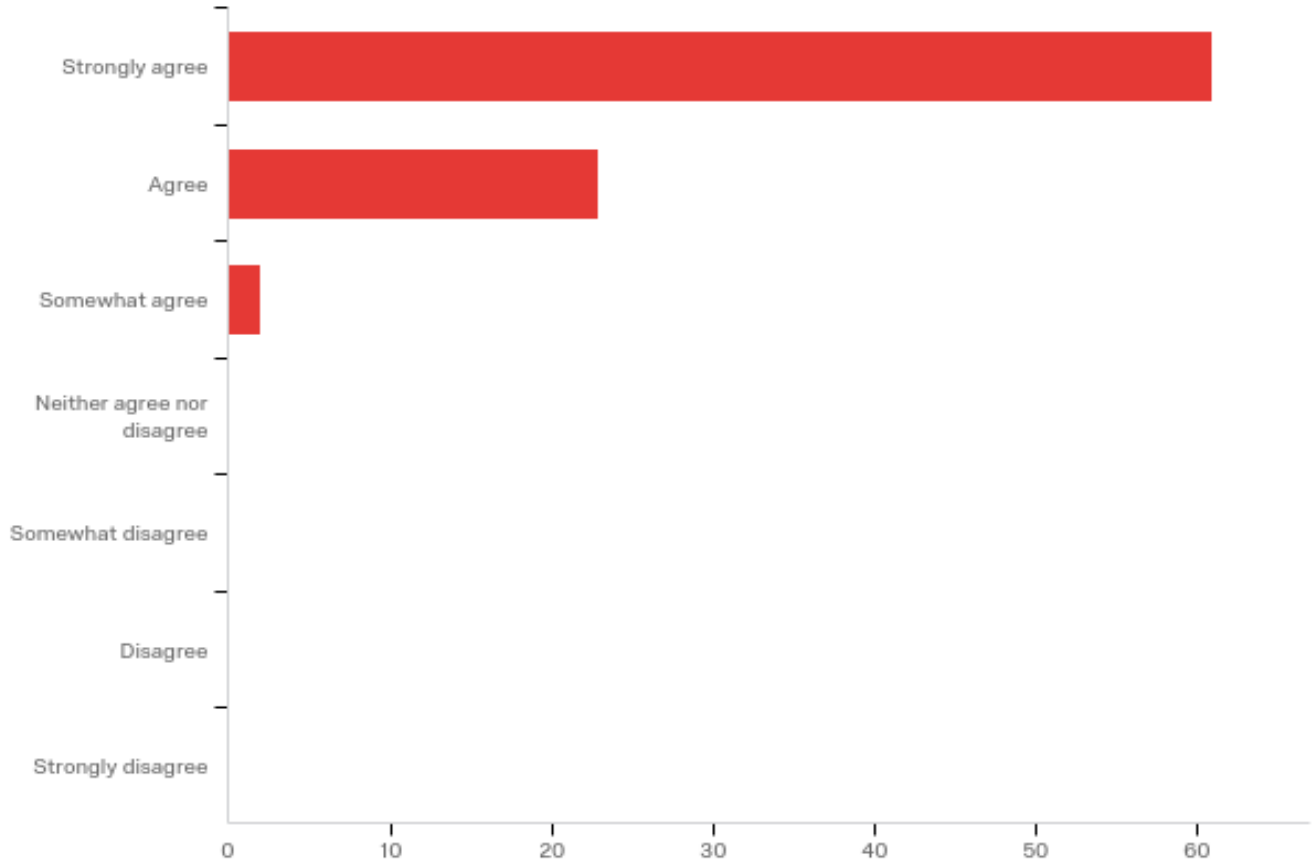
#	Answer	%	Count
1	Massive Online Open Courses (MOOCs) such as edX, Coursera, Kahn Academy.	5.47%	7
2	Organizational online courses such as International City/County Management Association (ICMA) or Michigan Association of Counties.	47.66%	61
3	Private local government training such as Blackboard, Learning Tree, or Skillsoft.	16.41%	21
4	Locally developed courses.	17.19%	22
5	Other.	13.28%	17
	Total	100%	128

Other.

Other. - Text
Specific software
Specific to certifications, new applications, safety training topics
e-Elections
State agencies
Medical programs training

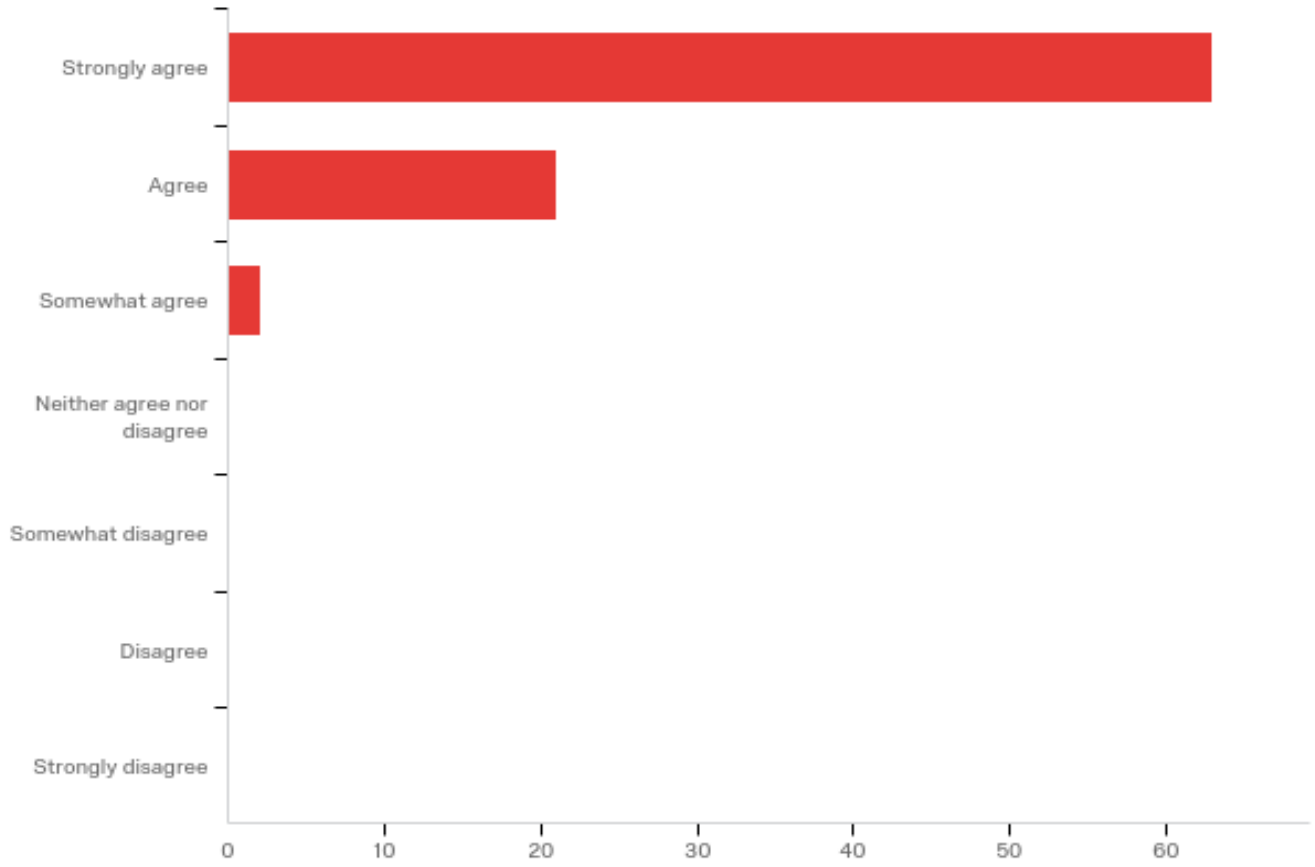
Employee soft skills are described as an individual's ability to understand and manage others in human relations in a manner that enhances positive interactions. It includes an individual's ability to perceive and recognize others' emotions and concerns and work within that understanding to create a positive situation (Sydney-Agbor, et al., 2014). The following are questions concerning soft skills in your organization. Please rate the extent that you agree or disagree with each statement.

Q24 - Soft skills are an asset in working with other employees in our organization.



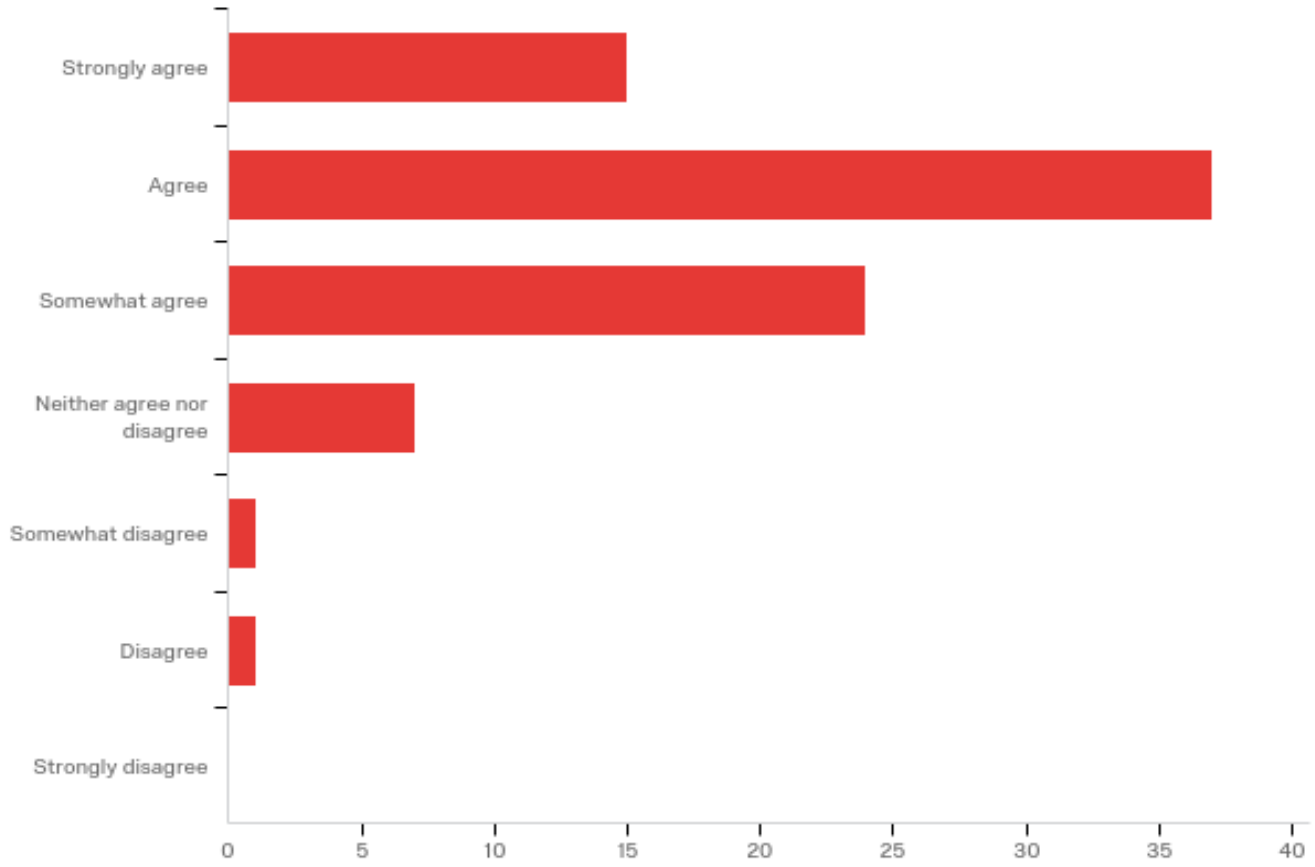
#	Answer	%	Count
1	Strongly agree	70.93%	61
2	Agree	26.74%	23
3	Somewhat agree	2.33%	2
4	Neither agree nor disagree	0.00%	0
5	Somewhat disagree	0.00%	0
6	Disagree	0.00%	0
7	Strongly disagree	0.00%	0
	Total	100%	86

Q25 - Soft skills are an asset in working with clients in our organization.



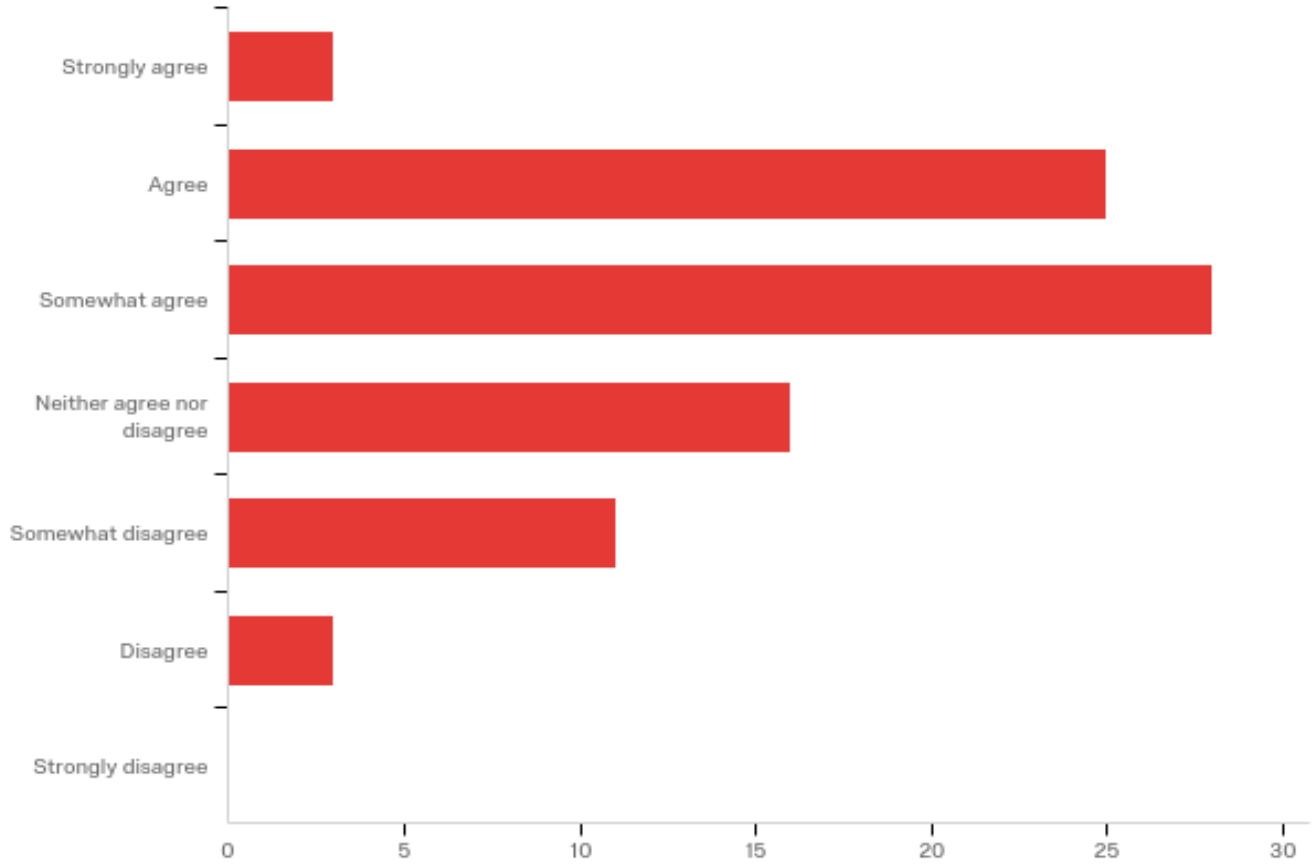
#	Answer	%	Count
1	Strongly agree	73.26%	63
2	Agree	24.42%	21
3	Somewhat agree	2.33%	2
4	Neither agree nor disagree	0.00%	0
5	Somewhat disagree	0.00%	0
6	Disagree	0.00%	0
7	Strongly disagree	0.00%	0
	Total	100%	86

Q26 - We evaluate an individual's soft skills during our interview process.



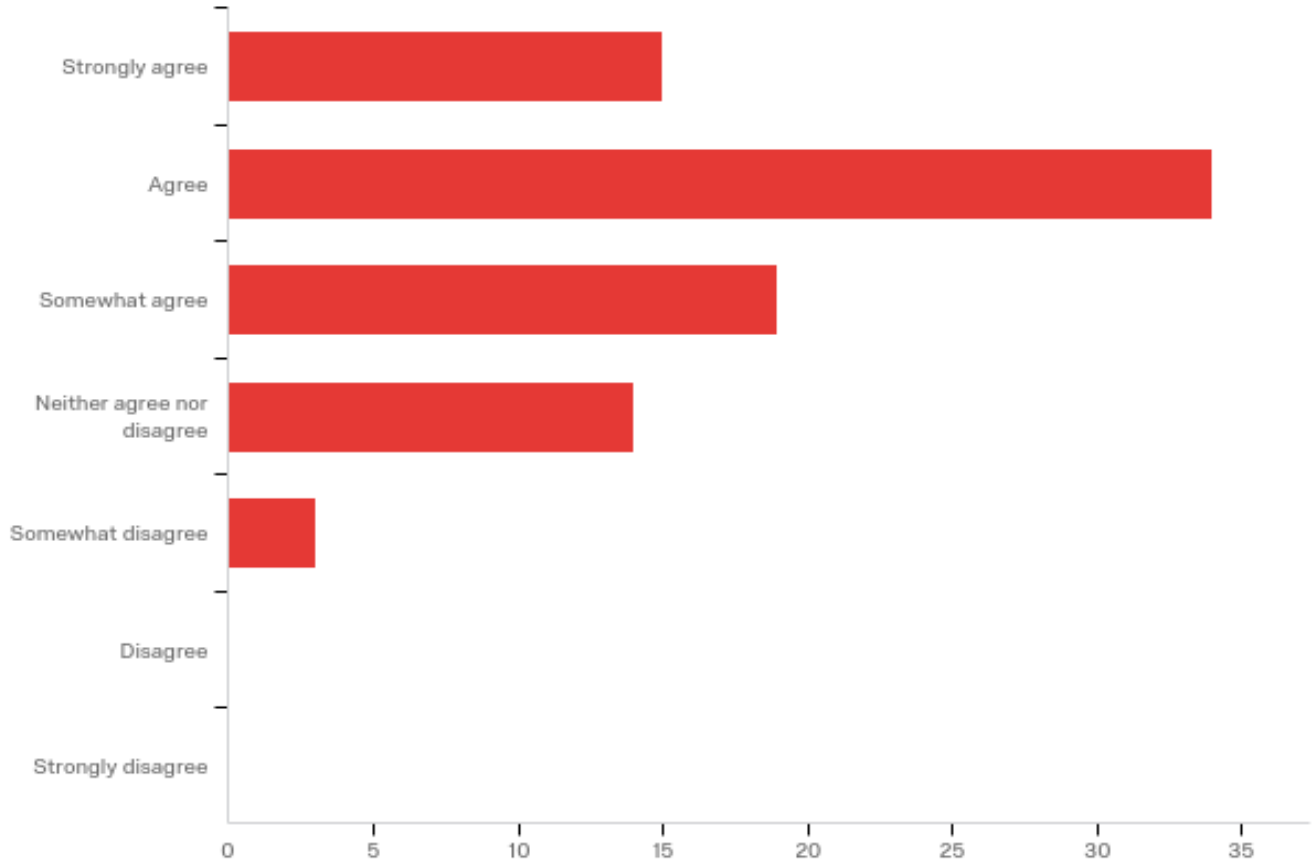
#	Answer	%	Count
1	Strongly agree	17.65%	15
2	Agree	43.53%	37
3	Somewhat agree	28.24%	24
4	Neither agree nor disagree	8.24%	7
5	Somewhat disagree	1.18%	1
6	Disagree	1.18%	1
7	Strongly disagree	0.00%	0
	Total	100%	85

Q27 - We believe that soft skills can be developed or improved through online training.



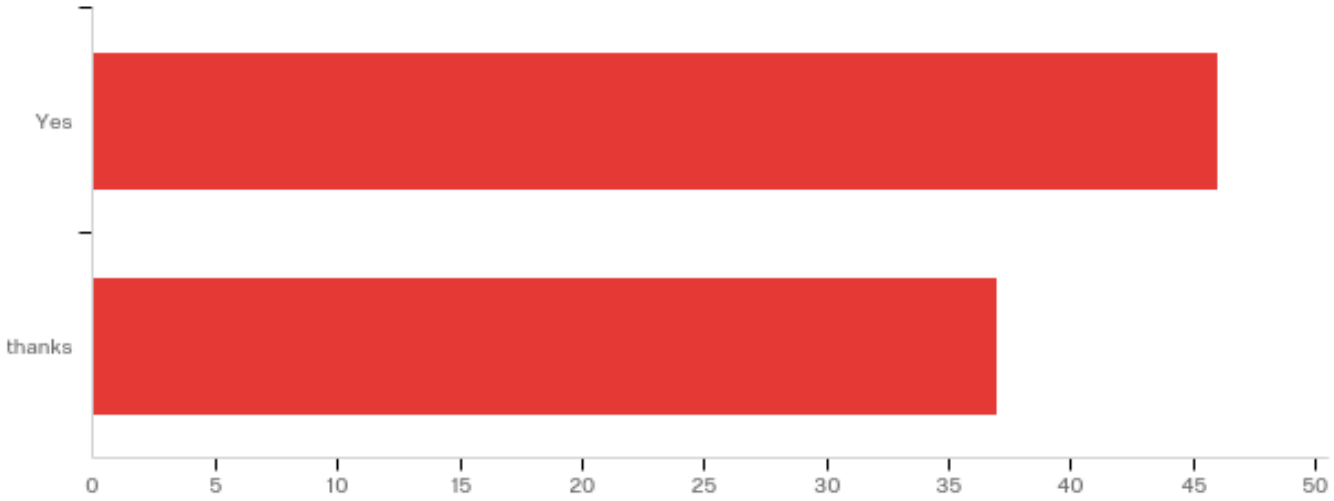
#	Answer	%	Count
1	Strongly agree	3.49%	3
2	Agree	29.07%	25
3	Somewhat agree	32.56%	28
4	Neither agree nor disagree	18.60%	16
5	Somewhat disagree	12.79%	11
6	Disagree	3.49%	3
7	Strongly disagree	0.00%	0
	Total	100%	86

Q28 - We believe that soft skills can be developed better through traditional training than through online training.



#	Answer	%	Count
1	Strongly agree	17.65%	15
2	Agree	40.00%	34
3	Somewhat agree	22.35%	19
4	Neither agree nor disagree	16.47%	14
5	Somewhat disagree	3.53%	3
6	Disagree	0.00%	0
7	Strongly disagree	0.00%	0
	Total	100%	85

Q29 - If you would like to have a copy of the results of this survey, please indicate and type your email below.



#	Answer	%	Count
1	Yes	55.42%	46
2	No thanks	44.58%	37
	Total	100%	83

Appendix D

HSIRB Approval Letter

WESTERN MICHIGAN UNIVERSITY

Institutional Review Board
FWA00007042
IRB00000254

Date: November 6, 2017

To: Matthew Mingus, Principal Investigator
Michael Norman, Student Investigator for dissertation

From: Amy Naugle, Ph.D., Chair

Re: Approval not needed for HSIRB Project Number 17-11-01

This letter will serve as confirmation that your project titled "An Assessment of Local Government Training Methodologies" has been reviewed by the Western Michigan University Institutional Review Board (WMU IRB). Based on that review, the WMU IRB has determined that approval is not required for you to conduct this project because you analyzing practices and not collecting personal identifiable (private) information about individual and your scope of work does not meet the Federal definition of human subject.

45 CFR 46.102 (f) Human Subject

(f) *Human subject* means a living individual **about whom** an investigator (whether professional or student) conducting research obtains

(1) Data through intervention or interaction with the individual, or
(2) Identifiable private information.

Intervention includes both physical procedures by which data are gathered (for example, venipuncture) and manipulations of the subject or the subject's environment that are performed for research purposes. Interaction includes communication or interpersonal contact between investigator and subject. *Private information* includes information about behavior that occurs in a context in which an individual can reasonably expect that no observation or recording is taking place, and information which has been provided for specific purposes by an individual and which the individual can reasonably expect will not be made public (for example, a medical record). Private information must be individually identifiable (i.e., the identity of the subject is or may readily be ascertained by the investigator or associated with the information) in order for obtaining the information to constitute research involving human subjects.

"**About whom**" – a human subject research project requires the data received from the living individual to be about the person.

Thank you for your concerns about protecting the rights and welfare of human subjects.

A copy of your protocol and a copy of this letter will be maintained in the HSIRB files.

Office of the Vice President for Research
Research Compliance Office
1903 W. Michigan Ave., Kalamazoo, MI 49008-5456
PHONE: (269) 387-8293 FAX: (269) 387-8276
WEBSITE: wmich.edu/research/compliance/hsirb

CAMPUS SITE: 251 W. Walwood Hall