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**Title:** *Individual Learning Preferences Between Online and On-the-job Training*

The accompanying research report is submitted to the University of Wisconsin-Stout, Graduate School in partial completion of the requirements for the

**Graduate Degree/ Major:** MS Training and Human Resource Development

**Research Advisor:** Sally Dresdow, DBA

**Submission Term/Year:** Summer 2017

**Number of Pages:** 40

**Style Manual Used:** American Psychological Association, 6<sup>th</sup> edition

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**Xiong, Txuji *Individual Learning Preferences, Online and On-the-job Training***

**Abstract**

The purpose of the research is to identify individual learners' preferences in an online or on-the-job training environment. The goal of the project is to determine the outcome of an individual's learning style that best fits their interest. By identifying an individual's learning style, the instructional materials can be adjusted to best fit the needs of the learners. An email survey was used, where the preferred learning style of each individual was determined. By identifying how learners preferred to learn, this research highlights that adapting to the learners' preferences for training, using online or on-the-job training, will retain the knowledge, skills, and abilities to perform a task as well as retain information better. Individuals were evaluated based on a nine-question survey designed to analyze the data collected from a sample of 50 Blugold Beginning members in Eau Claire, WI. It was found that individuals in Blugold Beginnings prefer to learn on-the-job rather than online. Individuals also reported that on-the-job training will provide them with better retention of the information and be more exposed to gain the necessary knowledge, skills, and abilities to perform a task.

### **Acknowledgments**

At this time, I would like to thank all those who helped me complete this research project. First and foremost, I would like to extend a special thank you to Dr. Sally Dresdow who guided, instructed, and encouraged me to complete my research paper. Thank you to Jodi Thesing-Ritter and Blugold Beginning staffs as well as members for assisting me with the distribution of my data collection. Thank you to all the participants for taking the time to complete the surveys; your time was greatly appreciated. Last, but not least, I would like to thank my family and friends for their everlasting support and inspiration.

## Table of Contents

Abstract .....	2
List of Tables .....	6
Chapter I: Introduction.....	7
Statement of the Problem.....	9
Purpose of the Study .....	9
Assumptions of the Study .....	10
Limitations of the Study.....	10
Chapter II: Literature Review .....	11
On-the-Job Training.....	11
Coaching .....	12
Job Rotation .....	13
Job Mentoring.....	14
Online Training.....	15
Game-Based Learning Training.....	16
Instructional Video Training.....	17
Computer-Based Training.....	18
Chapter III: Methodology .....	20
Subject Selection.....	20
Instrumentation .....	20
Data Analysis .....	21
Limitations .....	21
Summary.....	21

Chapter IV: Results.....	22
Demographics .....	22
Figure 1: Percentage of Subjects by Years in College.....	23
Importance of Individual Learning Preferences .....	23
Conclusion .....	30
Chapter V: Discussion, Conclusion and Recommendation .....	31
Discussion.....	31
Conclusions.....	32
Recommendations.....	32
References.....	34
Appendix: Survey Questions .....	38

### List of Tables

Table 1: Number of Participants Preferred to Learn Through .....	24
Table 2: Individuals Preferred to Learn Through .....	25
Table 3: Participants Preferred to Learn Mostly Through .....	26
Table 4: Participants Preferred to Learn Least Through.....	26
Table 5: Learner Preference Between Instructional Video or Role Play.....	27
Table 6: If I am Given a Task to Perform My Job, I Learn Best Through On-the-Job Training ..	28
Table 7: If I am Given a Task to Perform My Job, I Learn Best Through Online Training.....	29
Table 8: Number of Subjects Who Prefer Online or On-the-Job Interactions to Best Retain Information .....	29
Table 9: What is the Best Way for You to Learn How to Perform Your Task Effectively.....	30

## Chapter I: Introduction

Employers want to employ college graduates with the right knowledge, skills, and abilities (KSAs). As future workplace requirements change to keep up with emerging markets, so do educational institutions. In order to achieve their standards, educational institutions use multiple ways or methods for students to retain and acquire the appropriate KSAs.

According to Romero (2015), “there are three academic advantages of an online program: enhanced class discussions, improved online communication skills, and increased knowledge retention” (p. 1). During traditional classroom lectures, individuals may be too shy to voice their opinions or participate in class discussions. When students are involved in online discussions, individuals can speak their thoughts and add their input through various communication technologies, such as Skype, without face-to-face communication. As students interact online, each individual is able to express their opinions more openly. Moreover, technology has been proven to improve memory for better knowledge retention. Multimedia can include: video lectures, webinars, or infographics (Romero, 2015).

Likewise, Frefeld (2014) mentioned that online learning varies from person to person and the one reason online learning is effective is because learners are able to refer back to the materials as a reference to refresh their memories. By repetitively reviewing and referring to information provided through training, individuals are able to retain the information when they seek for it. Ni (2013) stated that online learning can remove obstacles while providing convenience, flexibility, and feedback over face-to-face interactions; however, individuals may feel isolated and frustrated. As a result, an individual’s interest to learn may be affected negatively. Without face-to-face interaction, individuals do not have direct connection with their peers, professors, or trainers to refer to as guidance.

Another method, on-the job training, has been the most effective type of training method to give learners the opportunity to work with experienced professionals, rather than just listening to lectures or watching videos (TrainingToday, 2016a). Individuals are able to observe professionals perform the task or procedure necessary to accomplish their work. Through observations and direct instruction face-to-face, individuals also receive immediate feedbacks to correct their mistakes or to enhance their KSA. According to Banna (2014),

One of the key elements of the learning process is the dynamic relationship shared between a student and fellow students, and a student and the teacher. Face-to-face learning fosters these relationships; such dynamism may be minimized or lost when training is undertaken on a distance or virtual format (para. 8).

As individuals continuously develop conversations and build relationship through on-the-job training, a learner is able to perform, ask questions, and convey any miscommunication or misinterpretation immediately. Additionally, Huhman (2015) stated, “In a 2013 Skillsoft survey of over 1,000 office workers, 33 percent said they prefer to learn by feeling or experiencing what they’re learning about” (p. 1). Individuals’ preference varies through different teaching methods, not just through a single learning method.

Blugold Beginnings is a non-profit organization on the campus of the University of Wisconsin – Eau Claire. It serves to educate and inspire students, particularly first-generation or low-income students, to pursue post-secondary education. The program works with local schools, 5<sup>th</sup> graders to graduating high school seniors, by hiring mentors to act as role models and provide college knowledge to mentees. Currently, mentors are trained through a hybrid training program, consisting of both on-the-job or face-to-face training and online training on a yearly basis. The time spent on designing and implementing various training techniques is

designed to show mentors their daily tasks. In Blugold Beginnings, mentors may not retain information or gain the necessary knowledge, skills, and abilities to perform their task due to the training techniques used throughout the year.

To better understand a person's individuality to learn, online and on-the-job training will be assessed to understand the costs and benefits of implementing either procedure.

### **Statement of the Problem**

Blugold Beginning offers a variety of training to best meet the needs of their mentors, however, the trainings lack effectiveness if mentors do not retain the information or material. To ensure mentors are carrying out Blugold Beginning's goals, the organization will need to develop a successful training strategy focused on providing mentors with the knowledge, skills, and abilities to perform their task effectively.

### **Purpose of the Study**

This paper will focus on and describe the effects of online versus on-the-job training.

Objectives include:

- Conducting a survey to assess Blugold Beginning members on their preferred learning style.
- Collecting and analyzing data to compare and contrast Blugold Beginning members' preferred learning style.

These objectives are intended to find out the individual preferences to learn best through and the knowledge, skills, and abilities obtained. It is important to note an individual's learning preference in order to best achieve the knowledge, skills, and ability needed to perform effectively. This study will assist Blugold Beginning in shaping their teaching methods to best meet mentors' learning preferences.

**Assumptions of the Study**

The assumptions for this research include:

- Participants will answer survey questions in an honest manner.
- Participants have an interest in the research and are willing participants.
- Participants know the basics of online and on-the-job training.

**Limitations of the Study**

The limitations of this study include:

- The sample size is small and does not accurately represent all learners.
- Participants are mainly millennial, whom were born during the era of technology.
- The research was conducted during the Spring of 2017 semester of students who are part of Blugold Beginnings at UW – Eau Claire.

## **Chapter II: Literature Review**

The literature review is to provide a general overview of online and on-the-job training as it relates to a learner's preferences. In order to determine an individual's learning preference between online and on-the-job training, the first part of this chapter gives a brief description of the influence online and on-the-job training has on a learner's skills. Next, the types of online training and its effect on individual learning and skills are presented. Finally, a brief overview of the types of on-the-job training and its effect on individual learning and skills are presented to assess learners' preferences.

### **On-the-Job Training**

On-the-job training remains as one of the most popular forms of training techniques for trainers (TrainingToday, 2016a). It involves face-to-face interactions between an instructor and a learner. Due to live face-to-face interaction as well as the opportunity to communicate with and ask questions to the trainer, an individual can gain deeper insight of the information being presented. On-the-job training provides different forms of training methods that can engage learners in assessing their knowledge and skill level such as live demonstrations.

Demonstrations provide learners to know how to perform a specific task, gives them the opportunity to perform the task, allow for immediate feedback, and to answer any questions of concerns. This will allow learners to improve and correct their mistakes as well as refining their performance rate (TrainingToday, 2016b, p. 1).

According to the Business Dictionary (2016), on-the-job training is defined as, "Employee training at the place of work while he or she is doing the actual job. Usually a professional trainer (or sometimes an experienced employee) serves as the course instructor using hands-on training often supported by formal classroom training" (para. 1). During on-the-

job training, individuals are able to retain information three and a half times more than sitting and listening to a lecture. As an individual repetitively performs the necessary learning skills physically, they are able to improve their knowledge and skills. Furthermore, training provides one-on-one interaction, which may lead to better communication and an increase in one's own confidence level. Whether an individual is lacking or not in their performance level, they will continue to improve daily through the assistance of a professional trainer. Thus, on-the-job training provides learner with real life situations that can enhance and refine their critical thinking skills (Globe University, 2012). For example, visual or online training provides an individual with only material content information to read and understand while hands-on training enhances an individual's knowledge, skill, and ability physically. Instead of reading and staring in front of an electronic media during training, individuals are actually performing the work. This gives them the opportunity to develop the necessary skills of accomplishing their work.

In addition, it is essential to understand what types of learning style works best for individuals. A study conducted by Everest College found that 52% (1,011 participants) of Americans mention the best way to learn is through hands-on training (Everest College, 2014). As learning styles may differ for every individual, on-the-job or hands-on training provides individuals the opportunity to retain information better. Moving forward, on-the-job training consists of coaching, job rotation, and job mentoring, which provides individuals the knowledge, skills, and ability to be successful.

### **Coaching**

Coaching consists of an experienced professional, a manager, or an employee. By initiating a coaching role, learners are able to develop their skills and knowledge as they correct their own mistakes and improve daily through their performance (Kirkpatrick, 2006). While

working alongside a manager or experienced professional, individuals are able to improve their job performance through immediate feedback. Additionally, positive feedbacks increase a learner's learning rate and performance rate. As individuals are praised for their work, they are more willing to perform better than being criticized for their poor performance. The most critical influence that a coach can do to improve learning and skills is to develop a positive relationship by providing feedback and assisting learners step by step (Kirkpatrick, 2006). As soon as a learner makes a mistake, they can correct their mistake to improve their work to meet performance goals by improving daily through the assistance of an experienced professional.

Moreover, on-the-job coaching gives individuals the opportunity to learn and develop their skills in all aspect of their work. Through continuous guidance, individuals discover and refine different skill sets while working in their job (Training: Train eyes on benefits, 2007). Just as there are mentors to guide others in finding a solution to solve their own problems, coaching provides a learner the ability to critically think and learn while on-the-job. According to Eggers and Clark (2000), "Coaching has become the next phase of employee empowerment" (p. 67). When positive relationship is created between a learner and a coach, it emits strong communication, trust, and empathy. Thus, learners receive honest advice to improve and strive for personal growth, such as meeting learning objectives and goals.

### **Job Rotation**

Job rotation is a method that motivates and allows learners to develop their skills by working various job positions. According to Davis and Jorgensen (2005), "Job rotation has been claimed to have the following benefits: morale building, productivity improvement, improved worker retention, opportunity for training, and training employees to enhance career development, as well as reducing the stress on the musculoskeletal system" (p. 1). Job rotation

allows employees to be exposed to wider work experiences out of their typical work job. By experiencing different positions of their job, they are able to develop various knowledge, skills, and abilities (Eriksson & Ortega, 2006). As a result of establishing their knowledge, skills, and abilities, trainers and learners are able to identify which job best fits an individual's strengths. Additionally, it promotes individual learning, exposes individuals to a variety of work job experience, increases motivation, and reduces workplace boredom (Middlesworth, 2015).

As an individual is exposed to a variety of job positions, they become more aware of their abilities to perform certain tasks. Not only do they become aware of their ability to perform, but individuals become more engaged as they do not have to repetitively repeat the same job tasks every day (Eriksson & Ortega, 2006, p. 654). For example, a data entry individual will not always be working in front of the computer daily. Instead, the individual will be exposed to other job positions within the company, performing various tasks.

Additionally, a study conducted by Pierce mentions that job rotation leads to increased networking opportunities and confidence as well as allowing an individual to cope better with change (Pierce, 2001). Since individuals work in various job positions, they experience different perspectives and roles of each position they are exposed to. These perspectives develop and allow individuals to think broadly. Just as their perspectives become broader, so does their knowledge, skills, and ability to perform in various job positions.

### **Job Mentoring**

Job mentoring is also a form of on-the-job training that involves a qualified, experienced professional and an inexperienced learner working together while establishing a relationship. As a mentor, they assist learners by providing support in their role and assisting them to achieve their goals. Kim, Im, and Hwang (2015) state:

The psychosocial support function of mentoring can improve mentees' work performance, because the emotional attachment, friendship, mutual respect, and recognition that are formed between mentors and mentees can inspire employees with a desire to work for their organization and to carry out their given tasks. (p. 70)

As a mentor and learner begin to develop a deeper relationship or bonding, learners will begin to work harder towards their career success. Therefore, learners become highly influential in their job to learn the knowledge, skills, and abilities required to complete their responsibilities (Kim et al., 2015). A mentor has to be patient, open, communicate, and be a people's person. Without these qualities, a mentor and learner relationship will not develop and learners will go against the mentor.

### **Online Training**

Tallent-Runnels et al. (2006) state, "With the rapid development of technology, online instruction has emerged as an alternative mode of teaching and learning and a substantial supplement to traditional teaching" (p. 93). Companies and educational institutions have implemented online multimedia for individuals as a way to learn materials. Ninety percent of public 2-year and eighty-nine percent of 4-year institutions have already implemented online learning as an alternative for individuals to take and learn. As a result of online courses being offered, a major effectiveness in determining online success is through an individual's accessibility to the materials (Tallent-Runnels et al., 2006). If an individual does not have access to web-based multimedia, then the effectiveness of online learning is very ineffective.

Online training also refers to training that is delivered in an online environment or when an instructor and learner are in separate locations. It is an increasingly popular multimedia that provides greater accessibility to learning by giving individuals the autonomy and time to retrieve

information anytime and anywhere (TrainingIndustry, 2016). As learners are able to go through the training materials pace by themselves whenever they want to review, they can revisit and refresh their knowledge through the online training modules. Furthermore, information can be updated by replacing outdated information online at a low cost to give trainees the most updated information to improve their knowledge and skills (Koller, Harvey, & Magnotta, 2006).

In addition, individuals are able to adopt new personas by participating in online discussions and voicing their opinions without feeling forced or afraid. As a result, learners are able to get feedbacks and comments from other colleagues. Equally, all learners are able to see the opinions of other learners to learn more about the main points of the topic/discussion being conversed (Vonderwell & Zachariah, 2005). By focusing on a single concept or topic, such as workplace violence, an individual is able to gain deeper insight of the topic being discussed by conversing with another individual in asking questions and understanding each other's point of view.

### **Game-Based Learning Training**

Game-based learning is designed to balance subject matter with a type of game such as card and board games. In order for individuals to win, learners must be involved by competing against other individuals or themselves. The object of learning is engaging learners in a storyline that allows them to score points (Teed, 2016). Game-based learning should be considered as fun and enjoyable. Over 170 million people play games and \$11.7 billion are spent for computer and videogames. Through game-based learning, an individual should progress as they are actively involved in the game to experience and understand the concept of the game. Trybus (2014) states, "Within an effective game-based learning environment, we work toward a goal, choosing actions and experiencing the consequences of those actions along the way" (para. 8). As an

individual selects different actions, they have to critically think ahead about their next move to determine whether it will benefit them or involve risks.

According to Yien et al. (2011), “Researchers have indicated that game-based learning could be the best way to trigger students’ learning motivation” (p. 2). Game-based learning can provide motivation, a friendly learning environment, and students can achieve better learning achievements by the use of challenging games. Furthermore, it provides learners with a variety of problem-solving skills through higher-level cognitive thinking skills while having fun. It can also improve learning achievements and the attitudes of learners through the implementation of computer-based learning (Yien et al., 2011).

Due to competition, engagement, and immediate feedback, game-based learning provides individual with the motivation to beat the game. While playing and advancing through the game, individuals will begin to increase their performance rate in order to defeat the system. Additionally, Rivera (2016) states “Researchers have also stated that play is a primary mechanism of learning and socialization common to all human cultures” (p. 1). Each individual does not like to lose and has their own way of competing against themselves or other players. As individuals begin to play more games, they would want to win and defeat the game system.

### **Instructional Video Training**

Instructional videos are used in a course context to introduce new knowledge that needs to be learned or reinforced. Some types of instructional videos may include: Tutorial, welcome video, or lecture. All of these videos are pre-recorded by an instructor and uploaded online where learners are able to view and comprehend the information (Humber, n.d.). For example, lectures are considered to be a condensed version of in-class lecture, which is pre-recorded for learners to view online and follow the content to understand the concept of the topic. It also

provides learner with location flexibility, cost-efficient and time-saving, self-paced learning, and allows for unlimited access to updated training materials. Thus, instructional videos are able to present information in an attractive, rich, and consistent method for learners to view actual or realistic scenarios (Zhang, Zhou, Briggs, & Nunamaker Jr., 2006). Although instructional videos provide informational content and accessibility, it will only improve learning performance by being interactive. One way to be interactive is to discuss the content or materials with another individual by asking questions and understanding the concept of the material.

According to Pappas (2015), elearning videos are effective facilitators for generating and promoting online discussions. Discussions can improve critical thinking and increase the interest of learners. Short instructional videos can allow learners to view a video for as long as they want in obtaining the necessary training information and enhancing their knowledge retention. By repetitively accessing an instructional training video, learners can improve their note-taking skills in analyzing and discovering the key points of the information (Pappas, 2015).

### **Computer-Based Training**

Computer-based training is any instructional materials delivered over the use of a computer such as Web-based training (TrainingIndustry, 2016). Overall, computer-based training is growing by 22% yearly and training over the Internet has increased to 80% yearly. As stated by Truck (2011), “Well-designed multi-media programs using everything from text to sound and video can see retention rates as high as 75 to 80 percent” (para 7). Due to the high retention rates, learners are able to develop psychomotor and affective skills due to simulations or games. In a well-developed computer-based training program, learners can increase their response rate and recall information to increase their performance rate. Moreover, it is able to

distribute information on a wider scale for all learners to learn and attain the same knowledge and skills (MacLeod & Costello, 1994).

Bedwell and Salas (2010) states, “CBT is not only effective for training US white-collar workers but also other cultural groups and those with less education” (p. 6). Although all learners may not be technology literate, computer-based training can be effective in various situations. As computer-based training has evolved through the years, it can be used to educate employees about the practices, history, regulation/policy, or providing assessments for learners to assess their knowledge. It can also be targeted towards student learners as it provides online courses and directions on how to complete their assignments, quiz/exam, or to be involved in discussions. Some of the advantages of computer-based training include: storing the performance of learner for future use, has multiple presentation forms, and is highly interactive (Pappas, 2014, p. 1). This allows computer-based training to enhance individual retention rate and provide various learning style or methods for all individuals.

### **Chapter III: Methodology**

This chapter introduces the methodology used to gather data to gain information on an individual's learning preference between online and on-the-job training. The study is designed to understand individuals' learning preferences and their favorable method to acquire information. Furthermore, this chapter will discuss details of the materials, methods or techniques, research designs, and data analysis of the research.

#### **Subject Selection**

The participants of this study are primarily students, whom are part of Blugold Beginnings, enrolled in the Spring of 2017 at the University of Wisconsin – Eau Claire. Approximately 200 college students are included as the sample size of the research. Blugold Beginnings was chosen as the sample size because they provide both online and on-the-job training to their employees. As mentors have a good deal of responsibility to connect and work with their mentees, the research will seek to learn an individual's preference that provides them with knowledge retention and growth.

#### **Instrumentation**

For the purpose of this research, a survey of nine questions was developed (see Appendix A). Survey questions were designed to determine what learning preference an individual desires as a way to gain knowledge, skills, and abilities. It contained Likert-type categorical standard and response options that focused on an individual's feelings and satisfaction. The instrument also consisted of a six-point scale that ranged from strongly disagree to strongly agree. On the contrary, response options were used to allow individuals to read a scenario and react to it by choosing between online or on-the-job preference.

## **Data Analysis**

Data was analyzed using statistical and a mixed method approach: Qualitative and quantitative methods. Quantitative data were analyzed by descriptive statistics and cross-tabulation of different items. Qualitative data was analyzed and interpreted to understand a learner's preference.

## **Limitations**

The research has the following limitations:

- Size of the sample is small and may not accurately represent all learners. As it involves a campus, a bigger sample would provide better reliability of the research.
- Participants are mainly millennial, whom were born during the era of technology.

## **Summary**

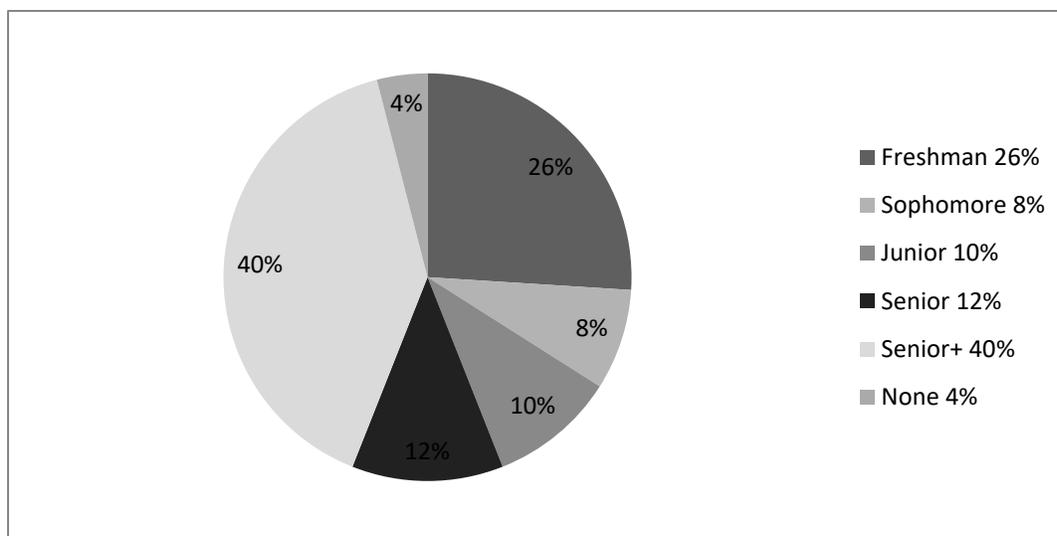
This research concludes chapter 3 with the data collection, methods, and analysis. Additionally, surveys and interviews was used to determine a learner's preferences, the effectiveness it has on their knowledge, skills, or abilities, and the skills obtained from online or hands-on training. To further evaluate our results, chapter 4 will discuss in detail the results of the surveys and interview.

## **Chapter IV: Results**

This study attempted to determine Blugold Beginning mentors' learning preference to achieve, retain, and gain the knowledge, skills, and abilities (KSAs) to perform effectively. Primarily, the study focuses on a learner's preference to learn materials either through hands-on or online learning. A survey was used to collect demographic information, determine an individual's learning preference of hands-on or online learning, and identify learning preference through various scenarios.

### **Demographics**

A total of 50 surveys were administered and collected through the participation of the survey. The participants were males and females in their first year of college to graduate students in Blugold Beginnings. Of the surveys completed, 13 (26%) were freshman, 4 (8%) were sophomores, 5 (10%) were juniors, 6 (12%) were seniors, 20 (40%) were post-graduates, and 2 (4%) did not mention their year in college. Senior status consists of graduate students, staff members, and students who are still completing their Bachelor degree in their fifth or more years of college. The approximate percentages of respondents are shown in Figure 1. It also shows that the largest number of responses came from the median range of those that have been in college for longer than 5 years or have graduated.



*Figure 1.* Percentage of subjects by years in college.

### **Importance of Individual Learning Preferences**

For the purposes of the survey, hands-on learning consists of job rotation, job mentoring, and coaching. Online learning consists of computer-based, instructional video, and game-based. Mean scores were calculated using the following ranking: 1 = most preferred learning method, 7 = least preferred learning method. An example of the calculation for mean scores is as follow: 35 participants chose face-to-face as their first choice, five chose it as their second choice, three chose it as their third choice, and three chose it as their fourth choice. The rating score is determined by the number of participants choosing their most preferred method divided by the frequency of participants. Of the hands-on (face-to-face) and online (computer-based) learning preference, the survey responses revealed that the majority of participants prefer ‘face-to-face’ learning with a mean score of 1.43 followed by ‘job mentoring’ with a mean score of 2.59, followed by ‘coaching’ with a mean score of 3.14, followed by ‘job rotation’ with a mean score of 4.09, followed by ‘instructional video’ with a mean score of 5.48, followed by ‘game-based’ with a mean score of 5.67, followed by ‘computer-based’ with a mean score of 5.67. Table 1

shows the mean scores of all the learning methods that respondents have ranked from one to seven (mostly preferred to least preferred learning method).

Table 1

*Number of Participants Preferred to Learn Through*

Response	Frequency (n=46)	Mean
Face-to-face	66	1.43
Job Mentoring	119	2.59
Coaching	141	3.07
Job Rotation	188	4.09
Instructional Video	252	5.48
Computer-based	261	5.67
Game-based	261	5.67

Additionally, of the 46 participants that took the survey, 35 (76.09%) prefer to learn face-to-face, 5 (10.87%) prefer to learn through job rotation, 5 (10.87%) prefer to learn through job mentoring, and 1 (2.17%) prefer to learn through instructional video. Over three-quarters of participants feel strongly about learning face-to-face compared to any other learning methods. See frequencies of descriptive statistics in Table 2.

Table 2

*Individual's Preferred to Learn Through*

Response	Frequency (n=46)	Percentage
Face-to-face	35	76.09%
Job Rotation	0	0%
Job Mentoring	5	10.87%
Coaching	5	10.87%
Computer-based	0	0%
Instructional Video	1	2.17%
Game-based	0	0%

The participants were asked to rank their preferred learning method as to their impact on their ability to learn with 1 = most preferred learning method and with 5 = least preferred learning method. The question aimed to discover whether on-the-job methods or online methods would be most sufficient for participants to learn. There were two on-the-job methods and two online methods used in the question. The participants were asked to ranked the following statements: I would like to learn through job coaching for 30 minutes, I would like to learn through role playing (face-to-face) for 30 minutes, I would like to learn through watching a 15 minute instructional video, and I would like to learn through online multimedia such as computer-based learning. In each of the data collected through the ranking of most and least preferred method, 95.83% of participants chose on-the-job methods (role playing and job coaching) as their most preferred learning method. The participants ranked role playing (face-to-face) as their number one learning preference, 'I would like to learn through role playing (face-

to-face) for 30 minutes' had a 60.42% of individual participant learning preference. See Table 3 for results on participants' most preferred way of learning.

Table 3

*Participants Preferred to Learn Mostly Through*

Response	Frequency (n=48)	Percentage
I would like to learn through role playing (face-to-face) for 30 minutes	29	60.42%
I would like to learn through job coaching for 30 minutes	17	35.41%
I would like to learn through watching a 15 minute instructional video	2	4.17%
I would like to learn through online multimedia such as computer-based learning	0	0%

Table 4 shows that participants ranked 'I would like to learn through online multimedia such as computer based learning' last with 66.67% of individual preference. See Table 4 for results on participants' least preferred way of learning method.

Table 4

*Participants Preferred to Learn Least Through*

Response	Frequency (n=48)	Percentage
I would like to learn through online multimedia such as computer-based learning	32	66.67%
I would like to learn through watching a 15 minute instructional video	14	29.17%
I would like to learn through role playing (face-to-face) for 30 minutes	1	2.08%
I would like to learn through job coaching for 30 minutes	1	2.08%

Similarly, the participants were asked to choose between watching an instructional video for 15 minutes online or to do role plays (face-to-face interactions) for 30 minutes on how to handle various situations that can occur in a workplace event. The situations included: how to solve and handle difficult workplace situations, how to handle difficult customers, how to

communicate with co-workers, clients, or customers, how to motivate co-workers, clients, or customers, and other. An average of 38 out of 50 (76%) participants chose role play (face-to-face interactions), 11 chose instructional videos (22%), and 1 (2%) chose other on learning how to handle the various situations in a job setting. For 'other', participants have the choice to choose what type of learning method would best suit their preference in handling these situations. One participant chose other and commented that self-experienced would be more effective in handling these various situations. The results are summarized in Table 5 as to what learning method would best suit their learning with the situation presented.

Table 5

*Learner Preference Between Instructional Video or Role Play*

Question	Response	Frequency (n=50)	Percentage
How to solve and handle difficult workplace situations	Instructional Video	11	22%
How to solve and handle difficult workplace situations	Role play (face-to-face interactions)	39	78%
How to handle difficult customers	Instructional video	9	18%
How to handle difficult customers	Role play (face-to-face interaction)	39	78%
How to communicate with co-workers, clients, or customers	Instructional video	12	24%
How to communicate with co-workers, clients, or customers	Role play (face-to-face interaction)	38	76%
How to motivate co-workers, clients, or customers	Instructional video	12	24%
How to motivate co-workers, clients, or customers	Role play (face-to-face interaction)	37	74%
How to motivate co-workers, clients, or customers	Other	1	2%

Next, the participants were asked to determine if they learn best through hands-on or online training. They were asked, 'if I am given a task to perform my job, I learn best through hands-on (on-the-job) training' and 'if I am given a task to perform my job, I learn best through online training'. The question gathered data that represented whether on-the-job or online

training would benefit them the most in terms of retaining information and gaining the knowledge, skills, and abilities to perform their responsibilities. The questions were rated using a 5-point Likert scale. The means were calculated using the following values: 1 = Strongly agree, 2 = Somewhat Agree, 3 = Neither agree or disagree, 4 = Somewhat Disagree, and 5 = Strongly disagree. Collectively, all 50 participants strongly agree that they learn best through hands-on training with a mean score of 100%. On the other hand, the mean score of learning through online training is 3.44 respectively. A summary of the comparison result is shown in Table 6 and Table 7.

Table 6

*If I am Given a Task to Perform My Job, I Learn Best Through On-the-Job Training*

Response	Frequency (n=50)	Percentage
Strongly Agree	50	100%
Somewhat Agree	0	0%
Neither Agree or Disagree	0	0%
Somewhat Disagree	0	0%
Strongly Disagree	0	0%

Table 7

*If I am Given a Task to Perform My Job, I Learn Best Through Online Training*

Response	Frequency (n=50)	Percentage
Strongly Agree	0	0%
Somewhat Agree	11	22%
Neither Agree or Disagree	15	30%
Somewhat Disagree	15	30%
Strongly Disagree	9	18%

In Table 8, participants were asked to imagine themselves in a training session. In order to retain information to perform on-the-job, participants were given two options: Reading and listening to an audio about the job online and practical face-to-face interaction and performing on-the-job. The responses provided insight on what learning method would benefit them the most and what didn't. From the responses, many prefer to learn on-the-job. Of the 50 participants that took part in the survey, the results are presented in Table 8.

Table 8

*Number of Subjects Who Prefer Online or On-the-Job Interactions to Best Retain Information*

Response	Frequency (n=50)	Percentage
Reading and listening to an audio about the job online	1	2%
Practical face-to-face interaction and performing on-the-job	49	98%

Going hand-in-hand, participants were then asked to imagine performing a specific task for their job and what method would be most effective for the individual to learn and retain information. Table 9 indicates that 98% would have somebody show them how to perform something while 2% would watch a video on performing a step-by-step process.

Table 9

*What is the Best Way for You to Learn How to Perform Your Task Effectively*

Response	Frequency (n=50)	Percentage
Have somebody show you how it is performed	49	98%
Read or listen about how something should be performed	0	0%
Watch a video on a step-by-step process	1	2%

### **Conclusion**

The survey found that a large majority of participants preferred hands-on training or being involved in face-to-face interactions. Participants had higher ratings in face-to-face interaction of all categories over online training. Whether it involved face-to-face or not, all types of hands-on training (job mentoring, job rotation, coaching) ranked in the top three mostly throughout the survey. Aside from hands-on training, most participants preferred watching instructional videos as their top online learning.

## **Chapter V: Discussion, Conclusion and Recommendation**

Blugold Beginning offers a variety of trainings to best meet the needs of their mentors, however, the trainings lack effectiveness if mentors do not retain the information or material. To ensure mentors are carrying out Blugold Beginning's goals, the organization will need to develop a successful training strategy focused on providing mentors with the knowledge, skills, and abilities to perform their task effectively.

Therefore, the goal of this research project was to identify what training method would solve Blugold Beginning's desire to provide mentors with the knowledge, skills, and abilities (KSAs) as well as the retention of materials or information to perform their task. While both, on-the-job and online training, provides sufficient advantage and disadvantage, the survey indicated that on-the-job training would benefit mentors the most to perform their task effectively. As a result of implementing an on-the-job or face-to-face training, retaining information and gaining KSAs will increase.

### **Discussion**

Defining and discovering an individual's learning preference was the focus of this research project. The research was completed through the research and analysis of survey results, taken by Blugold Beginning members at the University of Wisconsin – Eau Claire. Participants were questioned about their learning preference through various scenarios and the ranking of learning methods in terms of their preference and provides participant to retain or gain the knowledge, skills, and abilities to perform effectively. Most importantly, all participants (100%) who took part in the survey strongly agreed that they learn best through hands-on training if they were given a task to complete. On the other hand, participants varied in indicating if online training would allow them to learn efficiently.

## **Conclusions**

Based on the survey results, participants primarily favor hands-on training as their most preferred method. Whether it involved being in a job setting, training session, or ranking learning methods, hands-on training (face-to-face, job rotation, job mentoring, coaching) was chosen as the top preferred method in every category. Participants felt hands-on training provided them with the knowledge, skills, and abilities as well as retaining information more effectively compared to online training. Moreover, participants preferred face-to-face interactions as a high value in learning well. In contrast, instructional videos and game-based were mostly preferred in an online setting. Computer-based was ranked last in almost every category, which is least preferred by participants.

## **Recommendations**

Based on the survey results, it is recommended that Blugold Beginning should establish a type of hands-on training or learning environment for individuals to learn best for retaining or gaining the necessary knowledge, skills, and abilities to perform effectively. Participants feel they can learn better in a face-to-face or physical environment, rather than being in an online environment. To ensure mentors are learning to the best of their ability, Blugold Beginnings may focus on one or two training benefits and build off of the outcome, whether it is successful or not. After the implementation of the training program, they may gather feedback about what additional information they need to improve or increase the knowledge of their employees. Repetitive feedback should be continuous until Blugold Beginning feels they have obtained enough information to meet the needs of a mentor's capability to learn effectively.

Looking back in the study, there was one thing that could have been done differently. Additional questions should have been asked regarding an individual's own response in an on-

the-job versus online training. By offering more hands-on activities with the follow-up of an online activity, it may increase learning, retention of information, and developing the necessary knowledge, skills, and abilities to carry out given tasks.

In addition, the way information is conceived, delivered, and received has changed throughout the years. Online learning is growing in popularity in organizations, companies, or institutions. Although an online environment is least preferred by participants, online training for learning is popular and Blugold Beginning members should adapt to different learning styles or methods. With the implementation of an online training, it may never be effective or efficient no matter how much time or effort are put into developing a training program. The best possible way is to continuously try and present information as best as possible to meet a learner's need. On the other hand, learners' must also put in the same work by being organized, asking questions when needed, and staying engaged. As each individual's learning style varies, implementing a small online training may be the best way to start while identifying the strengths and weaknesses of a learner's learning style. Again, continuous feedback should be gathered to improve the effectiveness of the training program. Blugold Beginnings must continue to gather feedback until they are confident and ready to launch an online training that provides mentors with the knowledge, skills, and abilities to perform a task.

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## Appendix: Survey Questions

Hello! My name is Txujci Xiong and I am a Graduate Student at the University of Wisconsin - Stout. First and foremost, thank you for participating in this research! I am conducting research on an individual's learning preferences between hands-on and online training. I would appreciate the time to find out what learning methods you prefer in order to learn more effectively such as retaining information better. For confidentiality purposes, all participant's responses will be anonymous. The survey may take up to 10 minutes to complete. Please proceed by clicking the forward button.

Please answer two demographic questions about yourself

Currently, what year are you in college?

What is your major?

Provided below is a definition list of learning methods for you to use as you respond to the questions.

Hands-on or on-the-job training is face-to-face training involving an instructor and learner where the learner learns the skill from doing it in the instructor's presence.

Job mentoring is a form of on-the-job training that involves a qualified, experienced professional assisting and providing support to an inexperienced learner.

Job rotation is a method that motivates and allows learners to develop their skills by working various job positions.

Coaching consists of an experienced professional or a manager who gives advice and suggestions to an employee or learner.

Online training includes:

Game-based learning which is designed to balance subject matter with a type of game such as card or board games, where individuals compete against each other to win.

Instructional videos are used to introduce new knowledge that needs to be learned or reinforced. It is pre-recorded by an instructor and uploaded online (Internet) for learners to view and comprehend the information.

Computer-based training is any instructional materials delivered over the use of a computer, such as Web-based training.

1. Please rank the following learning methods in order of your preference: (1 being your most preferred learning method and 7 being your least preferred learning method)
  - A. Face-to-face
  - B. Job Rotation
  - C. Job Mentoring
  - D. Coaching
  - E. Hands-on
  - F. Computer-based
  - G. Instructional Video
  - H. Game-based
  
2. For each of the following training method indicate to what extent you believe the method provides you with the knowledge, skills, and abilities to perform a specific task.  
Face-to-face (Strongly agree to strongly disagree)  
Job Rotation (Strongly agree to strongly disagree)  
Job Mentoring (Strongly agree to strongly disagree)  
Coaching (Strongly agree to strongly disagree)  
Hands-on (Strongly agree to strongly disagree)  
Computer-based (Strongly agree to strongly disagree)  
Instructional Video (Strongly agree to strongly disagree)  
Game-based (Strongly agree to strongly disagree)
  
3. Imagine you are attending a training session as part of getting to know more about your job. What method would allow you to retain information more effectively?
  - A. Reading and listening to an audio about the job online
  - B. Practical face-to-face interaction and performing on-the-job
  
4. Imagine yourself performing a certain task for your job. What's the best way for you to learn how to perform it effectively?
  - A. Have somebody show you how it is performed
  - B. Read or listen about how something should be performed
  - C. Watch a video on a step-by-step process
  
5. If I am given a task to perform for my job, I learn best through hands-on (on-the-job) training.
  - A. Strongly agree
  - B. Agree
  - C. Neither agree or disagree
  - D. Disagree
  - E. Strongly disagree

6. If I am given a task to perform for my job, I learn best through online training.
  - A. Strongly agree
  - B. Agree
  - C. Neither agree or disagree
  - D. Disagree
  - E. Strongly disagree
  
7. Please rank the following methods in order of your preferred learning method.
  - A. I would like to learn through watching a 15 minute instructional video
  - B. I would like to learn through job coaching for 30 minutes
  - C. I would like to learn through role playing (face-to-face) for 30 minutes
  - D. I would like to learn through online multimedia such as computer-based learning
  
8. Imagine you work in a customer service job. Would you rather watch an instructional video for 15 minutes online or role play (face-to-face interactions) for 30 minutes with a supervisor/manager for the following areas.
  - A. Instructional video
  - B. Role play (face-to-face interaction)
  - C. Other
  
9. If you chose "other" in the previous question, what learning method would you prefer?  
(Please leave blank if you did not choose "other" in the previous question)