REVIEW PAPERS

TAILORING WORKPLACE TRAINING TO GENERATIONAL PREFERENCES

By

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ABSTRACT

Given the array of generations in the workplace and the variety of learning theories and technological exposure across those generations, many instructional design professionals argue that training should be tailored to these differences. We were skeptical of this assertion and sought to explore evidence for improved effectiveness in tailoring training based on generational differences. Through a review of literature, we explored the variables creating differences across generations, including learning preferences, teaching methods, learning theories, technology, and motivation. We considered the impact of teaching methodologies during learners' formative years on their preferences for learning as adults. We found a lack of substantive evidence that generational differences supported the assertion that adapted training was necessary. The conclusion is that, while it is always important to conduct an audience analysis and to be familiar with the needs of learners for learning events, tailoring training specifically based on generation does not justify the investment of time and resources to improve the effectiveness of training.

Keywords: Generational Differences, Learning Preferences, Teaching Methods.

INTRODUCTION

As society progresses, the benefits provided to employees by their companies change. In today's world, retirement benefits afforded to employees are dramatically less generous than the "benefits of old." Most of today's employees are reliant on stock-market based retirement plans or, in some instances, workplaces don't offer retirement benefits of any type. As a result, older generations in the workplace is either choosing or they are forced to retire later in life. The workforces span four, or even five generations (Jaffe, 2019).

Different generations communicate differently with coworkers, have different expectations of their coworkers, and may even have preconceived notions about coworkers based on their generation. The findings of whether there is substantial evidence to support the investment of time and other resources in tailoring training initiatives based on generational differences.

While there are no universally defined lines between generations or agreed-upon terms, the more commonly used year approximations and titles are used in this paper, along with (Warren, 2012) summary, as shown in Table 1. Schullery (2013) states that, "the forces that influence and form these distinct generational cohorts are thought to be strongest during childhood and early adolescence".

1. Literature Review

1.1 Variables that Impact Training Effectiveness for Different Generations

An individual's learning preferences and the teaching methods that are used can impact the effectiveness of training. Both learning preferences and teaching methods must be taken into consideration when creating and implementing training.

This paper has objectives related to SDGS

Generation	Birth Years	Ages	Noteworthy Information
Traditionalists, Silent Generation	1920-1945	77-102	Few Traditionalists are still in the workplace, but not none
			Radio prominent source of information; television recent and may not have been available for all families
Baby Boomer, "Boomer"	1946-1964	58-76	Many have retired, but many still remain in the workplace
			Radio and television prominent sources of information
			Exposed to linear, lecture-based learning in school
Generation X, "Gen Xers"	1965-1980	42-57	Along with Generation Y, comprises the majority of the workforce
			Internet's inception occurred overlaps with those born later in Generation X
			Exposed to module learning with lectures and small groups in school
Generation Y, "Gen Y," "Millennials"	1981-1996	26-41	Along with Generation X, comprises the majority of the workforce
			Internet born during this generation; many Millennials raised using it, but it may not have been available for all families
			Learning environments shifted from lecture-based to being more flexible and relied more heavily on computer-based technology
Generation Z, "Gen Z"	1997-2012	10-25	Smart phones invented during this generation, further revolutionizing the availability of technology
			Learning environments relied more heavily on computer-based technology.

Table 1. Generation Titles, Spans, and Qualities

1.2 Learning Preferences, Learning Theories, and Teaching Methods

There have been hundreds of studies on learning preferences. For the sake of simplicity, one of the most basic learning style models, Visual, Auditory, Reading or Writing, and Kinesthetic (VARK), summarizes learning modalities that occur through human senses and movements. Learning theorists posit that learners absorb information in a variety of different ways when processing information. For example, some learners are visually dominant, while others prefer learning through reading and writing. While some people have a particular learning preference, there are those who are capable of processing information equally from each learning modality.

A variety of teaching methods have developed over the centuries, particularly in the last half century, as technology has dramatically changed. Because of the combination of different learning preferences and the various popular teaching methods throughout the years, there has been a proliferation of learning theories. Learning theories examine the combined diversity of learning preferences and teaching methods and then theorize how they come together for effective learning.

One of the earliest teaching methods, and arguably the most common, is the authoritative teaching style. It relies on lecturing and one-way communication for instruction. Behaviorism learning theory is based on authoritative teaching methods and involves teaching students using rewards and punishments to drive learning. Material is presented through lectures, forcing learners to rely heavily on auditory learning, or by reading straight from the text.

According to (Lieb, 1991) Principles of Adult Learning, behaviorism and authoritative teaching methods do not account for students' intrinsic motivation, often voiding their usefulness when studying and predicting adult learning.

Compared to children and teens, adults have special needs and requirements as learners. Adults are autonomous and self-directed. Teachers must actively involve adult participants in the learning process and serve as facilitators for them, guiding participants to their own knowledge rather than supplying them with facts (Lieb, 1991).

Behaviorism also doesn't account for information processing through the senses and critical thinking, which are pivotal avenues to long-term memory development. Behaviorism is typically the result of an organization's lack of time and money to invest in robust curriculum development. It is the fallback method, and although behaviorism isn't the most engaging, retaining and teaching the organization's knowledge using this method is better than not teaching at all.

Cognitive and constructivist learning theories give insight into how learners can be active participants in how much or little of the information presented is learned, and that what is learned is also influenced by the experience a student brings to the classroom. These theories and advanced understanding of learning through research have forced the evolution of instruction to incorporate real-world

scenarios, role playing, debate, problem-solving obstacles, and critical thinking through demonstrator, facilitator, delegator, and hybrid teaching methods.

As teaching method popularity and technologies have changed throughout the years, some generations were taught primarily using one method, or have used auditory or visual resources more than others. There is a common hypothesis among academics that the dominance of a teaching method or learning preference during a person's adolescence might make the person more inclined to continue to learn, and may learn more effectively, if those same teaching methods and learning modalities are continued into adulthood. The common belief is that an entire generation might be more inclined to receive information better through one method over another because of the dominant educational experience during an individual's formal education. For instance, Warren (2012) states that, Baby Boomers were taught linearly reading boos. Generation Xers were taught in modules using book indices to find information rather than reading a book cover-to-cover. Gen Yers were often taught in a constructivist, networked learning environment. Since they were the first generation of digital natives, they wondered why anyone would consider researching by reading a book (Prensky, 2001). Millennials had infinite information at their keyboards and preferred flexibility, and were comfortable changing focus quickly.

Yet the concept of differing educational trends and teaching methods during a student's adolescence impacting workplace learning, runs contrary to what researchers have discovered about adult learning theory, which is based on the principles that adult learners have self-direction, utilize work or life experiences as a foundation for their learning experience, are driven by motivation to be successful in their careers, and desire real and immediate application of learning material (Schullery, 2013). This belief is also contrary to the empirical evidence that researchers have gathered. Lester et al. (2012) study concluded that, there are more perceived than actual differences among the generations.

These findings paint a very familiar picture, one in which "older" workers are rigid and inflexible, "younger" workers

are irresponsible and entitled, and the workers in the "middle" are misunderstood by both younger and older generations. Why is it that the generations hold such inaccurate images of each other, when in fact the similarities in what they value greatly outnumber actual value differences? The explanation for this may lie in the actual differences themselves.

2. Technology

These more recent (defined as methods used in popularity after the 1950s) teaching methods coincide with the increase and proliferation of technology. Each generation after this date had more communicative technology at their disposal and therefore a greater variety of ways to receive information.

Technology in the later 20th century has continued to evolve at a rapid pace. It has pushed learners to shift from processing information primarily through auditory learning (e.g., through a one-way communication, authoritative teaching method and radio when it was considered new technology), to that of visual learning once television became a household staple. Now that the majority of society owns and uses smart phones and computers, there are still newer skills that have become necessary to participate in society. Smartphone and computer skills and knowledge are necessary in the 21st century to both keep up with workplace skill demand and to participate in learning. The 21st century learner needs to text, type, and know where to seek information through different digital online platforms.

Trainers, with the input of researchers and academics, must consider whether individuals who have previously learned best auditory can further develop previously unpracticed and less-preferred ways of learning. There is no avoiding the fact that technology has changed and no doubt will continue to change the delivery of training now and in the future. As it is seen in case studies generations thought to be mostly auditory learners can shift to effectively learning and retaining new information through previously unfamiliar learning preferences and teaching methods. Older generations can adequately keep up with technology in a training environment to

successfully complete training and learn the material.

3. Motivation

Comfort and familiarity with a learning preference, teaching method, or new technology can help an individual quickly begin a training session, but these are not the only factors that contribute to successful learning. According to (Yelon, 2010) The Secret of Instructional Design, the components of effective instruction are not related to learning or teaching preferences. Effective learning happens regardless of student or teacher preferences, as long as the instruction was created with a real-world performance objective in mind, coupled equally with explanations, demonstrations and evaluations that lead a student towards their end goal of using the instruction successfully in the real world.

Internal motivation is a key ingredient in a learner's success. Behavioral intention is defined as an indicator of 'how hard people are willing to try' and 'how much of an effort they are planning to exert' on a certain behavior. It reflects people's willingness and motivation to perform the behavior (Sun & Gao, 2020). A student who is given access to the training and technology needs to participate, even a student who does not typically use said technology and possesses limited experience and ability, can still be successful in learning. Learning enjoyment and, more importantly, learning success can be attained even with rudimentary technological skills if the material presented is highly desired to overcome a problem or to reach a goal. According to (Sun & Gao, 2020), it is still important to use good audience analysis and to consider the technology's perceived ease-of-use because the employee weighs the costs and benefits of undergoing the desired training. However, with intrinsic motivation, learners from any generation have an equal ability to learn successfully.

In a study conducted on undergraduate nursing students across multiple generations, the empirical evidence collected supports the hypothesis that there is no significantly conclusive learning preference or teaching style preferred across generations (Simpson, 2020). According to the study, the same percentage of nursing students preferred the same teaching methods, supporting our conclusion that the same percentage of students learn through visual, auditory, reading or writing, and kinesthetic across differing generations.

This quantitative descriptive study surveyed 134 undergraduate nursing students, comprised of 25 students representing Gen X, and 105 students representing Gen Y. Although, [sic] there were no statistically significant differences found between Gen X and Gen Y students regarding their teaching method preferences, the majority (83%) of the students from both generations identified lecture as the preferred teaching method. In addition, the same percentage of students indicated that they did not prefer group work conducted inside or outside the classroom. In the classroom, the students indicated the desire to have handouts that corresponded with the lecture, along with other supplemental materials (Simpson, 2020).

Another study, by (Stephens, 2015), conducted through an online survey that was distributed to three municipal law enforcement agencies in the United States, reached a similar conclusion. This survey used David Kolb's learning style model to evaluate preferred methods. Like that of VARK learning modalities, the empirical evidence collected from this data concluded that there were overwhelming similarities among each of the generations when it came to learning preferences.

Baby Boomers ranged from 49 to 67 years of age, representing 16.7% of the sample with 63 responses. Generation X, spanning ages from 33 to 48 years old, represented 55.4% of the sample with 209 responses. Millennial consisted of 101 participants, representing 26.8% of the responses, with a maximum age of 32 at the time of this study. Data on learning styles was collected using the Kolb Learning Style Inventory, which was based on Kolb's experiential learning model. An assessment of the learning style data for each of the generational cohorts occurred in order to evaluate what percentage of each generation responded in each of the four learning style categories. Learning preference scores were divided by generation and evaluated for frequency distribution. The data reflected the percentage of responses for each

learning preference by each generational cohort as opposed to representing a percentage of the whole sample. Each of the generational cohorts demonstrated the Converging learning style as the dominant learning style. (Stephens, 2015).

Kolb's learning theory consists of "Accommodating," "Diverging," "Converging," and "Assimilating." The majority from each generation within the law enforcement officers surveyed choose Convergent learning as the preferred method for instructing new officers. Convergent learning is based on practical applications of ideas and deals with technical problem solving and reasoning approaches to teaching. The conclusion of this study supports the hypothesis that there is no significant difference in learning preferences across generations. Learning preference and teaching method preference, therefore, cannot be the dominant factors when designing a training program for an individual or group.

As human biology, and therefore learning ability, has not changed, people often select the path of least resistance, are also very resourceful and can learn if the benefits of learning outweigh the cost of the effort. Basically, every person and their willingness to learn new technology, is relying on their own personal evaluation of Return on Investment (ROI). There are continues to be people who will not try to learn the newest technology because it means putting forth effort that they do not believe is outweighed by the personal benefit of that technology. Individuals whose livelihood is dependent on learning new technology, however, will go ahead and do so.

Conclusion

Recent literature suggests that the need to look at generational differences in learning preferences for differing workforce training is a myth (Berge & Berge, 2019; King et al., 2019; Rudolph et al., 2021; Shepherd, 2017). The referenced data indicates that there are only small differences across generations in learning preferences and that age differences are not a big enough factor to justify different training to accommodate different learning preferences.

There is widespread information about differences in how generations learn, yet this study does not support those claims and, therefore exposes the concept of generational differences to doubt. This "chink in the armor" of generational differences is important and raises additional questions about whether claims of generational differences are accurate (Shepherd, 2017).

According to (Ahmad & Tarmudi, 2012), learner satisfaction with e-learning, "levels of satisfaction remain fairly stable across generations with few exceptions. The Baby-Boomer, Generation X, and Millennial, all indicate overall higher satisfaction".

Mencl and Lester (2014) study resulted in findings that support differences between generations valuing career advancement, diversity, and immediate feedback and recognition, but not for continuous learning. Mencl and Lester (2014) note that "managers should be careful not to discount the importance of training and development" among generations, due to finding similar values for learning across the generations studied. Rudolph et al. (2021) argue that categorical differentiation based on generations is "socially exclusive" rather than giving credit to the complexities of ever-changing age.

As noted by (Wong et al., 2008), empirical evidence does not demonstrate statistically significant differences in personality and motivation attributable to generational differences. Variables such as age and life or career stage are likely causal factors of these differences. Wong et al. (2008) noted that "the research emphasizes the importance of managing individuals by focusing on individual differences rather than relying on generational stereotypes". This notion is supported by (Lyons & Kuron, 2014), which highlights the disregard of research for the effects of organizational and individual variables on generational differences. Berge and Berge (2019) review of literature resulted in the conclusion that, there may be differences in people's work attitudes, behaviors, and values across generations, but there are more important commonalities across the generations than differences. Perceived differences may be due to maturation, life stage, career stage, or other developmental factors. Analysis of generational attributes may be useful in the areas of recruiting, retention, and motivation (Glass,

2007), but not so much for training.

Based on the most recent studies available, training and development professionals should not tailor training to different generations. Creating more than one training for differing learning preference, teaching method, or learning theory preferences is not practical, given that, even "within a generational cohort, [not all employees] value the same things" (Berge & Berge, 2019). The combination of time and resources that would be necessary to accomplish meeting diverse preferences would amount to a loss in money as they would be better used in other training department needs.

Training and development professionals need to realize that it is a false belief that there is a major difference in learning preferences among generations. Trainers also need to be aware of generational stereotypes and perceptions because these, too, can impact training and learning. For example, perceptions of whether the different generations can or cannot use and teach new technology leads people to treat others differently and therefore hurt them through preconceived ideas.

We found that stereotypes about older people's ability to learn new tasks interfered with the training they received. When trainers believed that they were teaching an older person how to do the computer task, they had lower expectations and provided worse training than when they believed they were teaching a young person. These results demonstrate that poorer training is a direct result of age stereotypes (King et al., 2019).

Generational differences in learning preference are not a big enough factor to justify tailoring training. It is recommended to create training that is not aimed at individual preferences. Training and development professionals should aim to create quality material that uses as much of the human senses and interaction as needed to create material that is engaging, stays in long-term memory and become a successful learning experience, while staying within the time frame and budget determined to be effective, efficient, and appealing. With any course design, evaluation should include assessment of whether training addressed the organization's targeted outcomes. This evaluation presents an opportunity to identify improvements that can be made to courses by instructional design professionals who now know to use trepidation in assigning blame to generational differences.

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