

Role Based Training in the Digital Age

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Introduction

Today's global market is inundated with the challenge of coping with advancing technologies. Companies are striving to sustain their businesses through innovations yet fail to equip their employees with the necessary skills for adaptability (Hamel, 2006). Businesses that have not been able to change with the dynamism of the market have recorded significant losses. According to the Global Simplicity Index (2013), the 200 top companies in the world have recorded a gross loss of \$237 billion, which represents about 10% of their total profits. This loss translates into a "mountain of waste, inefficiency and missed opportunity" (McDermott, 2013, p.2). Unfortunately, this is not merely a managerial issue. Employees suffer from this loss and companies' inefficiencies.

At the core, missed opportunities can be attributed to an employee's predictable nature. Employees have not been able to adapt and change in the digital world in order to embrace new opportunities arising in the market (Hamel, 2006). However, in order to be successful and sustainable in the 21st century, companies need to become more agile and dynamic in their key operations, especially in employee training (McDermott, 2013, p.2). In addition, companies are faced with the challenge of transforming their employees' conventional ideology. Companies are failing to create scalable and sustainable role based training, which is key to coping with the digital age. The good news is that the current training trend shows that learning leaders are looking for ways to better engage the adult learner to ensure their employees "move from knowledge to skill to application" (Harward, 2016).

The opportunity lies in the ability to use role based training in organizations as a tool to cope with the new trends in the digital age. This would include training employees on key concepts as super-computing, smarter global based outcomes, cloud computing, digital

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economy-hyper connectivity, and cyber security (McDermott, 2013, p.3). The purpose of this paper is to explain the aspects of role based training from different theoretical perspectives, and how it can be applied in the real world today.

Literature Review

Constructivism Theory

According to the constructivism theory, learners are able to acquire new skills and ideas from their past experiences. Therefore, every individual develops a different solution for any common problem. This theory provides that a learner's knowledge is constructed as they "make sense of their experiences" (Driscoll, 2009, p.387). The role of the instructor is crucial in ensuring the learning process takes place effectively. The instructor helps the learner identify specific methods and strategies to actively explore complex topics/environments (Ertmer & Newby, 2013, p.57). Therefore, the function of learning is to improve one's reasoning ability and reflective awareness. Whenever an individual is faced with new challenges, he or she can apply his past experience to confront or solve the issue.

Based on constructivism, certain principles need to be applied for effective adult learning. The principles include that learners should be aware of the learning process, independent, and self-directed. Learners should show readiness to learn, through developing the learning need (Huang, 2012, p.31). According to the *8 Essential Elements of Project Based Learning* and the *International Society for Technology in Education (ISTE®)* standards, effective training must include certain criteria for 21st century learning (ISTE website). In relation to the constructivism theory, effective adult role based training must include the following:

- *21st Century Competencies*- "learners are eager to develop skills and competencies that are beneficial to the current world such as problem-solving, collaboration,

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communication, critical thinking and creativity/innovation, which are explicitly taught and assessed.”

- *In-Depth Inquiry* – “learners are engaged in an extended, rigorous process of asking questions, using resources and developing answers.”
- *Driving Question* – “project work is focused on an open-ended question that learners understand and find intriguing, which captures their task or frames their exploration.”

Behaviorism Theory

The behaviorism theory outlines that learning occurs when certain positive behaviors are demonstrated by the learner following presentation of specific environmental stimuli. With this respect, questions used in the learning process are regarded as stimuli, while the answers are the observed responses. The theory supports the idea of learning through motivation, where reinforcement may be used to promote the chances of a specific behavior being repeated in the future. Since learning takes place through stimulation, the learners need to be “reactive to conditions in the environment as opposed to taking an active role in discovering the environment” (Ertmer & Newby, 2013, p. 48). The theory provides that memory is critical to learning, and it becomes more efficient when the student exhibits certain behaviors repeatedly.

According to the behaviorism theory, measurable outcomes are used to assess the degree of acquisition of skills and knowledge. The learner should be exposed to pre and post assessment (Ertmer & Newby, 2013, p. 49). In relation to the behaviorism theory, effective adult role based training must include the following:

- *21st Century Competencies*- learners tend to identify current leaning stimuli such as emerging problems and innovations that elicit behaviors, which are positive and attract rewards.

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- *In-Depth Inquiry*- learners are involved in identifying problems from the environment and reacting to them.
- *Driving Question*- project work emphasizes on innovativeness that is achieved through repeated experiments until certain outcomes are observed.

Cognitivism Theory

Cognitive theories emphasize that the environment is important to the learning process. Feedback is considered paramount to acquisition of skills and knowledge. It focuses on the mental aspect of the learner that results in goal setting, planning, and organizational strategies. Memory is assigned a different role from that of behaviorism in that it organizes learned materials and stores them for easier retrieval (Ertmer & Newby, 2013, p.52).

In relation to the Cognitive theories, effective adult role based training must include the following:

- *21st Century Competencies*- learners are eager to understand complex ideas or concepts such as technological issues that are beneficial to solving problems in the current world.
- *In-Depth Inquiry*- learners identify complex problems from their environment for analysis and interpretation.
- *Driving Question*- project work is aimed at learners identifying complex problems in the current world that intrigue them into research to establish clear and meaningful solution(s).

Application and Relevance of Role Based Training

Impact on Learning

In order to initiate change, organizations must first understand and realize the real value and impact of learning and how it translates to its employees. We are in an era in which “direct

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instruction has come to an end” (Prensky, 2010, p. 10). In addition, it is prudent to acknowledge that the relevancy of the Internet (Web 2.0 tools), the emergence of “the learner as a digital native” and the adoption of new teaching methods have all majorly impacted learning (Ertmer & Newby, 2013, p.65). As “tools get faster, smarter, better and cheaper”, learners will have more access to these tools (Prensky, 2010, p. 9). Therefore, we are in an age where relevant training plays a critical role in shaping the learning process and outcomes.

One of the new teaching methods is partnering. Partnering is learner-centered and based on instructors presenting driving questions which helps the learners think for themselves. Driving questions allow the learner to take an active role in their own learning and the instructors take on the role of becoming a mentor or coach. Partnering has many forms. It can be used in problem-based, project-based, learner-centered, case-based, inquiry-based, and co-constructing learning (Prensky, 2010, p. 9). By partnering and engaging in relevant training, learners realize the importance of the subject matter and the reasons for learning (Prensky, 2010, p.17).

Basic partnering for relevant role based training involves inquiry-based learning which can ensure high standards for training content. The instructors focus on directing the learners to explore the most recent knowledge and expertise. It builds comprehension across and among important subjects based on requiring “well-supported (i.e. intelligent) responses” (Prensky, 2010, p. 39). It engages learners with real world data, experts, and tools that facilitates solving meaningful problems. From the constructivism theory, learning should improve the reasoning abilities of the learners. This is in agreement with standards of learning through inquiry-based learning. Quality content enables the learner to analyze issues from varied perspectives, and hence provide comprehensive solutions.

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Relevant role based training can position learners so that they encounter training that incorporates the key take-aways from learning theories. This approach allows learners to “foster mastery of specific tasks” with a structured foundation (Ertmer & Newby, 2013, p.61). With relevant role based training, training can be positioned so that the learner explores concepts or topics in various ways in order to obtain specific answers (behaviorism). The learners acquire extra competencies such as research skills when responding to the assigned tasks. The experience gained from the learning process can be applied in the future to tackle new ideas (constructivism). In addition, the research skills that are developed enhance the process of learning such that learners are able and willing to handle different tasks (cognitivism). Instructors can present driving question that are structured for specific job specific roles. This prompts the trainees to research the entire topic for correct responses (partnering). When all of this is aligned, the learning experience is genuine and the acquired knowledge can be utilized for solving problems in the future (constructivism). Therefore, the learner is able to find the correct ideas that can be combined to form a comprehensive solution.

Based on the constructivism theory, learning should be aimed at identifying a problem and giving appropriate solutions. The learners are responsible for the process of identifying and researching solutions. In regards to employees, relevance in the process of training ensures their problem-solving skills are directed towards the organizational goals and objectives. They are equipped with knowledge that enables them to observe and evaluate different situations in the organization, in order to obtain possible problems and propose solutions. With relevance in training, the trainees are familiar with most of the problems that face the organization both at the present and near future. Knowledge and experiences become dynamic. In this case, relevance ensures that the learners are updated in the areas of business priorities (McDermott, 2013, p.21).

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In addition, this aligns with the cognitivism theory that encourages learning of complex concepts that are aimed at solving problems in the practical world. The training environment can provide the appropriate opportunity to apply the learned skills and ideas (Driscoll, 2009, p.395). Learners explore the world based on their areas of study. This leads to discovery of new knowledge which is very important in 21st century learning (Lombardi, 2007).

From constructivism, cognitive apprenticeships have evolved. According to Brown et al. (1989), they suggested that learning is not independent from the context that it will be used in, such as real-world situations. Cognitive apprenticeships make sure that the learning environment (21st century) is appropriate for its learners. They create learning practices, physical environments and human support that ensure quality outcomes (Driscoll, 2009, p.175). The instructors are able to collaborate and share best practices that facilitate learner skill acquisition. Through cognitive apprenticeship, the learners are able to access materials and learning tools that aid them in understanding and applying the knowledge (Brown et al., 1989). In regards to employees, accessing technological tools enables a learner to conduct self-research and learn new ideas from different topics. In addition, cognitive apprenticeship facilitates the inclusion of the international community in the process of learning through online and face-to-face methods (Brown et al., 1989). With this in mind, the behaviorism theory provides that, the process of learning should be related to the environment for easier acquisition of the concepts being learned (Huang, 2012, p.33). Learning outcomes are affected by the environment where it takes place. Therefore, instructors should expose learners to different learning environments. When used appropriately, the learners are able to develop the need to adapt, which motivates them into understanding and memorizing of new concepts.

Creativity (Effects for Learners) – Partnering

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In addition to adapting to new situations, relevant role based learning has a domino effect to significantly change the learner's creative nature. Relevant role base training is a strategic approach that modifies the learners reasoning in different forms that foster innovation and creativity. When learning is learner-centered, the learners are able to discuss problems with their instructors that guide them to develop problem-solving skills. Next, the newly acquired knowledge is correlated to the problems that arise daily. Unfortunately, the learner does not experience challenges in analyzing specific solutions. The problem becomes that sometimes employees are faced with emerging issues (McDermott, 2013). However, relevant role based training enables an employee to critically synthesis emerging issues such as competition, contract changes, and new products or solutions in the market. The impact is that employees can be trained to discuss the issues without interference from the management and create long lasting solutions. Employees can also be trained to be in a position of identifying new market opportunities, which the company may expand its service or market share (McDermott, 2013).

Relevant role based training exposes the learner to a learning environments, which positively contributes to skill acquisition and practice. They interact with challenging situations and gain new knowledge for identifying problems. The learners can acquire additional skills by using technology tools and other instructional aids that are important in skill acquisition. With this approach, employees are able to utilize technological tools in conducting research for potential customers (McDermott, 2013).

Conclusion

Learning in the current world should be dynamic in order to equip learners with skills and new ideas that are relevant to surviving in this digital age. The problem facing the top companies can be neutralized through relevant role based training, where employees are exposed to skills

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that enable them to change with new trends. They are also able to create new ideas that help in solving current problems facing the industry.

Constructivism theory has evidence to support role based training through its principles and ideologies. It provides that learning should be based on discovery, learner-centered, and focuses on improving the reasoning abilities of learners. The theory supports relevancy role based training when the curriculum is designed based on current issues that allow learners to utilize technological tools into manipulating information.

Behaviorism theory emphasizes learning through exposure to the stimuli from the environment. It elicits specific responses that are important to skill and knowledge acquisition. Learners are motivated to repeatedly show positive behavior whenever they are rewarded. With reference to role based training, organizations can utilize rewards as reinforcement to acquisition of certain skills in trainees, which may include innovativeness and commitment to goals and objective attainment.

The Cognitivism theory also provides substantial evidence to support the idea of role based training. The theory emphasizes on the importance of the environment to learning of complex ideas. It can be reinforced through theory comparison, which ensures coherence in the curriculum and concepts taught to the learners. Applying the theory during employee training may facilitate their advancement in utilizing technological tools in conducting marketing and product promotion research.

Based on all this analysis, role based training shapes the learners or trainees into coping with current problems in the world. Organizations should embrace relevant role based training to strategically survive in the digital world. By using these strategies for role based training, learners are better equipped to make dynamic decisions in the workplace.

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