The CBT Nuggets Learning Experience

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A recent article on the ELearning Industry claimed that "Traditional eLearning is Dead," referring to a recent dip in the profitability of the eLearning industry. The article's provocative title is meant to draw you in and teach you about the new approaches to eLearning: It needs to be fun, bite-sized, campaign-driven, and social (Denny, 2017). With that in mind, eLearning is not exactly dead, but is taking a new shape in today's fast-paced digital and social world. CBT Nuggets understands the need for an adaptable, cutting-edge learning environment where the "Learning Experience" is preferred over traditional "transmission" models of education. It is no longer satisfactory to simply pass exams and train for new information — employers are progressively looking for people who excel at learning. In the IT world more than anywhere else, learners need to be adaptable to an ever-shifting landscape of technology — beyond IT, the U.S. Department of Labor considers the skill of learning a major component in its Commission on the Skills of the American Workforce. A recent survey of CBT Nuggets learners cited the desire to remain marketable as the number one factor driving them to train. The CBT Nuggets Learning Experience functions on the emphasis of the learning process, implementing a learning system that encourages users to return to training and apply learning skills to training in the future.

This paper is intended to walk you through the CBT Nuggets Learning Experience, and how it considers both long-standing and contemporary research on adult education and IT training.

Theoretical Overview

In his groundbreaking model on education, Kolb (1984) looked to combine the pedagogical theories of multiple renowned scholars and philosophers to develop his "Experiential Learning Cycle." Education was once thought to be a one-way or two-way transmission process, where information is delivered in some form and passively received by the student — upon which the information is "obtained," and "learned." From the 1950s onward, however, our understanding about learning have complexified, taking into consideration varying contexts, experiences, as well as teaching and learning styles. According to Knowles, a leading scholar on adult education, "experiential learning approaches have the dual benefit of appealing to the adult learner's experience base as well as increasing the likelihood of performance change after training" (Knowles, 2015). For 30+ years, Kolb has been developing a comprehensive set of guidelines and assumptions about learning as a process, drawing on (1) The Lewinian Model of Action Research and Laboratory Training; (2) Dewey's Model of Learning; and (3) Piaget's Model of Learning and Cognitive Development. These three theorists, among others, emphasize the experiential aspect of education, and in synthesizing their models of learning, Kolb compiled six basic tenets of a theory of experiential learning.

1. "Learning is best conceived as a process, not in terms of outcomes."
As mentioned above, this belief is an overriding component of experience-based learning systems, and is rooted in the assumption that effective learning is ongoing and process-oriented, instead of the traditional focuses on results and outcomes. According to Kolb et. al, education with only an outcome in mind is a dead-end for learning and developing as a learner.

2. "Learning is a continuous process grounded in experience."
While this concept sounds like a recycled version of the previous one, it means to emphasize the process of using one's experiences to reconcile with new information, which in turn modifies or eliminates the need for the old information: "If the education process begins by bringing out the learner's beliefs and theories, examining and testing them, and then integrating the new, more refined ideas into the person's belief systems, the learning process will be facilitated" (Kolb, 1984).

3. "The process of learning requires the resolution of conflicts between dialectically opposed modes of adaptation to the world."
This tenet elaborates on the reconciliation of the previous concept, where learning is always supposed to be a process wrought with tension between old information and new information. While this points to more philosophical understandings about education, it

essentially means that the point of learning begins with, and is inherently characterized by that struggle to reconcile experience and new stimulus.

4. "Learning is an holistic process of adaptation to the world."
A holistic process of learning encompasses not only the traditional conceptions of cognitive apprehension, but includes various "adaptive learning activities" such as creativity, problem solving, decision making, research, investigation, etc. This tenet implies that learning is a complex process that goes beyond just the simple act of being presented with and memorizing information.

5. "Learning involves transactions between the person and the environment."
By "transactions," Kolb is referring to the reflexive interactions of the person and the environment. The majority of established learning theory to this point argues that environmental factors play a major role in the quality or efficacy of learning. This statement is meant to emphasize both the environment's effect on the learner as well as the learner's effect on the environment — the combination of both creating the conditions for a given learning situation.

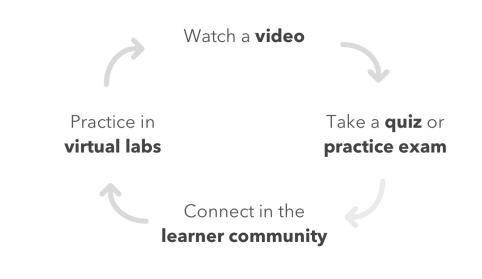**6. "Learning is the process of creating knowledge."**
Finally, the sixth tenet of experiential learning is a philosophical comment on the nature of knowledge itself. In Kolb's conception, knowledge is "the result of the transaction between social knowledge and personal knowledge," which encapsulates the earlier tenets to argue that knowledge is what emerges from personal experience and understanding in interaction with new information in the world.

Kolb's Experiential Learning theory culminates in a model of experiential learning: "this process is portrayed as an idealized learning cycle or spiral where the learner "touches all the bases" — experiencing, reflecting thinking, and acting — in a recursive process that is responsive to the learning situation and what is being learned" (Kolb, 2005). The above six assumptions are integral theoretical frameworks through which to view his learning cycle, as well as the CBT Nuggets Learning Experience model, which echoes some of the same core foundations of Kolb's iteration.

The CBT Nuggets Learning Experience

In the forthcoming pages, we will be able to understand the similarities and differences between the Kolb Experiential Learning model and the CBT Nuggets Learning Experience. First and foremost, the CBT Nuggets Learning Experience is constructed for today's IT learner, taking into consideration the busy schedule and demanding training needs of an IT professional. With CBT Nuggets' holistic approach to the learning cycle, thinking, feeling, acting, and watching are integrated in each step of the learning process. CBT Nuggets' unique training style, combined with its myriad other resources for learning, reflecting, and practicing, allows for users with different learning styles to work from the stage they feel most comfortable. Additionally, the modular nature of CBT Nuggets training delivery system allows for a unique scalability (Kovachev, 2011) with options to train on a variety of devices in a variety of environments — all to better accommodate the learner.

From here on, we will take a closer look at each step within the CBT Nuggets Learning Experience, starting with the original draw of CBT Nuggets' unique training videos and ranging all the way to cutting-edge training technology and virtual practice labs.

Watch a **video**

Take a **quiz** or **practice exam**

Connect in the **learner community**

Practice in **virtual labs**

CBTnuggets

Watch a Video

Generally, the first step users take with the CBT Nuggets Learning Experience is to watch one of the hundreds of uniquely memorable and engaging training videos. In a previous research publication, CBT Nuggets training videos were analyzed with specific social-psychological theories of behavior and mental modeling (Strait, 2014). This research concluded that the unique conversational and anecdotal style of elite trainers significantly improves training retention, efficacy, motivation, and desire to return to training.

An integral component of an experiential learning process is the stage of concrete experience and/ or knowledge transference. The earliest and most foundational scholar on adult education, Edward C. Lindeman, concluded that "experience is the richest resource for adults' learning; therefore, the core methodology of adult education is the analysis of experience" (Lindeman, 1926). In Kolb's conception, this stage is referred to as "concrete experience," which in the context of eLearning translates to a video, lecture, or simulation where the user gets to watch the instruction of the skill being learned. It is important to note that within this category of a learning cycle, different users bring different experiences, environments, and learning styles to the table.

The modularity and playback options of CBT Nuggets training allows for a more flexible "concrete experience," setting a strong foundation for users with differing learning styles, as well as for accessibility in various environments and for users with different skill levels. For example, a seasoned systems administrator brushing up on the latest Microsoft MCSE exam updates can set a video to a higher speed and watch it on a train commute. Conversely, a human resources manager can learn the ins and outs of Microsoft Excel at his or her own pace on a personal tablet on the couch in the living room.

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I like the courses that are broken down into bite-sized sections so that I can dip in and out depending on how much time I have available. The mobile app is great for this.

Will
Systems Engineer

Take a Quiz or Practice Exam

CBT Nuggets training videos contain quiz questions either at the end of the video or interspersed throughout, whereupon learners are encouraged to reflect on their lessons as soon as they can by testing their memory on the training topic. They can also try to apply their new or refreshed skill sets to a practice exam. Both options encourage a degree of reflection necessary for effective learning as well as time-sensitive retention. The Online Learning Glossary argues that in order to combat Ebbinghaus's Forgetting Curve (1885), where learners forget new information at an exponential rate over a relatively short time period, educators need to enforce regular training with relevant and clearly deployed content. Additionally, an interactive aspect to learning will not only encourage learners to train more frequently, but will help them learn better and retain that information for a longer period of time. When asked about learning preferences and styles, a number of CBT Nuggets users cite attention disorders or general difficulty staying on task. These quizzes allow for a break in the lesson and a quick reflection and refocusing around the topic at hand.

In Kolb's model, this stage can fulfill the process where the user reflects on the learning experience, referred to as "reflective observation." Immediate testing on material triggers a reflective state which can improve retention and comprehension of the material. Additionally, the results from the quizzes are accessible to company administrators as well as the CBT Nuggets coaching team.

Another unique resource available to CBT Nuggets customers is coaching, where a team at CBT Nuggets help to compile lesson plans and track progress of learners' training. Company administrators can then review information and work with the coaches to determine the most productive and helpful learning paths for their given needs. The latest research in eLearning posits that the strongest benefit to eLearning as opposed to traditional models of education is the capacity to adapt lessons and curriculum to the unique needs of learners. The automatic assessment available in eLearning environments provides a unique opportunity for educators to "dynamically revise and deliver instructional materials in accordance with learners' current progress" (Kumaran and Sankar, 2013).

In education studies, there are two general types of assessment employed to check on learner progress: Summative assessment periodically tests what students know and do not know — we can think of summative assessment like a standardized test, such as the LSATs or a Cisco CCNA exam; Formative assessment, in contrast, provides data to instructors that allows them to adjust the learning plan to better adapt to the learner's progress. Marzano (2009) argued that formative assessment, like that made possible by CBT Nuggets quiz data and coaching combination, has a powerful impact on student achievement as well as their motivation levels.

Connect in the Learner Community

The CBT Nuggets Learner Community allows users to reach out to IT professionals, trainers, and training experts to seek out answers to questions ranging from the most specific programming quirk to general advice about career paths. Users in the community are supportive of one another, helping to provide motivation and congratulations when others are aiming for or reaching milestones in their training and certification processes. Pratt (1988) argues that adult-specific "readiness-to-learn," a prominent category of adult education studies, derives from two major needs: direction, or the level of dependence of the learner on an educator and curricular path; and support, which describes the level of emotional support needed by a learner. A learner's confidence and his or her commitment combine to equal the amount of emotional support a learner requires. For instance, a learner training for a CISSP certification might have a high level of commitment, but lack confidence in his or her ability to pass the exam. That gap in confidence can be bridged with support from a learning community.

Research shows that the option to learn within a community can be highly beneficial. Not only is an online learning community a 24/7 resource for learners seeking quick answers, community-regulated learning (CRL) facilitates regular peer assessment based on expertise and reputation. Pham et al. (2012) concludes that "recommendations are not limited to learning goals, resources, activities, and tools but also include learning peers on the community level." This implies that once working within a learning community, learners can break through the normal teacher/student boundaries to form significant learning relationships and practices. Because of the nature of online learning communities, roles are dynamic and not institutionally bound, allowing for trainees to participate in learning as well as teaching positions. In spending this quality time with the learning community and the material being discussed, learners can partially fulfill Kolb's third stage of "Abstract Conceptualization," wherein the learner "considers thoughts and reflections to identify the significance of the learning experience and considers what may have been done differently to enhance the outcome" through discussions and exchanges with other learners. The simple act of articulating a question about material that one is struggling with, according to research, immensely improves cognitive comprehension and retention length.

Practice in the Virtual Labs

One of the more dynamic resources from CBT Nuggets is virtual labs, where learners can actively practice the skills they are learning. Users can access virtual labs (production environments) from their internet browser and apply their new skills or experiment safely within the sandbox environment. It goes without saying that actual experience with the material is a core component of experiential learning. For Kolb, this practice is referred to as "Active Experimentation," where the learner tries out the new skills in the world (in this case, a virtual environment), and through experimentation with that interaction, further solidifies comprehension as well as adds to the base level of experience for the learner to start the cycle anew.

While in other schools of thought on learning experience plays a less central role, experiential learning models recognize that hands-on experience plays a crucial part in concert with cognition, behavior, and perception (Kolb, 1984). Kolb is primarily influenced by Lewin's (1951) problem solving model, which looks specifically at action research and laboratory training as integral to effective learning. Herein, the learner receives "feedback" from experimental practice that produces data that the learner can then use to determine "deviations from desired goals," which, in turn, enables goal-directed action.

Learning programs, such as online IT training like CBT Nuggets, can be considered a genre of education focused on "learning transfer," where training is intended for obtaining skills to then be used vocationally. Transfer here refers to the degree to which those skills can be successfully implemented after training. Learning transfer is a complex subject in its own right, but is particularly geared toward improving adult education programs. Education scholars Furman and Sibthorp (2013) argue specifically that "experiential learning techniques foster a depth of learning and cognitive recall necessary for transfer," providing a number of relevant adult learning programs that are made more effective with experiential learning tactics.

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I just used my first virtual lab in the new Server 2012 course and it's a pretty amazing feature. It allows you to get that "hands- on" application with systems you may not personally have access to, and to make changes you wouldn't want to make on a production (or maybe even home lab) system.

Michael
IT Support

Conclusion

In conclusion, the experiential learning cycle is an ideal theoretical formulation to evaluate adult online training platforms such as CBT Nuggets and its Learning Experience program. Experience-based learning is specifically advantageous for adult online training programs, and the resources CBT Nuggets provides effectively fulfill the stages of the Experiential Learning Model. Practice exams and video training tests allow for a stage of observation and reflection, while the CBT Nuggets learning community provides the necessary support for learning environments geared toward learning transfer-related vocations. Additionally, the virtual labs allow for a uniquely optimal practice environment for learners to experiment with new skills. The CBT Nuggets Learning Experience provides the tools and resources necessary for improved learning, longer retention, community support, and concrete practical experience.

Learning is best conceived as a process, and the CBT Nuggets Learning Experience uses a cycle of training, reflecting, connecting, and practicing to accommodate all types of learners at all levels.

Video training facilitates concrete experience with material, which is tantamount to effective adult learning processes. The modular nature of CBT Nuggets' video playback options allows for a scalable learning experience for users of all education levels.

Practice exams and in-video quizzes provide a state of reflection and observation for users, as well as produce curriculum data for administrators and accountability coaches who can, in turn, improve the learning process by adapting the learning path accordingly.

Experiential interaction with learning material is proven to extend the "forgetting curve," and facilitate longer and stronger retention of information.

The CBT Nuggets Learner Community provides ample support (both technical and social) for learners, which is proven to improve performance and motivation.

Virtual labs allow learners to practice and experiment with new skills, which is argued to exponentially improve learning efficacy, motivation, and goal-setting.

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