

EXPERIENTIAL LEARNING TOWARDS COMPETENCY DEVELOPMENT IN WORK FORCE TRAINING

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Abstract

The Indian industry overviews the corporate training market, which is estimates to be worth about 2500 crores, in which 60 percent accounts to technical skill and the rest 40 percent would be soft skills. This comes from a study combinedly done by Institution of Engineering and Technology (the IET), and Feedback consulting. In another study done by IMARC group, the India soft skills training market is anticipated to show a CAGR of 15.14% during 2022-2027. Professional soft skills training enables the workforce to enhance their individual attributes, efficient communication and manage a positive relationship with in the organization and also in the business environment. The effectiveness of the training, whether technical or behavioral depends on the methodology which is deployed for the training and its affinity on the participants. As the cohort of employees have been changing over the years, the present generation does not accept the old methods of class room training, listening to continuous slide decks and lectures. Experiential learning and engagement are the formula which works in today's learning and development atmosphere and simultaneously technology is also a major factor in this game. In this work we will see what are the general methods of training in the industry and also the new methods of experiential learning and gamification adapted by the system. A brief overview of the science which explains why experiential learning is more effective method in learning and its implications.

Keywords: *Soft skills training, Technical training, Experiential learning, Gamification, Blooms taxonomy, Kolb's model, Neurology.*

INTRODUCTION

Today's job roles demand, one to be exceptionally competent to achieve his professional goals and be successful. Once the person is employed in an organization, right from onboarding there is a periodical upskilling happening all through his career journey. These are usually advised by the department head and facilitated by their training department. This learning environment in the organizations are predominantly captive with a deluge of information delivered to the participants and is compelled to be learned in a very short period. The

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influence of the andragogy is measured post training and its always speculative when it does not prove results. Later when the management assess performance and does not see visible improvement, they end up putting a blame on either the participants for non-involvement or the trainer's ineffectiveness. What the management fails to see is the whole mechanism through a bird's eye view to detect the gaps.

OVERVIEW OF EXPERIENTIAL LEARNING IN TRAINING DOMAIN

Definition of Experiential Learning

The experiential learning methodology is a well-adapted model in the field of education, training, facilitation, coaching and in the management of organizational development. There are different terms applied to the process of learning from experience. John Dewey (Dewey and Dewey 1915) discussed "learning by doing," while Wolfe and Byrne (1975) used the term "experienced-based learning." [1] J Hoover emphasized upon the learning of behaviours. In a jointly published paper (Hoover and Whitehead 1975, p. 25), the definition given was: Experiential learning exists when a personally responsible participant cognitively, affectively, and behaviourally processes knowledge, skills, and attitudes in a learning situation characterized by a high level of active involvement. [1]

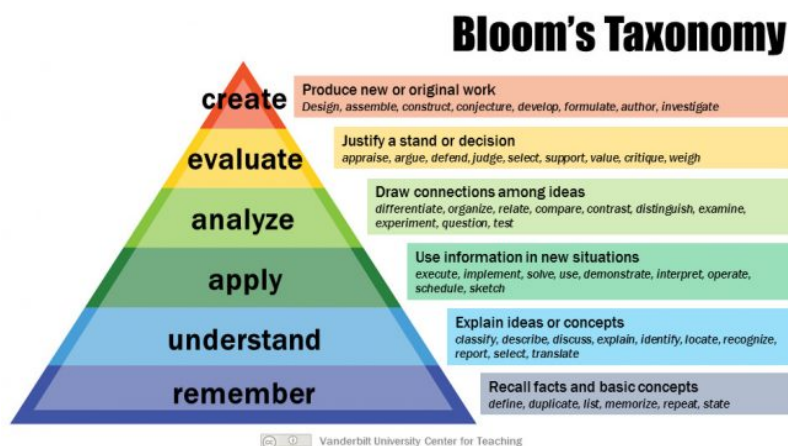
Learning Methods

The widely accepted learning modalities are Visual, Auditory, Reading/Writing and Kinaesthetic which is shortly called VARK. The pedagogy should consist of elements which are Visual, Auditory or speech, Written material to read and modules which can be demonstrated or experienced practically. The modules in today's corporate learning are prepared keeping these modalities in mind and it generally works to the requirement. But effectiveness in learning and affinity to the subject will happen on when more of kinaesthetic mode is applied during training process. To understand better let us explore the mechanics of cognitive learning.

Bloom's Taxonomy

The concept of learning has been studied and implemented into a classroom ecosystem, predominantly by Bloom's Taxonomy of Cognition. This is a set of framework models formed in order to be used for classification of educational learning objectives based on the levels of complexity and relevance. It's named after Benjamin Bloom, who initiated a study in 1956 for categorizing educational goals with a team of educators and facilitated in devising the

taxonomy. This framework model has been followed by the teachers to instructors from all over the world. Since the initial formation of the framework by Bloom, it has later gone through periodical changes based on further research and new findings while applying its fundamental principles. It resulted in forming a revised framework in 2001 done by a group of theorist, researchers and cognitive psychologist. The concept of the classifications is as giving in Fig 1.



(Fig.1)

Explaining the concept these 6 levels can be used to structure the learning outcomes, lessons, and assessments of a training or course.:

Remembering: *This actions in Retrieving, recognizing, and recalling relevant knowledge from long-term memory.*

Understanding: *This actions in Constructing meaning from oral, written, and graphic messages through interpreting, exemplifying, classifying, summarizing, inferring, comparing, and explaining.*

Applying: *This actions in Carrying out or using a procedure for executing, or implementing.*

Analyzing: *This actions in Breaking material into constituent parts, determining how the parts relate to one another and to an overall structure or purpose through differentiating, organizing, and attributing.*

Evaluating: *This actions in Making judgments based on criteria and standards through checking and critiquing.*

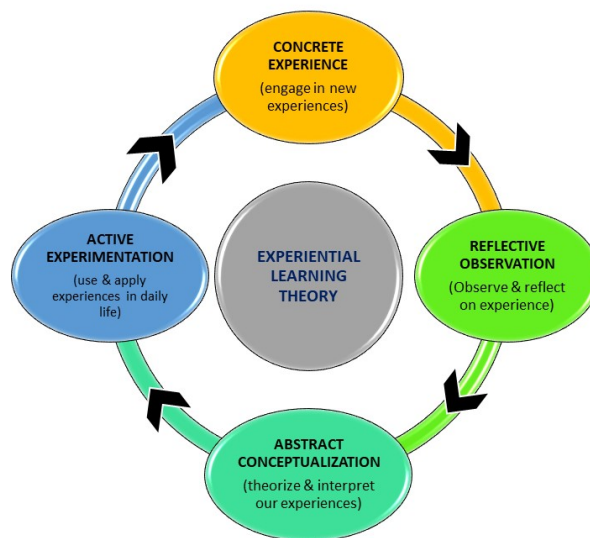
Creating: This actions in Putting elements together to form a coherent or functional whole; reorganizing elements into a new pattern or structure through generating, planning, or producing.

Bloom’s taxonomy is hierarchical, which means that learning at the higher levels is reliant to have prerequisite knowledge and skills at basic levels.

Kolb’s Concept of Experiential Learning Theory

The study on experiential learning was pioneered by many scientists in the late 20th century and one amongst them is David Kolb. He published his experiential learning theory in 1984, inspired by the work of the gestalt psychologist Kurt Lewin. He theorized that learning occurs best when pressure occurs between experience and theory further when groups are encouraged to analyze this tension through their subjective experiences. [2]

The learning cycle analyzed by Kolb basically involves four stages, namely: *concrete learning, reflective observation, abstract conceptualization* and *active experimentation*. Here effective learning can be seen when the learner progresses through the cycle. It is apparent that the learner can also enter the cycle at any stage of model with a logical sequence.



(Fig:2)

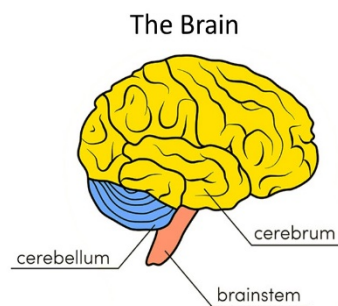
Neuroscience of Learning

To understand the way how learning happens in the neural system or the brain let’s look in to its physiology and how it functions. The brain consists of 100 billion neurons, which are the

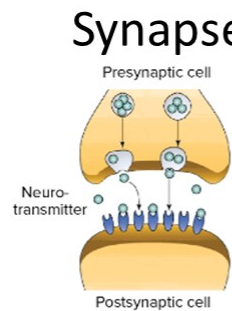
fundamental functional units of a brain and nervous system. It is responsible to receiving sensory inputs from the environment outside our body, send commands to our muscles to function and relay and transform electric signals in the process. The main parts of the brain are the brainstem, cerebellum and cerebrum (fig 3). The cerebrum has certain key sensory functions which are sight, speech, hearing, touch, short-term memory, long-term memory, language and reasoning abilities which are fundamentally important for learning.

Mechanism of Learning and Retention

Through billions of the neuron networks, sensory information is transmitted through the junction between two neurons called synapses. (See Fig 3-A) The information passed along the neural pathway are stored temporarily in short-term memory, a subtle region



(Fig. 3)



(Fig.3A)

of the brain that acts like a receiving center for the load of sensory information we encounter throughout the day. The brain's neural pathway carries the processed short-term memory to the structural core, where they correlated with the existing memory and stored in long term memory portion of the brain which is an archive of all our experiences. The process happens instantaneously but goes through some degradation due to imperfect transmission, hence may not be perfect and therefore memories become incomplete. The learning and memory formation are made by the strengthening and weakening of the connections amongst the neurons. It was found in an experiment with mice, that they were able to observe the actions of the brain while learning to do and perform a new task. The scientist found that when two neurons frequently interact, they form a bond that allows them to transmit the impulses more easily and accurately, which leads to complete memory formation and easier recall. The research has important significance in learning, mainly the way we acquire new knowledge, storing and retrieving when needed. While learning new things, memory and recall are reinforced by frequency and recency. The reiterative practice of something very new and recent, it becomes easier for the brain to transmit and retain it in memory, for an easy recall.

GAMIFICATION IN TRAINING

The importance of training the employees of a company or enterprise is managed by the learning and development team. They work with department heads and find the need and identify the topics to upskill and develop the competency of the workforce. The management has the responsibility in the career development of their employees and create a roadmap as part of the vision and mission of the organization. But a common drawback in the employee training program is that they do not see a value and only feel it's a burden, except for a few. At the same time, it's also important to map the employee experience during the program and get their feedback. To make the experience better and the training more effective many company's managements are adapting modern and latest methods in the training program which keeps the learning experience engaged. The experiential learning method is now getting into gamification and creates a much better output and results.

The Mechanics of Gamification

The definition according to Kapp gamification is “using game-based mechanics, aesthetics and game thinking to engage people, motivate action, promote learning, and solve problems.” (Kapp, 2012) [3]. In training, gamification is a process of using game elements, workings and principles, imbibed with the modules which is mostly theory based. It is then debriefed to comprehend the essence of core subject in a much simpler manner. According to Gabe Zichermann, cited by (Giang, 2013), the application of game mechanics enhances the abilities to learn new skills by 40%. Game mode led to higher level of commitment and motivation of users to activities and processes in which they are involved. Game procedures are familiar to the participants as most of them have played or continue to play different games. Although this conclusion applies to companies and their employees, it is unconditionally true in the field of education.[3]. The game mechanics has some key elements which are the nuts and bolts of game and here are some examples:

Goals – *The participant finish the task and get a reward, (badge or points)*

Status – *Participant get elevated in their level through completing activities. Leaderboards indicates who is ‘winning’ and inspires to work harder.*

Community – *participants are paired or put in groups to solve problems.*

Education - *Tips, tricks and quizzes are given throughout the process.*

Rewards - *Points and badges are common and other rewards could be any useful items benefiting the employees.*

CONCLUSION

Its apparent that in today's workforce management that training and development is very much an integral part and the present-day management is looking for optimum skill level to improve their competency. It is also a herculean task of the learning and development department to map the skill levels and keep the employees in peak level performance. For effective upskilling the HR and the management together spend huge amount as investment in their training program, rolling out the best and the latest. In spite of these year-round exercise many programs fail due to ineffective training design and delivery. Study and research prove that the method of andragogy has to have enough engagement and experiential learning to see a transformation in the participants. The learning management system also keeps measuring the ROI of each training program using tools like Kirkpatrick's evaluation method and Likert scale to get, on the ground feedback. All these evaluation systems have proven the management that experiential learning in technical and non-technical trainings have demonstrated results and thus measuring their ROI by enhanced competence levels of the participants. This is a scientifically proven method and today all learning methodology from the academic level to career upskilling applies various forms of engagement to give a result-oriented training delivery.

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Links:

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