



## **EXPLORING FACTORS OF E-LEARNING RELATED TO STUDENT ENGAGEMENT**

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### **Abstract:**

*This research focuses on exploring the factors which relate learner engagement with E-Learning. It tries to explore the strength of the link between learner engagement and E-Learning. E-Learning in today's world has become a common mode of study and knowledge dissemination. E-Learning is an educational, training and learning method which is spreading widely and becoming a popular method of delivery among both educational and corporate environments. Is it beneficial for educational institutions and organisations to choose blended learning that is face-to-face learning combined with e-learning is another question, however; e-learning has become a major choice of knowledge distribution and attainment in today times due to the advantages it provides. Some advantages which are evident include, E-learning is offered on mobile devices, personal digital assistants and portable devices which enhance learner convenience, allow a digitalised learning experience to the learner, and help accommodate the learning needs of individuals in their lifestyle. Training, even if it is online goes through the phases of planning, content development, scheduling, delivery, assessment and re-training if necessary. At most training scenarios, training professionals are engaged in all the above activities, however; sometimes the trainers are engaged in only the planning, delivery and follow-up, there are other persons who have developed the content. The top driver of training effectiveness is content preparation and its adaption to the mode of delivery. The learners' thirst for the information being provided and his curiosity to learn more can be termed as 'learner engagement'. Although the trainer might have a cumbersome learning material with substantial interest in its content, the learning cycle and the rationale of E-learning will not be complete, if the learner does not absorb and comprehend the matter. The concern for learning and gaining knowledge should be visible and also manifested by the learners' actions to ensure that one has an engaged learner. This research is an effort to explore the gains and shortcomings of using this technique of online training or E-learning. It also explores the factors integral to this technique, which contribute towards learner engagement.*

**Key Words:** Learning, Online Learning, E-Learning, Employee Engagement & Training

### **Research Objectives:**

This research is an effort to explore the factors inherent in e-learning that relate to learner engagement.

### **Research Methodology:**

This research is an analysis of data obtained from secondary sources. Data is obtained from books, journals and internet references.

### **Introduction:**

Online learning or training has been a chosen alternative over live, classroom program since a long while now. Both educational and corporate sector take advantage of this for the reason that it is simple and can be used very effectively. Use of e-learning is done for online courses for students, for employees, for business partners. It is a

method which saves time, cost and reduces the inconvenience of travel. Organisations of all types and sizes today, are bent to replace live training with online training or atleast reduce the number of instructor-led trainings and shift to e-learning. Most online tools are interactive and intend to drive higher engagement of learner. Today, online learning is availed for purposes of training in software, technology, business, customer handling, and much more.

Online training, not only can be utilised in multiple ways, but has multiple benefits also. There is an ever changing trend and upgradation in the tool of online training and new modes of knowledge dissemination. This update is also an effort to improve the levels of learner engagement, retention, ease and motivation. The term 'engagement' can be defined as the level of attention, attraction, interest, thought, bonding and commitment that is present between two or more entities. In case of e-learning, it is the learner's engagement towards the topic of learning, material, process, tools, instructor, attention to delivery, feeling of obligation to understand material, complete assessments and gain mastery of the matter intended to be conveyed through online learning. This research explores the factors of e-learning process which are contributing and moderating towards learner engagement.

#### **Digitalisation:**

The digital touch is the cause of revolution in all industrial sectors, and so without an iota of doubt, it has mesmerised the educational industry also. According to a McKinsey Survey, (May 2016), authors Richard Benson-Armer, Arne Gast, and Nick van Dam, 120 senior learning-and-development (L&D) officers were surveyed to gain a more in-depth understanding of the present state and probable trajectory of corporate academies. A benchmarking was also done where 'best practices towards leaning' was the topic of research, and about a dozen of Chief Learning Officers were interviewed. Apart from other findings related to formal learning, and the methods of knowledge dispersal in organisations, digitalisation learning opportunity was discussed. It is observed that younger employees—millennials and post-millennials, or Generation Z—feel the greatest level of comfort with digitization.

Integrated cloud-based platforms enable more than just new computer programs or nifty smartphone apps. Sophisticated organizations are now expanding their use of cloud-based learning to run such personalized applications as MOOCs (massive open online courses), SPOCs (small private online courses), instructional videos, learning games, e-coaching, virtual classrooms, online performance support, and online simulations. (McKinsey Survey, May 2016).

#### **E-Learning – Its Opportunities and Challenges:**

##### **Shortcomings of E-Learning:**

**Faces Challenges in Terms of Recognition on Learning Programmes:** It is indiscriminately argued that online courses have no value or accreditation in the job market. Bureaucratic organisations and those with set mental models of courses which the employees must be certified in, at most times do not prefer hiring candidates with non-accredited qualification. It is however not so always. Recent times have shown online courses offered by universities, to get the official recognition and the organisations displaying flexibility in accepting candidates who hold these qualifications.

**It is Like Self-Learning and Hence Requires the Individual's Motivation:** Online courses or any informal learning is based on the learner's whims and fancies. The learner must have a sense of responsibility, motivation and drive to self-pace and

monitor his own learning. This depends on the learner's motive or need behind gaining the requisite knowledge.

**The individual may or may not answer the e-learning tests with his own abilities:** It is a challenge to gauge whether the learner has himself performed the tests to assess his knowledge for the material shared with him. It is possible that an online learning system may not be truthfully and honestly answered by the one it intends to groom.

**The transfer of learning to real-time application (practical) is questionable:** It is highly disputable for one to believe that online learning enables transfer of skills on the job. This requires the learner himself to reproduce the principles and practices learnt while he is on the job and indulge in a repetitive behaviour using the concepts, for that behaviour to become a habit.

**The learner may lose interest soon and may become disengaged:** It becomes difficult to engage the user of the e-learning facility as it is not face-to-face and direct. The learner may wander in thoughts and may not have a significant attention span to absorb the nuances being delivered. The learner may be multi-tasking at the other end, which may be difficult to control by the trainer.

**The learning style of the learner cannot be considered while designing e-learning courses:** This is because the learners are distant and never come in contact with the programme designers and the trainers of the online course.

**Learner may face difficulties due to technological glitches:** Certain learning matter or plug-in in the online program may require a level of technology or software which may not exist with the learner. This may make the learner feel helpless and may cause time lag in learning.

**Lack of social interaction which a physical classroom can bring to the learner:** This contributes to a major part of the learner's understanding of different perspectives on topics. Interaction with others is necessary for exchange of ideas and experiences.

**Perceived Anonymity:** Although the learner may have access to, or may be presented with, a profile or resume, of the teacher or trainer, and may be able to see the trainer via webcam facility, there is limited access to facets like body language, eye contact, physical presence.

**Online learning can have several benefits also:** The benefits to online training, have by far and large superseded the shortcomings which are discussed earlier. However continuous improvements, adaptations and customisations are ongoing.

**Provides learning opportunities on a continuous basis:** Online learning courses are relatively easier to get registered for. These provide the mind food for thought and also help the learner to constantly be engaged with the latest developments in the topic of interests.

**Provides convenient learning:** The mode of learning is convenient and easy. It is accessible at all places using a personal desktop computer, laptop and today even using palmtops.

**It is a self-paced learning method:** It provides the learner with learning at his own speed. The learner can spend hours with the learning content and analysing the matter, researching on the topic.

**Makes it easier to track the learner's progress:** Learner progress and understanding can be monitored via continual online assessments, discussions on topics. The progress can be traced via the click of a button and the students who may need more coaching on the topic can be scheduled for further online sessions.

**Can be applied to a diverse area- can be used in education and in corporate:** Online training and learning can be used in a diverse way. It is used to deliver formal education as well as a mode for corporate trainings. It is also used by curious minds as an informal method of exchanging thoughts and ideas, culminating into new learning on a topic. Thought communities and communities of interest have come together on the internet from all over the world. They are focussed, effervescent and passionate about their subject of discussion.

**Anonymous polls and chat conversations:** Virtual classrooms, webinars have the facilities like unidentified polls which helps gain opinion of the participants. The participants can show their agreement or disagreement towards a topic, without any inhibitions. There is also a facility where all the participants can enter into a chat conversation, with each other and with the trainer.

**Multiple facilities and options:** Has the option of sharing the screen to show presentation, documents, or a software application. Participants can use VoIP to speak to each other and the trainer. Other facilities like inserting smiley, emoticons during the session can be used by the participants to give on-going feedback to the trainer. The trainer may also receive feedback after the session through the virtual classroom application, which may have a facility to record the students' reactions after the session and prompts the student to provide a feedback.

**Provides learning facilities to the workers who are working remotely:** For the agents who work remotely, the organisation can provide learning and training facilities of a virtual classroom.

#### **En-Cashing the Benefits of E-Learning:**

**Broadening Horizons:** Online learning today, is not restricted to limited topics. Topics vary from personal ideas and themes, broad areas like management, science, history, mathematics, etc. Online learning is also not constrained for the approach exercised to reach out to individuals. It uses virtual classrooms, online forums, discussion groups, test and assessment submissions, case study methods, etc.

**Has a facility like video recording lectures:** Online learning not just speeds up learning and facilitates a self-paced learning, it also has facilities of recording sessions of learner and trainer interaction. This can be used as an evidence of study and also can help the learner listen and view the recording at a later date, for a refresher; or help a learner, who has missed the session listen to it.

**Saves travel and increases the reach:** Online learning saves time and costs of reaching to a place or institution where the training session will be held. It also introduces global standards to globally operating organisations.

#### **Learner Engagement:**

Technology can be put to good use by creating reusable content and can reduce cost of delivery for the organisations. It is just a said thing that online learning must be boring. It can be made fun too. At Google, the Googlers-Teaching-Googlers (G2G) program has already offered around 200 courses globally in the in the first half of 2009. Their G2GTV is being developed to feature short videos in which Googlers teach one another about a wide range of topics like Sales, Working, Smarter, Health and Fitness, and Engineering. Similarly, they have resources such as GWhiz, where any Googler across the world can register himself as available for questions/ mentoring on any area of expertise, allowing all other Googlers to consult him/her. This further fosters the concept of Googlers teaching one another.

Web-based learning delivers knowledge to the learner's desk. The knowledge and course materials which are delivered in a physical classroom can be replicated and

put forth on the screen of the learner. The recent advents in the e-learning scenario are increasing use of learning management systems, webinars and virtual classrooms.

Can the solution to this be blended learning? That is the knowledge delivery methods can involve face-to-face as well as online learning, and such other multiple delivery modes. However, these learning methods must be designed in such a way that they complement each other.

Dr. Reddy's Laboratories, the company has its learning webpage on the intranet, which caters to the developmental needs of the employees across the globe. The learning webpage has key features like, information on training programs running in the company, the learning blog which disseminates information and captures information about learner needs, any employee can mention his/her training requirements on the blog. The webpage is also a place where videos are shared on a weekly basis on topics like leaderships, corporate values, trust, sustainability and the old videos are archived. The video recordings feature company board members sharing their experiences, which make the individual employee relate to the topic of interest. The learning webpage also contains archives of books published over the globe to keep the employee abreast with the latest knowledge in their topic of interests.

According to the article in Focus - Education: Online vs. Offline, in the year 2005, IBM has taken a leap in academic initiatives which help plug skill gaps. One of this initiative involves offering remote access to students in United States and Canadian schools to remotely access the program housed at Marist College at Poughkeepsie, thus allowing students to get a hands-on experience to work with mainframe as a part of their computer science degrees. Another initiative in Latin America is to allow students to access via internet to an IBM server allowing them to develop their teaching and research projects without having to own large scale equipments. This is done by establishing a mainframe hub running Linux at the University of Campinas, Sao Paulo, Brazil.

Another article by Rossett (2007) states that new supervisors at IBM turn to Basic Blue (a software) for their development. Basic Blue is a blended learning system, based on online self assessments, vivid e-learning scenarios, an online community and mentor, and workshops. The new supervisors gain knowledge over time through structured learning and coaching experiences that are embedded in the challenges faced on the job.

Technology enabled learning can also occur in a semi-formal or informal manner like while a bunch of executives exchanging their ideas and experiences through the learning portal in their organisation. The medical pharmaceutical sales representative may research on the recent trends of medical problems while waiting to meet a medical practitioner.

Technology has enabled learning without barriers. Today it is possible to have a bunch of people sitting at remote offices share their ideas and knowledge with each other via online meetings. It is also an additional enhanced feature of most systems to record the discussions, which then can be used as learning for others in a similar situation. Systems that support self paced informal learning for an individual in today's times are online communities, e-coaching, blogs, wikis, knowledge bases.

To enhance learner engagement with online courses, and to better their retention of learning, the following tactics can be utilized:

- ✓ Having a robust content tutorial with theoretical framework in place so that the learner has background information to relate to. The content must consist of illustrations wherever possible for the learner to understand the content better.



- ✓ Using case studies and examples during the course of learning wherever possible. With this method learners will have simulated situations and related examples, to analyze and learn a skill.
- ✓ Having interactive learning content where learner can take a quiz, discover and uncover new facts, proactively participate in role-plays, activities with others in the learning process. The content must have FAQs section, and portions for solving misconceptions on the theory.
- ✓ The learning content should have videos and audio attached to enhance learner retention. A video may have demonstrations of the activity or skill in actual or replicated life situations.
- ✓ The learner must have the option of reaching out to the teacher or instructor via convenient modes like email, contact form present on the Learning Management System portal.
- ✓ Multiple ways of assessment like written submissions and oral, face to face presentation of matter.
- ✓ Customization of the learning content to suit the needs of the learner. The trainer must ask and not assume the learner's requirements. This is especially in context of corporate training. The trainer must not plate all ingredients which are in the realm of the trainer. Most of it may not be required by the learner, and this will cause a major disengagement. Make sure that the content has the required matter and the learning style of the learner is also taken into consideration while delivery.
- ✓ Design of the learning should have short-term goals.

#### **Forms of Online Learning and Training:**

Certain tools and mediums of online learning help individuals and corporate develop their business networks.

**Social Networking – The new way of learning** – Social media websites and interfaces have developed to become sources of educational and social learning. Topics of social and community interest and matters relating to social explicit knowledge are shared and discussed.

**Peer Review Communities** – Groups of individuals form online communities and venture towards online peers and community members with conversation topics of common interest. Conversations begun by an individual on the peer review group are commented and opinionated on by the community members. This forms threads of conversation, which can be reviewed and new knowledge can be developed.

**Blogging** – Micro blogging is the new way people have resorted to for network building and learning. Implicit knowledge can be made explicit by writing articles on the micro-blogging website on which people are free to like, comment and express their views and rate articles.

**Autonomous Searches** – All curious individuals and employees, in their thirst for learning and immediate answers to problems, divert themselves towards online searches. Websites like Google, Wikipedia are some places where the search generates meaningful output from its archives.

#### **Understanding the learning styles of the learner is vital:**

It is very important to design the learning material and delivery to suit the learning style of the learner. In a virtual setting, however; it is difficult to gauge the learning preference. To engage the learner (or learners from different backgrounds, with different learning styles), it is essential that the trainer diversifies in matter and modes of delivery. Delivery of material should include visual, auditory, kinesthetic

modes. Some material which is too boring and dry in nature, may have to be presented to the learner in an on-the-job learning scenario for it to be effective.

**Learning is of Utmost Importance:**

HIPO (High Performing Organisations) have associated their existence to continual learning. They have increased learning opportunities, for their employees to learn, outside classroom and in virtual worlds. They ensure a tailored learning experience is given to their employees depending on the requirement.

Companies must include la carte packages in learning models and courses. This involves designing of highly relevant content. Online learning requires a number of mediums of interaction and engagement to make up for the lack of physical interaction. It is important to make the content accessible to learners. Through online tracking system, how the learner uses the content should be trailed. Online learning content designers must analyse data and apply intelligence to make meaning of the tracking done.

Some challenges that are faced in the process are inability to customise the content, not being aware of the role for which the learning is being designed, not knowing the career development path, not knowing what the reporting managers have recommended.

Organisations need to know their learners, their interests, habits. It is indeed difficult to measure formal and informal leaning. But it is essential to know what are we measuring against, the baseline is complex, since the goal of learning is performance.

**Conclusion:**

E-learning is a powerful tool of giving out of knowledge and information in the educational sector and the corporate world. It has its own rewards and returns on investment. It may sufficiently be utilised for replacing a number of face-to-face training scenarios.

Although, learner engagement is debatable, however; the various factors, elements and findings explored in this research are testimony to having high possibility of learner engagement by thoroughly using all the engaging techniques to e-learning modality.

The measure of level of learner engagement by using the various combinations of factors in e-learning technique is open to further discussion.

**Recommendations:**

- ✓ Online learning should be such that it must involve the learner. Fresh content and guest instructors lead the learners to have an innovative outlook towards the topic.
- ✓ While running E-learning platforms in the corporate scenario, employees should be encouraged to participate by pitching in with ideas, articles, uploading photos, videos of successful projects, teamwork, etc. This keeps the learner morale high and subsequently a feeling of engagement rests.
- ✓ E-learning should be challenging for the learner. Easy targets and extremely simplified assessments will not lead to engagement. Assessments which test the knowledge of the learner will lead to a sense of accomplishment.
- ✓ Relate to content and assessment to actual work situations which can provide learners with practical understanding and hence may better the chances of retention.
- ✓ Learners should be encouraged to present their understanding in various ways like virtual discussion, holding virtual meetings, role-plays and other innovative methods.

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