The Missing "Kinesthetic" Component in E-Learning: How it can be Incorporated?

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Abstract - **We all use our senses for gathering information and knowledge and depending on the circumstances may focus on one or more of them in varying proportions simultaneously. For example, when listening to great sound track music, we may close our eyes to more fully listen and to experience certain feelings or even shake or head or limbs to fully internalize the music and be delighted. Every learner has preferred representational systems. For example, when learning something new, one may prefer to look into a book or read or see it , others need to hear it from somebody while some others need to get a feeling for it-touch it and operate it. Depending on certain behaviors or characteristics of the audience's / learner's preferred representational system(s), the e-learning systems need to be developed. Sufficient auditory and visual components in e-learning are embedded into the system. The difference in the e-learning and conventional learning is the missing link of "Empathy-rapport-feel and eye cue" which can be summarized as "Kinesthetic component". As it is, the two way communication through auditory mode is not developed enough to make it a real time operating system. The visuals and animations are incorporated in an e-learning system which is way too much as compared to auditory and kinesthetic components. How then can the e-learning system try and incorporate the 'missing link'. This papers throws light on some methods which can be easily implemented to cater to the Kinesthetic learners.**

Keywords - **Kinaesthetic Learner, E-Learning, Learning Styles, Preferred Representation**

I. INTRODUCTION

The two important aspects of learning are the Latent learning and implicit learning. Latent learning is learning that is not perceptible when a subject is being taught and its relevance is noticed only when the learned skill or behavior is required in future to perform some task.

Implicit learning happens unconsciously without actually meaning to learn or intending to learn. One example would be to sing without actually learning to do so. It may be sketching, swimming, playing a game just by just observation and an intense desire to imitate what is seen. A baby learns how to crawl, walk, speak his first words in a native language and recognize care givers without understanding any of the steps involved in these processes. The e-learning system should be developed to cater to latent as well as implicit learning.

II. E-LEARNING PERCEIVED

E-learning has transcended the traditional definition of "education through an internet source only". The E-learning process includes courses from technology, medical, cultural and extending to life styles. There are a number of e-learning companies working around the world which cover a large gamut of services. The e-learning products largely depend upon the types of service offered by the e-learning company. However the salient features which every e-learning company focuses are as follows: this process.

A. Cost Factor

The E-learning process does not need more investment for execution and operation. It is beneficial both for personal and group learning. Companies require large budget for training their employees on current practices of the Company and on recent trends that may be benchmarked for future adoption by the Company.

B. Time Factor – The 4As'

Any information- Anytime-Anywhere -for Anybody. This flexibility of e-learning process saves the time of learner. There are many domain knowledge offered from the E-learning companies in engineering, medicine, hospitality, travel, management and so on There are a number of experts working with these companies to develop user-friendly content in specific domains.

C. Online Test

These e-learning websites also offer test engines to test the learner's knowledge accumulations and understanding of the subject. It can help the learner to assess his/her own learning ability.

Besides all these common features, e-learning portals offer discussion forums, online chats, connectivity to other social media and contact hours for personal counseling if required. Many e-learning portals assist in offering additional resources by way of CD or DVD or other electronic means at a nominal cost.

III. E-LEARNING SUFFOCATORS

No one likes to have a dull eLearning environment. Generally, interaction to engage and motivate learners and creating an experience is expected in an e-learning portal. The absence of this can frustrate the learner and dilute the intentions of returning back to the e-learning portal. Some hitches that deter and irritate the learner are:

A. Superfluous Clicks

The portal should restrict the number of clicks which a user has to manipulate to access information. Too much scrolling and unnecessary hyperlinks makes learning more complicated. Keep the user experience simple; fewer the clicks – better it is.

B. The 'Next' and 'Previous' Button

Turning pages on the screen can sometimes get tedious. The NEXT button or 'PREVIOUS' button on the screen gives a creep as it consumes time for loading the next page and the continuity in reading is lost. Most of the active screen is filled with pop ups and advertisement material and hence the subject content is minimum on the screen requiring frequent page changes.

C. Inconsistent Menu Buttons Location

When it comes to interactivity, the location of commonly used interactive elements such as the Next, Close, or Menu buttons is confusing as it lacks location consistency. Learners should not be required to search for buttons. They should be placed logically, prominently and consistently.

D. Excess Screen Interactivity

E-Learning interactivity is the "dialogue" between-learners and eLearning tools. It is a key element of the eLearning course design process which adds intangible value to the learning experience. The eLearning interactions may include multiple choice quizzes, tests, simulations, and animation videos etc that help learners to internalize the learning and retain the same. The use of interactive elements in an e-learning portal should be optimum. Too much is too bad. The interactive system should keep the learners interested with a proper proportion of interactive screens among static text and image screens such that the eye does not get strained by the text and image movements on the screen. Adding interaction should be with a purpose and for a function. If it is not required, the best is to leave it out.

E. Learner Friendly

Many times, the learner finds it difficult to manipulate the control of the interactive or multimedia elements in the e-learning portal. For example, if sound accompanies an

interactive experience, the learner will have to search for an icon to reduce volume. Instead, to control the volume or mute it completely a provision of simple soft buttons on the screen could be advisable.

IV. LEARNING STYLES

The e-learners too have a specific dominant learning style. The Auditory learners-who learn best by listening and talking, and the Visual Learner who learns best by 'Seeing' and photographic memory. The use a lot of color and sketches to learn. The Kinesthetic learner has other ways of learning and typically consist of:

- To walk around while reciting/reading
- Prefer to DO than to SEE.
- Prefer to use Hands-on-work for learning
- Acting out a situation
- Enjoys making and creating.
- Operatesand prefers to make something like a model
- Has trouble staying still or in one place for a long time.
- Cannot resist fiddling with small objects while listening or working.
- Cannot resist the urge to eat snacks while studying.

Some other classification of e-learners is:

A. Passive Interactivity Level: No Interaction

This level includes simple images and graphics, simple video and audio, test questions, etc. The e-learner does not have any other significant role other than reading and watching.

B. Limited Interactivity Level: Limited Participation

Learners are required to make simple interactions with the e-Learning material which may include: animations, clickable menus, drag and drop interactions, and multimedia.

C. Moderate Interactivity Level: Moderate Interaction

The e-Learning experience may include: animated video, customized audio, complex drag and drop interactions, simulations, stories and multimedia.

D. Full Interactivity Level: Full Engagement

Learners are required to fully interact with the e-Learning content and give frequent feedbacks for assessment. This may include: interactive games, simulated job, performance exercises, customized audio or videos, stories and scenarios, as well as multimedia.

V. KINESTHETIC LINK

The same concept is applicable for learning, particularly when it comes to electronic learning or e-Learning. Familiarity with how the course is presented will certainly help a great deal in making it more understandable and effective for the viewer.

When developing e-Learning courses, it is important to note that reaching out to your target market is important but analyzing the learning styles of the target market is more essential. This will help in designing the contents for specific types of learners. For instance, an eLearning course aimed at Asians may be better appreciated if the videos displayed have individuals with Asian qualities and Asian accent. The e-learners may be better able to relate to individuals with dark-colored hair and dark-colored eyes .Hence, it is important o use words, phrases and idioms which are similar to the culture or demographic culture of the e-learner. It vital to always be aware of your target markets' profile so you could tailor-fit your approach and thus make the eLearning experience better for them.

Considering that the other aspects like videos and translations are adopted sufficiently, Developing eLearning courses can be quite challenging. However, it is a more innovative, and practical to use a tool to understand the needs of the e-learner. The e-learning portals should be designed differently for different learning styles. A "One Size Fits All" concept will not tend to delight the learners.

Before the e-learner takes up the learning process, it would be very appropriate to know the dominant learning styles of the learner by asking the learner to take a online learning style test. Depending on the type of learner, the designed e-learning portal access should be given to the learner. For example, if a learner is dominantly a Visual learner, then a portal designed with most of the content suiting a visual learner will be appreciated by the learner. With such a tool, you can make learning more interesting, interactive, and enjoyable. Your concepts and ideas will be better appreciated and absorbed with a bit of creativity and novelty.

When it comes to kinesthetic learners, the e-learning portal should be designed to motivate the learner to read a specific topic and immediately get on to do an exercise requiring the learner to move out of his chair and do something. For example, if the e-learner is accessing a domain where there are details about a Battery and the charge-the e-learning portal can ask the learner to first open up the cover of his mobile phone, read the details given on the battery, type it in the box provided on the screen and press 'Enter'. Now, the e-portal will explain all about the values that the learner has entered like Volts, Ampere, Watts, etc. This connects the e-learner with the e-learning portal and also he gets to do some practical work which does not require any supervision. Making the e-learner leave his seat for some-time, go and see a product, touch it, feel it and then come back to the portal to further his knowledge can make the learning very interesting. There are sample things that can be demonstrated with domestic items to explain concepts of Physics, Chemistry, Biology, engineering and management subjects. This needs innovative thinking. Content writers should work in sync with people who can develop practical components for the kinesthetic learners. Very soon a day will come when such segregation of learners will be mandatory and the learners will choose the portal which best suit them?

VI. CONCLUSION

With the practical component incorporated for kinesthetic learners, the Implicit Learning and Latent Learning also get reinforced. The learner is forced to reckon with the practical he has conducted earlier for the learning. The full engagement learning becomes more effective than simply watching somebody else do a practical on the computer screen. The kinesthetic learners have to be taught in small chunks-a little at a time. Overload information can cripple the learning process. Lessons can be designed so that the e-learner is informed in advance about the requirements to conduct a hands-on practical lesson before he logs on to the e-learning portal. Keeps the materials ready before the e-learning happens.

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