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RESEARCH ARTICLE

E-Learning: A Conceptual Framework

M. Veeramani
Head Librarian, American University of the Middle East, Kuwait
Email: veeramani.m@gmail.com

ABSTRACT
Basic concept of managing knowledge is not a new one, even though knowledge management is a new discipline it has emerged only recently and, given its newness is still developing its theoretical home. Knowledge management has always been conducted in one way or another, e.g. apprenticeships, colleagues chatting or a parent handing over her/his business to the offspring. E-learning is one of the tools used in the knowledge management to share the knowledge among groups. E-learning is an approach to facilitate and enhance learning through both computer and communication technology.
KEYWORDS: *e-learning, digital library, e-journals*

WHAT IS E-LEARNING?

E-learning therefore is an approach to facilitate and enhance learning through, and based on both computer and communications technology (salmon, Gill 2002). Such devices can include personal computers, CD-ROMs, Digital Television, P.D.A.s and Mobile Phones. Communications technology enables the use of the Internet, email, discussion forums, collaborative software and team learning systems.

WHY E-LEARNING? WHY NOW?

Technology has changed the way we live, work, think and learn. Today's workforce has to process more information in less time than in the past. As production cycles and life spans of products continue to shorten, information and training quickly become obsolete. In the new economy, organizations and academic institutions need to find new, cost-effective ways to keep America's workforce cur rent and competent. Knowledge and skills have to be delivered more rapidly and efficiently whenever and wherever needed to account for the increasing complexity and velocity of the work environment. In the age of just-in time production, just-in-time training has become a critical element of organizational success. Social and demographic changes, such as declining birth rates, the aging population, and the severe shortage of skilled labor, are directing education toward new target groups. Today, traditional students—age 18 to 22—represent only a minority of the higher education student population. Working adults, the fastest-growing group attending higher education institutions, already account for nearly 50% of students, constituting a niche whose needs are severely underserved. For universities, these individuals are excellent candidates for education delivered to their homes or officers. The explosive growth of the Internet opens up opportunities to support demographic, technological, and lifestyle changes and offer quality education to those who would other wise not have access to it.

COMPONENTS OF E-LEARNING

E-Learning components include: learning management system (LMS) or learning content management system (LCMS), content, collaboration, testing and assessment, skills and competency, e-commerce, and Internet video-based learning. (Alavi, Maryam 1994). A complete e-learning portal represents the total integration of multimedia, instructor-led, and real-time training - in a human, collaborative environment.

Organizing the content

While organizing the content for E-learning we have to ask ourselves these four questions.

For whom do we create e-learning content

What do they need to learn

How do we organize the content

Which tools / platform do we use? For creating? For delivering?

E-LEARNING STANDARDS

Some of the commonly used standards used for E-Learning. (Alavi, Maryam 1994).

SCORM™ stands for Shareable Content Object Reference Model. This is a standard for web-based E-learning. It defines how the individual instruction elements are combined on a technical level and sets conditions for the software needed for using the content.

Alongside SCORM, a draft learning object metadata scheme is underway in the UK. The UK Learning Object Metadata Core attempts to create a consistent tagging system, which enables educationalists to tag their learning objects.

The Schools Interoperability Framework or "SIF" specification. It is the US national kindergarten through 12th grade (K12) specification for modeling educational data and information in an XML format, and a specification for sharing that information between software applications in the educational space.

ESSENTIALS FOR E-LEARNING

ANYTIME, ANYWHERE

Online delivery of management education will have significant impact on the competitive positioning and strategy of leading business schools, institutions, and Universities, the employment relationship between faculty and their institutions, the curriculum structure, and teaching methods. Issues faculty and administration need to address include the protection of intellectual property, quality assurance of Online courses, management of relationships with online partner firms, and expansion into global markets.

Universities have to realize that they will soon be in the business of running an Internet start-up, involving new strategic positioning, more sophisticated segmentation of target groups, and fast time to market.

To be able to react flexibly to changing market demands, institutions will have to overcome bureaucratic barriers and speed up their decision-making process. Many schools may need to gear up their IT infrastructure and train faculty and administrators to provide high quality online student service.

The selection of the right dot-com partner can make the difference between success and failure of the online venture. The vast majority of e-learning companies are small start-up businesses with unproven business models, which, in the best-case scenario, will not generate black numbers for 2–3 years. How can university administrations, whose sophistication in the brand new e-learning industry is limited, know which of the thousands of providers will be the winners in this market? Among the criteria we developed and described in our research report Corporate e-Learning: Exploring a New Frontier are first-mover advantage, brand leadership, experienced management, global reach, and scalability in terms of R&D, delivery technology and distribution. Most importantly, ownership of engaging, highly interactive content will be a key differentiator among competitors. We believe that the leaders in the e-learning market will be players integrating quality content, robust learning management systems, and a suite of value-added services into a complete e-learning solution.

To prepare for the new learning paradigm, academic institutions also need to find new ways to deliver learning to disparate groups of students without sacrificing teaching quality. For universities to attract students and succeed with an online program, the goal should not be to simply replicate the on-campus experience but to enrich it and design online courses that offer even better quality and interaction than instructor-led courses. The definition of quality for an instructor-led class is very different from an Internet based class. While classroom instruction has three attributes of quality (teacher, textbook and content), online learning has many. Quality parameters universities have to consider in addition to the level of content and teaching materials are the deployment of technology, use of multimedia and simulations, ease and convenience of use, integration within the learning community, time delay for downloads availability of online services and mentoring, scalability, time-savings and the achievement of measurable results. If universities can offer high quality, media-rich content adjusted to students' learning styles and customized to their current skill sets, demand for online courses and degree programs is likely to explode.

INTERACTIVITY AND PARTICIPATION

The most important thing in e-learning is to ensure that there should be a high degree of interactivity and participation. That means designing and conducting learning activities in such a way that it should result in engagement with the subject matter and fellow students.

FEEDBACK

A primary task of the teacher is to provide feedback. In E-learning, teacher's feedbacks or comments are in email messages. They usually correct the original file submitted by the student and students can download it to see the comments.

MODERATING AND FACILITATING

E-learning requires good moderating and facilitation skills. Moderating involves encouraging students to participate in discussion forums and conferences, ensuring that certain students don't dominate, keeping discussions focused on the topic at hand, and summarizing/ synthesizing the highlights of discussions.

FACULTY COLLABORATION

E-learning offers many opportunities for student interaction and it also provide many possibilities for collaboration among teachers and students. Basically the following kinds of collaborations can be thought of:

Teacher – teacher collaboration

Teacher – student collaboration

Student – student collaboration

There is no face-to-face interaction like traditional classroom hence nobody feels ashamed or hesitation to present his/her opinion. It helps to modify or correct once fault.

STUDENT EVALUATION

One aspect of e-learning process that often generates considerable concern for teachers is evaluation of student performance. They worry that they will not be able to assess student understanding or participation properly. But this is a myth. Actually student evaluation can be done far more effectively online than in a traditional classroom setting because of the ease of creating online tests and other forms of assessment. Online tests can successfully hide students' as well as teachers' identity. So the biasness or personal inclination factors can be reduced to a great extent.

WHAT IS REQUIRED FOR E-LEARNING TO BECOME AN EFFECTIVE KNOWLEDGE MANAGEMENT TOOL?

Several trends are spurring the momentum behind e-learning. One, as stated earlier, is the need for firms to keep up with the ever-changing businesses environment and shorter product lifecycles. (Elmer, Greg 1999) Another trend is the growing importance of information sharing. E-learning can be taken outside of company firewalls and can be used to educate firm partners, customers, and suppliers, in addition to the firm's employees. In return, the firm can generate new knowledge through the use of chat rooms, surveys, etc. Knowledge partner's benefit from the information gained through e-learning, while the firm in turn benefits from the capture of new information from knowledge partners. Once information is captured and categorized as useful knowledge, its sources become irrelevant in terms of value (Swanson, 2000). Cisco Systems, one of the many companies that promotes e-learning as part of its knowledge management strategy, defines the benefits of e-learning as follows (Cisco Systems, 2001):

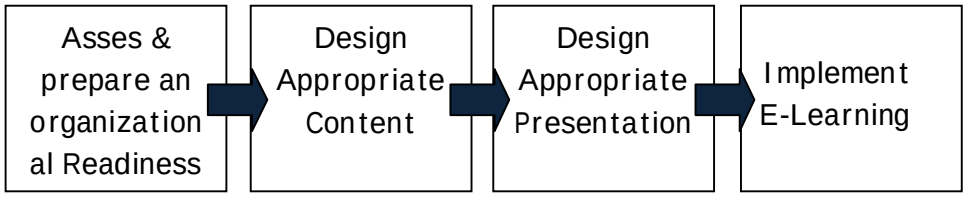
E-learning provides a new set of tools that can add value to all the traditional learning modes – classroom experiences, textbook study, CD-rom, and traditional computer-based training.

Old-world learning models do not scale to meet the new world learning challenges. E-learning can provide the tools to meet that challenge.

With e-learning you can empower learners, and the learner as well as the mentoring system is held accountable.

Numerous studies have been conducted regarding the effectiveness of e-learning. To date, there are only a few that argue that learning in the online environment is not equal to or better than traditional classroom instruction (Institute for Higher Education Policy, 2000). However, e-learning is not meant

to replace the classroom setting, but to enhance it, taking advantage of new content and delivery technologies to enable learning. Several considerations must be taken into account for e-learning to be a lucrative investment and an effective knowledge management tool. The below Figure depicts an e-learning value chain that represents the e-learning planning process, which can be directly linked to the knowledge management value chain. The elements of the e-learning planning process include assessing and preparing organizational readiness (factors to consider before going online), determining the appropriate content (content that ties into the goals of knowledge management), determining the appropriate presentation modes (considering factors contributing to effective e-learning), and implementing e-learning (content and technology infrastructure considerations).
Organizational readiness is directly tied to the first two processes in the knowledge management value chain, i.e. it requires the determination of strategic knowledge requirements and an assessment of the current organizational knowledge gap. (salmon, Gill 2002) The last two processes in the knowledge value chain (closing the knowledge gap and disseminating the knowledge acquired) are aligned with the last three phases of the e-learning value chain. The design of knowledge content and presentation and the subsequent e-learning implementation are intended to close the knowledge gap and disseminate the knowledge required to promote organizational survival and improve its competitive position.



DRIVING E-LEARNING

DEMAND	**SUPPLY**
Rapid obsolescence of Knowledge and training	Internet access becoming standard at work and at home
Need for just-in-time training delivery	Advances in digital technologies enable creation of interactive, media-rich content
Search for Cost-effective ways to meet learning needs of globally distributed workforce	Increasing bandwidth and better delivery platform make e-learning more attractive
Skills gap and demographic changes drive need for new learning models	Growing selection of high-quality e-learning products and services
Demand for flexible access to lifelong learning	Emerging technology standards facilitate compatibility and usability of e-learning products

E-LEARNING SOFTWARE

There are many software's are available for E-learning. Here are the examples of some open source and commercial E-Learning software for E-Learning platform. (www.opensourcecms.com)
Open source software:
ATutor
DoceboLMS
Dokeos
Interact
Moodle
Site@School

WordCircle
Commercial software:
ANGEL Learning LMS and ePortfolio
Blackboard
Desire2Learn
eCollege
eduX VLE systems
Gradepoint
Inquisiq
Learn.com
learn eXact
NetDimensions Enterprise Knowledge Platform
WebCT

CONCLUSION

Nowadays learning pattern has changed tremendously from traditional to digital. So In this direction I am trying trial run of Moodle open source E- Learning software for my department. I found out the findings that it's worth software for much small and non-profit organization. This software has the enough features of maintaining the E-Learning system in any organization.
Moodle is a course management system (CMS) a free, Open Source software package designed using sound pedagogical principles, to help educators create effective online learning communities. You can download and use it on any computer you have handy (including web hosts), yet it can scale from a single-teacher site to a 40,000-student University. This site itself is created using Moodle, so check out the Moodle Features demos, the Demonstration Courses or read the latest Moodle Buzz.

REFERENCES

[1] Salmon, Gill (2002). E-moderating: the key to teaching and learning online. Epping Forest.
[2] Alavi Maryam (1994). Computer-Mediated Collaborative Learning: An Empirical Evaluation. MIS Quarterly June, PP. 159-174.
[3] Elmer, Greg (1999). Web Rings as Computer-Mediated Communication. CMC Magazine, Vol.6, January.
[4] http://en.wikipedia.org – Wikipedia
[5] http://en.wikipedia.org/wiki/Managed_learning_environment
[6] www.opensourcecms.com
[7] www.moodle.org