

Importance of Needs Assessment for Implementation of E-learning in Colleges of Education

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Abstract

E-learning is the expression broadly used to describe “instructional content or learning experience delivered or enabled by electronic technologies”. Needs assessment/analysis identifies performance areas or programs within an organization where training should be applied. A needs analysis explores the problem or need and then proceeds to identify the aims, content, implementation, target population and outcome of an intervention. Any institution venturing into e-learning should conduct a needs assessment survey to find out its expected customers’ (i.e., learners’) willingness to enroll in its e-learning courses. Needs analysis will help institutions analyze the short-term and long term needs for their e-learning initiatives, and in turn will be instrumental in developing their e-learning strategies. Needs analysis can also provide information about the technological and other support services needed for their e-learning initiatives. Through a comprehensive needs assessment process, an institution can establish its e-learning goals. In this article, E-learning needs assessment importance role and analyzing of e-learning system’s components for implementation in the context of colleges of education have been studied by the researchers.

Keywords: Needs Assessment, E-Learning, implementation, Educational Institutes.

1. Introduction

Higher education sector can take greatest advantage of the increased use of technology, especially the Internet, in delivering the educational product. Distance learning via the Internet will drive tremendous growth (Cappelli, 2003). Usage of new technologies, internet and e-learning in higher education especially in educational programs, can increase speed of development, and educate citizen familiar with ICT and needs of living in 21 century.

2. E-Learning

E-learning, or electronic learning, has been defined a number of different ways in the literature. In general, e-learning is the expression broadly used to describe “instructional content or learning experience delivered or enabled by electronic technologies” (Ong, Lai and Wang, 2004). Some definitions of e-learning are more restrictive than this one, for example limiting e-learning to content delivery via the Internet (Jones, 2003). The broader definition can include the use of the Internet, intranets/extranets, audio- and videotape, satellite broadcast, interactive TV, and CD-ROM, not only for content delivery, but also for interaction among participants (Industry Canada, 2001). More recently, this definition can be further expanded to include mobile and wireless learning applications (Kinshuk, Suhonen, Sutinen, and Goh, 2003; Lehner, Nösekabel and Lehmann, 2003).

Welsh, Wanberg, Brown and Simmering (2003, p.246) define e-learning as the use of computer network technology through the Internet to deliver information and instruction to learners. Holmes and Gardner (2006) point out that e-learning provide access to resources that promotes learning on an anyplace, anytime basis. E-learning is simply defined as a delivery of course content via electronic media such as Internet, Intranet, Extranet, satellite broadcast, audio/video tapes, interactive TV and CD-ROMs (Urduan and Weggen, 2000).

3. E-learning Components

Khan (2001) pointed out that; an e-learning program in terms of various components and features that can be conducive to learning. Components are integral parts of an e-learning system. Features are characteristics of an e-learning program contributed by those components. Components, individually and jointly, can contribute to one or more features. Khan (2005) has organized e-learning components into seven categories;

1. Instructional Design (ID)
2. Multimedia Component
3. Internet Tools
4. Computers and Storage Devices
5. Connections and Service Providers

6. Authoring/Management Programs, Enterprise Resource Planning (ERP) Software,
7. Server and Related Applications

4. Defenition of Needs Assessment

Mitchell (1993) describes needs assessment/analysis as "an examination of the existing need for training within an organization". It identifies performance areas or programs within an organization where training should be applied. A needs analysis identifies the problem or need and then proceeds to identify the aims, content, implementation, target population and outcome of an intervention (Cohen, Manion and Morrison, 2007).

5. Scope of Needs Assessment

Needs assessments have occurred in various settings including community organizations (Rahtz & Sirgy, 2000; Torma, 1998), government agencies (Holton, Bates, Naquin, 2000; Noll & O'Dell, 1997) and health care facilities (Thorton, 1995; Barry, Doherty, Hope, Sixsmith, Kelleher, 2000) as well as education institutions (McCaslin&Lave, 1976; Stabb, Harris, Talley, Buhrke, Etzel, Hinkle, Pinkey, Prieto, 1995). In higher education, the needs assessment process appears in several contexts. This process has been applied to distance education, to various student organizations or faculty work groups (Bishop, Bauer, Becker, 1998; Kruse, Elacque, Rapaport, 1998). Definition of the terms need (Kaufman & Herman, 1991), needs assessment (Witkin & Altschuld, 1995), or need analysis (McKillip, 1987) may vary depending on the discipline or source consulted.

6. Discussion and Conclusion

Needs analysis can help institutions to match the needs of their target audience with the e-learning courses and programs they plan to market. Any institution venturing into e-learning should conduct a needs assessment survey to find out its expected customers' (i.e., learners') willingness to enroll in its e-learning courses. Needs analysis will help institutions analyze the short-term and long term needs for their e-learning initiatives, and in turn will be instrumental in developing their e-learning strategies. Needs analysis can also provide information about the technological and other support services needed for their e-learning initiatives. Through a comprehensive needs assessment process, an institution can establish its e-learning goals (Badrul Khan, 2005).

Teachers play a very important role in a student's life. It is, to a great extent, the teachers who decide the shape a student's life will take. So, it is very necessary to be adequately equipped with resources that will make the teacher a perfect role model to the students. Integrating of e-learning technology in education and having skilled

Faculties and students as future teachers should be an integral part of the Teacher Training colleges' curriculum to developing in IT and Knowledge based societies. Having a clear profile of needs analysis on e-learning components, current level of knowledge in computer skills of faculties and students (as future teachers) of colleges of education and provides vital information about situation of colleges of education. Through a comprehensive needs assessment process, an institution can establish its e-learning goals.

The findings of this kind of studies will facilitate the process of decision-making and planning of usage and implementation of e-learning in teacher education colleges. Clarifying potential differences or similarities on gender, work experience, level of education, type of institution, type of subject (learning for students and teaching for faculties) will show a mirror with a full feature of selected sample and finally population of colleges.

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