INSTRUCTIONAL DESIGN FOR BLENDED TEACHING LEARNING PROCESS, PROBLEMS AND PROSPECTS: A CASE STUDY OF ALLAMA IQBAL OPEN UNIVERSITY)

*Muhammad Ajmal**

Abstract

Instructional Design in Distance Education is an innovative subject in itself. It is key to design course material. It generally refers to planning, development, delivery and evaluation of instructional system. Instructional Design is an applied field of study aiming at the application of descriptive research outcomes in regular instructional settings. This study is significant from point of view that only standardized self-instructional material is useful for the learner in distance education system. An evaluation of existing instructional design followed by Allama Iqbal Open University can lead to further improvement in instructional material and ultimately the quality of education can be ensured with production of high quality self-instructional material. This study is a source of knowledge for course coordinators, writers, editors, media personnel's, tutors and researchers. The study aimed to evaluate the existing instructional design of blended teaching learning process followed by Allama Iqbal Open University and propose a new model of instructional design for Allama Iqbal Open University. The study was conducted on 120 faculty members of AIOU involved in instructional design process. Data was collected through five point likert scale and some open ended questions. Analysis was made through percentage and mean score. Study revealed that proper need assessment is not done before conceiving the outlines of courses. Courses did not contain sufficient activities, pictures and illustrations. Study recommended that proper need assessment may be conducted before writing any course. Multi-media support may be provided along with correspondence

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* Allama Iqbal Open University, Islamabad, Pakistan

courses. Text material of courses should be enriched with illustrations, pictures, activities and self assessment questions.

Keywords: Instructional Design, Blended Learning, Allama Iqbal Open University.

Introduction

This study is significant from point of view that only standardized self-instructional material is useful for the learner in distance education system. An evaluation of existing instructional design followed by AIOU can lead to further improvement in instructional material and ultimately the quality of education can be ensured with production of high quality self-instructional print material. This study is a source of knowledge for course coordinators, writers, editors, media personnel's, tutors and researchers. So the study is significant and justified. The study aimed to evaluate the existing instructional design followed by AIOU and propose a new model of instructional design for AIOU.

Objectives of the Study

1. To evaluate the problems and prospects of blended instructional design process at AIOU
2. To assess the opinion of faculty about blended instructional design process at AIOU
3. To propose a model for blended instructional design model for AIOU

Procedure of the Study

Survey of related literature in the form of books, periodicals, research reports and theses was undertaken to develop a framework for the study.5-point likert scale Questionnaire was developed in the light of conceptual framework for collecting data for the study.120 faculty members involved in process of instructional design were selected as sample of the study. Questionnaire was professionally vetted before administration. Data collected through instrument were tabulated and analyzed using percentage and mean score . On the basis of analysis interpretation were obtained, conclusions were drawn and recommendations were made.

Literature Review

Distance Education, according to Coombs & Ahmad (1974, p.11) "Any organized systematic educational activity carried on outside the framework of formal system to provide selected types of learning to particular sub-groups in population, adults as well as children".

Keegan (1980, p.33) identified following main elements of distance education:
i.   Separation of teacher and student
ii.   Influence of central integrated organization
iii.   Use of media
iv.   Provision of two way communication
v.   Possibility of occasional meetings

Instructional Design in Distance Education

By design one means the style or plan of teaching. It is the blue print of teaching method. Glossary of term commonly used in distance education IGNOU (1997, p.29) defines instructional design as "It is generally refers to planning, development, delivery and evaluation of instructional system." According to Braden, R.A. (1996, p.5), "Instructional Design refers to process of improving quality of teaching and learning". According to Torsten & Postlethwaite (1994, p.28):

> "The term instructional design describe the complete process of analysing what is to be taught, how it is to be taught, conducting tryout and assessing whether learner learn".

Rowntree, D (1979, p.112) presented a format of instructional design in Distance Education as follow:
i)   Introduction.
ii)   Overview of entire section.
iii)   What you have to do tasks.
iv)   Objectives of the section.
v)   Student Profile.
vi)   Aims.
vii)   Constraints.
viii) Select content.
ix)   Decide sequence.

x) Write up.
xi) Assessment.
xii) Evaluation.

Blended Learning

Graham (2006) summarizes three definitions of blended learning as the (a) combination of instructional delivery media, (b) combination of instructional methods, and (c) combination of online and face-to-face instruction. The first two definitions reflect the debate on instructional media versus instructional methods on learning and are too broad to make blended learning a distinct phenomenon since virtually all-learning systems include a variety of methods and media. Defining blended learning as the combination of online and face-to-face instruction more accurately reflects "the historical emergence of blended learning systems"

Types of Blended Learning

According to Graham (2006), blended learning may occur at different levels of instruction: (a) at the activity level, when a learning activity contains both face-to-face and computer-mediated elements; (b) at the course level—the most common—where both face-to-face and computer-mediated activities are included as part of a course; (c) at the program level, when participants take both online and face-to-face courses in a program; and (d) at the institutional level, with organizational commitment to blending face-to-face and computer-mediated instruction.

Moore (2005) explains that blended learning may simply meld face-to-face and distance learning within residential courses in order to enrich students' learning experiences and to use faculty resources more sufficiently. At this level of blending, online learning time substitute time spent in class for residential students. However, whether and how to provide face-to-face instruction to students in distance programs is more problematic and challenging. Graham (2006) further states that based on the practical question of how to blend, three categories for blended learning systems exist:
1. "Enabling blends" focus on addressing issues of access and convenience.

2. "Enhancing blends" incorporate incremental changes to existing pedagogy such as offering resources and supplementary materials online while in a traditional face-to-face learning environment.
3. "Transforming blends" allow a radical transformation of the pedagogy by taking full advantage of the capacity offered by the technology.

Many researchers and practitioners focus on guidelines for practically implementing blended learning in distance education. Zukowski (2006) emphasizes five emerging ingredients as important elements of a blended learning process, including live events, self-paced learning, collaboration, assessment, and performance support materials. Painter (2006) lists eight key steps to blended learning:
1. Prepare learners with essential skills and overall understanding to ensure success.
2. Inform learners about objectives, facts, and key concepts of the skills they are going to learn and explain the value of learning them.
3. Demonstrate procedures, principles, concepts, and processes so learners can apply the skills.
4. Provide learners with opportunities to practice newly-learned skills and build long-term retention.
5. Evaluate learners' application of new skills and provide feedback.
6. Assist learners' transfer of learning.
7. Provide tacit support of peers, mentors, or experts.
8. Allow learners to work collaboratively as a community to solve problems.

The role of Information and Communication Technologies (ICTs) in the school classroom is becoming increasingly prominent, both because of the need for children to develop skills that will empower them in modern society and because of the potential value of such technologies as tools for learning. One of the challenges facing teacher educators is how to ensure that graduate teachers have the necessary combination of skills and pedagogical knowledge that will enable them to both effectively use today's technologies in the classroom as well as continue to develop and adapt to new technologies that emerge in the future. ICT has great potential for enhancing teaching and learning outcomes. The realization of this potential depends much on how the teacher uses the technology. This would in turn depend, among other things, on the kind of training that the teacher has undergone.

According to Warlick (2005), the need for continuous access to information and knowledge makes learning lifelong and the traditionally neat distinction between learning and work unreal. Education thus becomes a continuum, with no marked beginning and end, which provides opportunities for lifelong learning to help individuals, families, workplaces, and communities to adapt to economic and societal changes, and to keep the door open to those who have dropped out along the way. According to Rosen and Well (1995) and Thierer (2000), the role of technology in teaching and learning is rapidly becoming one of the most important and widely discussed issues in contemporary education policy. Cabanatan (2001) argues that the effectiveness of ICT integration is impacted by the teachers' motivation to integrate, personal knowledge and experience with ICTs, confidence in ICT use, access to ICT resources and training, teacher preparedness and technical and pedagogical support.

Omona and Odongo (2006) describe that advances in electronic-based information and communication technologies (ICTs) are rapidly transforming social and economic conditions across the globe. As the cost of ICTs continues to fall and their capabilities increase, their applications are becoming even more vital to all sectors of the economy and society. ICT has the potential to improve the quality of life by providing new tools for improving access to information and knowledge management as well as sharing.

Wozney, Venkatesh and Abrami (2006) identify technology related training as a key factor, suggesting that it "plays a crucial role in developing teachers' competency with computer applications as well as influencing teachers' attitudes towards computers." There is no doubt that ICT provides productive teaching and learning in order to increase people's creative and intellectual resources especially in today's information society. Through the simultaneous use of audio, text, multicolor images, graphics, motion, ICT gives ample and exceptional opportunities to the students to develop capacities for high quality learning and to increase their ability to innovate.

Warlick (2005) states that technology today offer many new opportunities for innovations in teaching learning process through new learning tasks and potentially powerful scoring, reporting and the real-time feedback mechanisms. Information and communication

technologies have brought new possibilities into the education sector, but, at the same time, they have placed more demands on teachers.

Blended Instructional Design Process at AIOU

AIOU is a media-based university. According to Allana (1986, p.4) "The AIOU is primarily a distance teaching institution using multimedia techniques. The main components of its system are:
i)   Correspondence packages.
ii)   Radio & Television broadcasts.
iii)   Tutorial interactions at study centres.
iv)   Course assignments".

The instructional design is the core of any distance education system which is a systematic approach used to develop the course instructions for distance learners. In order to cope with the global scenario, many universities across the globe have set up Instructional Design Centre for the purpose of:
* Designing technology integrated instructional and assessment strategies
* Rethinking curriculum to reflect technology-rich environments
* Developing media for instruction including a web presence

The Allama Iqbal Open University is primarily a distance education institution, providing a range of education from basic/general to professional/Ph. D level to the masses across the country. It is the largest national institution which provides educational opportunities to more than 600, 000 students every year. The strong outreach system of the University comprising of 36 regional campuses is the backbone of the Open and Distance Learning System of AIOU. The university is a key player to educate masses in the country and has joined club of mega universities of the world.

The Higher Education Commission of Pakistan has been emphasizing on indigenous R&D capacity development within the country. AIOU being a prime distance education institution has initiated R&D work in for the capacity development in instructional design and development. The university has already experimented with delivery of electronic courses through access of Internet and broadcast media in a linked way using instructional design.

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Instructional design is a practice of maximizing the effectiveness, efficiency and interaction of learning experiences. Ideally, the process depends upon pedagogical and andragogical theories of learning. Foundations of Instructional design were laid in World War II when US military needed to train large number of people to perform complex tasks. It is the systematic process of translating general principles of learning. It makes the learning material more flexible thus empowering the learners. Otherwise distance-learning courses are likely to fail as if they were traditional courses.

AIOU serves a large population, which naturally has different learning styles such as auditory, visual and tactile. To cater different learning styles, instructional design is being developed using narration, graphics and text. This approach is mainly electronic based.

Major Findings and Conclusions

Majority of respondent are of the opinions that schemes of studies are developed on principle of self learning, objectives of the course are clear, content are simple easy to understand and useful for students needs. Activities are not placed properly in the text. Self assessment exercises are not properly incorporated in the text. Summaries are not rightly placed in the text. Sequence of the content is inadequate, courses are at par with the courses of formal system but length of each unit is not suitable. Majority of the respondents are of the view that need assessment is not conducted before conceiving the outlines of the courses. Media indication in the text is not proper, cross references of other units are not developed in the text. Pictures, maps and illustrations are not sufficient in the text to illustrate multitude ideas.

Recommendations

The findings of the study provide enough suggestions for improvement of instructional design in distance education followed by AIOU – Islamabad. Some of the recommendations are as under:
i) Time for development of material should be increased.
ii) Need assessment should be conducted before writing of any course.
iii) Meetings of statuary bodies should be held properly and at least quarterly in a year.

iv) Implementation of the suggestions provided by statuary bodies should be incorporated in the course design process.

v) Multimedia support, i.e. audio & videocassettes & computer diskettes should be provided along with study material.

vi) Illustrations and self-assessment questions should be incorporated in each unit keeping in view the objectives of the course.

vii) Learning should be the focal point in place of teaching.

viii) Cross references of other units should be developed.

ix) Instructional design in distance education should be introduced as a subject at Master, M.Phil and Ph.D level at AIOU.

x) Centre for Instructional Design may be restructured as per organizational hierarchy as given in the proposed model.

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