

A Review on Elements for Successful Distance Learning in Higher Education

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Abstract— Enrollment into tertiary education has increased over the years. Most applicants are not able to secure admissions into tertiary institutions. These institutions are under pressure since the infrastructure cannot support the increasing number of students they enroll. The strategy therefore is to adopt distance learning to enable them increase intake and at the same time ensure that the pressure on exerted on the physical infrastructure is minimised. To be able to deliver effective distance learning, there is the need for institutional collaboration. This study reviews literature on the elements for a successful distance learning, a brief history on distance education, and assumptions of distance education. The concludes that for any institution to develop an effective distance learning program there must be leadership, institutional commitment, faculty commitment, instructional design, distance learning technologies, learner characteristics, and evaluation.

Keywords— Distance learning, education, technology.

I. INTRODUCTION

The terminology, distance education and distance learning are normally used interchangeably. Distance education is literally education happening at a distance. The Association for Educational Communications and Technology defines distance education as: ‘institution-based, formal education where the learning group is separated, and where interactive telecommunications systems are used to connect learners, resources, and instructors.’ In some cases teaching and learning happens entirely at different locations or teaching and learning happens both at different locations and same locations. For instance, in Ghana, all the institutions running distance learning have centres throughout the country which are located at regional capitals of the country. These centres are not solely owned by the universities but are for other institutions, for instance, like a polytechnic or a nursing training school. Instructors travel to meet students in their home centres on weekends for lectures. In the week days the instructors and students communicate online. Usually distance education in Ghana and some other places attract working adults due to the way the programme is run.

History of Distance Education

Distance education in history has evolved from correspondent courses, to electronic communications and to distance education institutions. Through correspondent study in the 1840, Isaac Pitman offered shorthand courses to his students which were formalized later with the founding of the phonographic correspondent society. In the 1873, Anna Eliot started offering correspondent study in classical courses which attracted a large number of students numbering about ten

thousand (10,000). New York started awarding academic degrees to students who have completed correspondence courses in the 1883 to 1891. As time went on, correspondence courses were offered in the mining area. Thomas Foster in 1891 started offering mining and the prevention of mine accidents courses which later developed into an international commercial school with enrolment of two hundred and twenty-five thousand (225,000) in the 1900 and more than 2 million in 1920. Correspondence teaching started to spread to Germany and Sweden. Correspondent teaching became an important part of the University of Chicago. The Chicago University created extension divisions which had five departments with one namely Correspondent Teaching Department.

Progressively, correspondence learning was introduced at the secondary school level. For instance, in 1923, Benton Harbour, Michigan offered vocational courses which were followed by other secondary schools in the United States. Some governments took up the project on correspondent teaching at the policy level. For instance in France a correspondence college was set up by the government due to the Second World War.

There was a gradual shift from the use of materials in correspondence teaching. Europe started using advance electronic media such as audio recordings, and laboratory kits. The United States saw the establishment of a number of radio stations in academic institutions. By the 1930s some universities had started using the television for teaching students. By the 1950s credit courses were offered via television. From the 1957 to 1982 the New York University offered sunrise semester on Colombia Broadcasting System.

The advancement in technology in the 1980s to the 1990s and with the discovery of fibre optic cable, the transfer of high quality information and a two way communication was made possible. The universities started live communication and expanded very rapidly. The Iowa Communication network started providing data or the internet, voice services, and two-way interactive video. The use of computer mediated communications allowed distance education to quickly grow throughout the world with course materials being distributed through computer networks. These advancements in technology enabled a lot of distance teaching universities to expand their courses and increase enrolment.

Problem Statement

This study seeks to review available literature to determine essential elements for successfully distance learning in higher

education. The research will service as a guide for successful distance learning implementation in higher education.

Assumptions of Distance Education

In distance education the students are less supervised as compared to the normal regular campus students. The distance students also have less chance of meeting other students in their class for a discussion. Mostly it is assumed that the distance student is more mature and handles stress better. It is also assumed that they are more self-motivated than the regular campus students. Additionally they are viewed as being able to strike a balance for their work and school activities since most distance learning students are adults and already working.

Key Elements of Distance Education

For any institution to develop an effective distance learning program there must be leadership, institutional commitment, faculty commitment, instructional design, distance learning technologies, learner characteristics, and evaluation [1].

A. Leadership

Leadership is the action of directing the affairs of a group of people in an institution. This is very daunting task since it involves behaviour changes. Notwithstanding that there need to be a group of people to assume the leadership role if an effective distance education programme is to be achieved in the universities [2, 3]. Therefore, the academic leadership should take a bold stand to plan and implement a successful distance learning programme. The leadership should be able to organize all other stakeholders who matter in the execution of an effective programme. The leadership should be able to collaborate with faculty, administrative, and technical staff to give direction to the teaching staff, non-teaching staff and technical staff. The leadership must be well vest in institutional issues and very knowledgeable in change management issues as well.

There should be the creation of sub-committee that would serve as a link to the various groups in the institution to elicit ideas from them and liaise with the leadership [4]. These leaders in the sub-committee should be members of a committee that would see directly to the effective running of the distance education programme.

B. Institutional Commitment

The distance education programme must be part of the vision, mission and goals of the institution. There must be an institutional strategy to execute the programme [5]. Due to the nature of distance education, it would require a lot of efforts to run compared to the regular on-campus courses. Thus, for it to be successful support service function such as material duplication and distribution, grade reporting, textbook ordering, student registration, and management of technical resources should be encouraged and consolidated. There should also be plans for enough technical support for the development, implementation and troubleshooting.

The institution should endeavour to provide enough time for faculty to prepare their notes since the distance learning approach of teaching is different from the regular approach of

teaching [6]. Faculty should be given the freedom to be able to teach and not be directly involved with other implementation issues.

C. Faculty Commitment

The faculty and students are the main people involved in the core business of teaching and learning in the institutions. Therefore, if there is lack of commitment in their part the education programme would be less effective if not non-effective. Thus, faculty must be equipped with skills to be able to deliver the distance learning programme effectively [7].

Most delivery methods in distance education is different from the traditional delivery methods. Thus, the faculty members have an additional task not to know their subject area alone but to have computer skills and master the delivery tool in order to be effective at teaching [1]. Knowing the subject area alone would not suffice. This puts an extra burden on the faculty. Thus, they are tasked more than they would be with the regular on-campus students. Therefore, management is to provide incentives to keep them committed to the work.

Furthermore, there is the need for management to train them in the use of teaching tools [8]. This can pose a challenge that the management has to surmount. Some faculty are resistant to change as such the training should be made interesting in order to elicit their commitment to the training programmes provided. Motivation in terms of such training counting towards their promotion can be instituted in addition to monetary incentives [9].

D. Instructional Design

Factors that influence Instruction design is well stated. It is a must for HEI to be able to maintain the methods of teaching that suit current trend and yet maintain the critically thinking stimulation, interactivity, evidence based, and problem solution oriented methods in distance education. This can only be achieved by good instructional design which is dependent on student involvement and lecturer experience [10]. It implies that HEI must come out with an appropriate Instructional design that would be able to take advantage of innovative ways of learning to minimize the inherent difficulty and complexity in distance education.

The factors of time, training, incentive and professional identity have been stated as the factors affecting instruction design [6]. Also in the situation where more than one instructor is handling a course then collaboration between the instructors should be a factor that can hinder instruction design. There need to be an agreement to what is to be added and not added. Seufferheld and Scagnoli [10] puts it "it should have a global perspective." It has been well documented that incentives could enable institutions get lecturers to dedicate time to instructional design. It is true that incentives may help, but lecturers will be more committed if they are given incentives as well as time to come out with eLearning course materials.

It has been proven that much time needs to be invested in preparing an interactive course compared to non-interactive course. Ruiz Ruiz, et al. [11] in their research found out that pedagogy is moving towards a competency-based curriculum which emphasizes learning outcomes instead of process involved in education. Learning is moving towards the

reduction of actual classroom teaching time and the emphasis on adaptive and collaborative learning.

Thus the issue of time in instructional design should, be invest time to gain time. It is therefore very pertinent for a well-defined model to be adhered to in instructional time. For instance, how much time is to be allotted to asynchronous communication, and synchronous communication? What should actually be discussed in class? All these must be well-defined to reduce classroom time in order to reduce lecturers load so that they can make time to invest in instructional design and with an incentive, this can better be achieved.

E. *Distance learning Technologies*

With the advancement in technology Distance Education progressed from correspondent courses, to electronic communications and to distance education institutions [12]. The technologies deployed in distance learning are various. These are audio, video, data and print. These technologies are to aid the teaching process and faculty must be focused on instructional outcomes and not the technology delivery. Faculty must be abreast with the advantages and disadvantages of each technology tool and use them appropriately to help the students gain knowledge. Furthermore there should be plans put in place to support technology failure during teaching [13]. For instance a laptop suddenly switching off in the middle of a lecture. Faculty must also ensure students commitment in the technology used for the delivery. Students must be familiar with the technology to enhance their learning process.

If there is woefully lack of skill on the part of the students, basic computer skills class could be organized for them [14]. Most university in Ghana has a basic ICT course for the on-campus students. Since they are on campus they have access to all the computer lab facilities on campus. In this light distance learning students are disadvantaged since they have to travel from their place of stay to a centre in the capital to have access. Thus faculty must ensure that distance learning students are not disadvantaged.

F. *Learner Characteristics*

In distance education the students are less supervised as compared to the normal regular campus students. The distance students also have less chance of meeting other students in their class for a discussion. Mostly it is assumed that the distance student is more matured and handles stress better. It is also assumed that they are more self-motivated than the regular campus students [15]. Additionally they are viewed as being able to strike a balance for their work and school activities since most distance learning students are adults and already working.

These assumptions could be wrong and thus faculty must ensure that students are properly trained in the technology usage and also motivate them to increase the completion rate [16]. Some students are not able to finish their course due to the difficulty involved in distance education for the learner.

G. *Evaluation*

Weinstein [17] was of the view that learning is effective in distance learning only if there is programme evaluation and careful planning. There must be a comprehensive assessment of distance learning students, materials used, the audio, the

video, the data and the print materials to ensure that the technology is used as it is intended. That is to aid the delivery of information and makes it more effective. These must all be evaluated to ensure proper acquisition of knowledge. The communication between faculty and students must also be evaluated to ensure proper feedback. Each course should also be evaluated to ensure that learning objectives are met.

II. CONCLUSION

Distance education programs is an alternative to traditional education models. A lot more is required from people, therefore they are faced with the ever-increasing demands and responsibilities at work and home. Distance education offer access to higher education. Students are able to work at their own pace, while receiving a quality education. With the proper support distance learning opens the door to many non-traditional students, who otherwise would not have access to higher education.

Therefore, institutions have to make distance education effective to enable these students' benefit to the fullest. For any institution to develop an effective distance learning program there must be leadership, institutional commitment, faculty commitment, instructional design, distance learning technologies, learner characteristics, and evaluation [1].

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