Proposing Conceptual Framework for Enhancing Integrating of E-learning and Distance Education in Nepal

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ABSTRACT:

Online learning is considered to be a kind of distance education, the main component of learner and teacher at the time of teaching, a mainstream of the process of instruction that content and instruction are conveyed largely over the Internet. In the same time the distance education is considered to be a system or method of instructing education that there is no faceto-face communications. The intensive literature review has been found the lack of studies that trying to solve the weak of utilizing e-learning technology to improve the dependence on the solutions of net-based learning. The key objective of this research is to propose conceptual framework for enhancing integrating of e-learning and distance education in Nepal. The descriptive analysis methodology has adapted for conducting intensive academic literature review. It analysis Governmental and nongovernment all report and other literature that relates to e-learning and distance education. The research exposed that it is vital to of conducting in deep research in e-learning and distance education in Nepal and propose proper conceptual framework

KEYWORDS: E-Learning, Distance Education, Information Systems, Information Theology, Web Application.

RESEARCH BACKGROUND

The past decade has seen a dramatic growth in the utilization of online, blended, and the approaches of distance learning in secondary and elementary education all over the world. Online learning is considered to be a kind of distance education, the main component of that is "the segregation of learner and teacher at the time of teaching, a mainstream of the process of instruction" (Watson and Kalmon, 2005). Online learning is said to be "an education that content and instruction are conveyed largely over the Internet".

Distance education is considered to be a system or method of instructing education that there is no face-to-face communications. At present face-to-face contact is becoming accepted and fashionable in such mode of culture. The methods of Distance education delivery help the ways of delivery of the courses conditional on the needs and nature of the subjects (Pradhan, 2011). The teacher or instructor is a facilitator of face-to-face communication or interaction and teacher counselor is the obtainable resource person locally for offering regular support to the students.

Even though working from a superior level of responsiveness of pedagogic skills, staff in the area faces two essential impediments in the acceptance of a more open learning culture. Firstly, the access of Internet is rapidly improving, but is still in general too weak and contradictory to allocate any dependence on the solutions of net-based learning (Rennie and Mason, 2007). Secondly, the educational culture is opposed to the appreciation of the value of the degrees of open-learning, with succeeding difficulties in re-designing the materials of the course for a more educationally supple, student-centered environment of learning.

The culture of Nepali education is governed by face-to-face teaching. It has a very long history starting from the culture of Gurukul system to the current formal schooling. The appearing processes or practices of utilizing technology and advancement in education have been fostering online learning as a type of distance education and attaining popularity. Online Learning is regarded as one of the different methods or approaches to e-learning (electronic learning). E-learning is considered to be a broader idea of learning, which incorporates the utilization of all electronic ways for learning. On the other hand, Online Learning is particular to the Internet or Intranet arbitrated learning prospects (Pangeni, 2016). E-learning is defined as the "utilization of online media, ICT, and web technologies for culture of education". One of the greatest definitions of elearning can be: a word covering a broad set of processes and applications, like computer-based learning, web-based learning, digital collaboration and virtual classrooms. It incorporates the content delivery by means of Internet, audio- and videotape, intranet/extranet; interactive TV, satellite broadcast, CD-ROM, and so on. In Nepal, HEIs (Higher

education institutions) have begun employing Online Learning as e-learning primarily to assist the conventional on-campus learning and teaching activities. It is supposed that e-learning offers new and current opportunities to both the HEIs and the students by making latest and exciting opportunities.

1921	Educational radio broadcasting begins at Ohio School of the Air
1929	University of Nebraska begins supervised independent study high school
1951	School of the Air launched in Australia
1953	Educational television broadcasting begins at University of Iowa
1961	Purdue University pioneers airplane-based K-12 instruction
1965	Computer-based K-12 learning experiments at Stanford, and a year later at Illinois
1971	Educational broadcasting via geosynchronous satellite begins using NASA's ATS-1
1980s	Audio and computer conferencing technologies used in K-12 instruction
1980	Development of USENET
1982	Development of SMTP e-mail and Internet Protocol Suite
1987	Norwegian distance learning expert Morten Paulsen predicts creation of a "virtual school"
1989	Timothy Berners-Lee demonstrates key functionalities of the World Wide Web
1990s	Many states and regions develop broadband networks for K-12 instruction and other uses
1996	University of Nebraska's CLASS program, Florida Virtual High School, and the VHS consortium begin offering web-based high school courses during the school year
1996	Florida Virtual School launched; many state virtual schools follow
2000	Online charter school provider K12 Inc. founded; Connections Academy launched a year late
2009	State virtual school programs exist in 27 states, report 320,000 course enrollments
	Full-time online schools exist in 24 states, enroll about 175,000 students
2011	More than a million estimated enrollments in K-12 online learning
2013	State virtual school programs exist in 26 states, report 740,000 course enrollments
	Full-time online schools exist in 29 states, enroll 310,000 students
	More than 75% of school districts offer online or blended learning options
2014	State virtual schools served 741,516 course enrollments (one student enrolled in one semester-long course) in 26 states in SY 2013–14.
	Fully online schools served 316,320 students in 30 states in SY 2013-14.

Table 1: Key dates in the history of K-12 distance and online learning Source: Clark, 2012

Table 1 depicts the key dates in the history of K-12 distance and online learning. The K-12 online learning starts with the systems and concepts, which made it possible. The self-regulating research high school launched by the University of Nebraska in the 1920s provided as a model for online and distance learning programs later on. By 2004-2005, K-12 self-regulating research enrollments peaked at 174,000 all over the country, but about 40% were in the courses online. A series of breakthroughs of technology set

the stage for the appearance of web-based teaching or education. The Internet, networked computers, email, the broadband and the Web were all required before Morten Paulsen's 1987 outlook of a "virtual school" became a reality in the 1990s and 2000s. A virtual school is "an organization of education, which provides K-12 courses all the way through Web-based or Internet-based techniques and methods" (Clark, 2001).

• Problem Statement

Nepali students and teachers had no options more than talk and chalk incorporating the textbook and blackboard as the materials of teaching, in the past. Most recently, they could utilize all probable materials of teaching covering video, audio, simulated and animated objects, Internet/Web tools, software tools, electronic pen, smart board, and several more as per the require of the class or lesson they intend. The culture of Nepali education is on a winning streak to generating a splendid shift in the direction of adjusting new and innovative technology (Dahal, 2014). Technology developed (OPL) Open and Distance Learning is considered to be another chance or opportunity for the Nepali Higher education institutions to attain the students all over the country and beyond. Hence, teaching or tutoring is not restricted within boundaries of all the four walls of a class or classroom; the courses are easily reached to each and every student linked to the Internet from all around the world. And the distance education links the non-formal and formal sector. The open school system is said to be an optional route to the formal school schooling with external examination system, stipulation of school curriculum and differing in the materials of learning in the print form, broadcast telecast, audio-visual cassettes, audiovisual conferencing etc. all the way through resource materials, distance tutor and face-to-face contacts (Pradhan, 2011). This kind of education is proposed for all sorts of people for various purpose such as literacy, young and adults, technical, vocational and scientific. This method is most dynamic and potential for any country developing or developed nature. Because of the advancement of technology, more efficient and effective learning materials and equipment's are coming up that would develop the efficiency and quality of distance learning.

Objectives

The key intention of this research is to explore in detail about Integrating E-learning and distance education in Nepal.

Limitations of the Research

- a) The findings of the research are restricted to E-learning and distance education alone
- b) This research is limited to Nepal alone
- c) This research focuses mainly on "Integrating Elearning and distance education in Nepal"

CONCEPTUAL FRAMEWORK:

The following figure illustrates the conceptual framework for integrated e-learning and distance education in Nepal

Figure 1: The conceptual framework for the integrated e-learning and distance education in Nepal Source: Author

Hypothesis:

The following research hypotheses are to be proposed and tested based on the above conceptual framework in order to know about the integrated e-learning and distance education in Nepal H1: There are significant impact of E-Learning & Distance Education on the Beneficiaries Satisfaction.

H2: There are significant impact of E-Learning & Distance Education on the Policy /Performance.

H3: There are significant impact of the Policy Performance on Beneficiaries Satisfaction.

H4: There are significant impact of E-Learning & Distance Education and Beneficiaries Satisfaction through policy Performance as mediator Factor.Research Methodology

The aim of this thesis is to integrating E-learning and distance education in Nepal. The following section will briefly discusses about research paradigm, research design, types of data, sampling design, data analysis and interpretation techniques and explains ethical considerations in this research.

Research paradigm and approach:

A research paradigm is explained as a structure of methods, standards and attitude inside which the investigators work, and the investigation work takes place (Krauss, 2005). Research paradigms are of two broad categories. They are (1) Positivism and (2) Interpretive (Creswell, 2003).

This research adopts mixed methodology. This research integrates both *positivism* and *hermeneutics*. Hermeneutics is a method in the research since the researcher has gathered descriptive data for analyzing the concern proposed in the research. This research also undergoes positivism since it examines a research hypothesis by analyzing the numerical data gathered from primary respondents.

This research employs both *quantitative* and *qualitative* approaches. Qualitative research also known as inductive method of research is subjective in character (Muijs, 2010). Quantitative analysis uses numerical information. This research shares questionnaires to 150 students in the distance education institutes of Nepal. Alternatively, this research interviews ten officers working in ten various distance education institutes of Nepal for the qualitative analysis.

This research adopts *descriptive research design*. According to Thyer B (2009), the descriptive research attempts to characterize the problem, situation, service, and phenomenon and offers information about the living conditions of a community or characterizes attitudes towards the problem. This research can be employs when the research object is very difficult. Also, it is employed in identifying the connection that exists among the variables. Grinnel and Unrau (2008), points out that descriptive design makes use of the elements of both quantitative and qualitative research strategies in the same research. The current research is *descriptive* in nature because this research has both quantitative and qualitative analysis.

MODEL DISCUSSING

Pradhan, (2008) stated about the distance education, a imparting educational method without a face to face interactions are integrated in Nepal. But in recent years, face to face interactions are new and popular mode of education. The delivery of the distance education in Nepal, clearly assists the mode of delivery, depending on the subjects demands as well as the nature of each subjects. In Nepal, the distance education has two main persons like tutor and tutor counselor; here the tutor plays the part of facilitating the subjects whereas the tutor counselor is resource person who is locally available for supporting the students continuously. In Nepal, the difficulties faced in distance education are the under development, poverty and landscape hindrance even after equal access for all people. The radio education program was the first launched distance education in Nepal by the college of education.

Rennie and Mason, (2007) analyzed the development of distributed learning techniques conducted by many universities to design distance and distributed learning courses in Nepal and Bhutan. The distance and distributed learning has created higher awareness for pedagogic skills, but here the staffs face significant impediments for reaching the students adopting open culture in the process of learning. The firstly, negative aspects is the internet access in Nepal, which are mostly weak and inconsistent to make the net based learning program more difficult. Secondly, the resistant academic culture cannot be recognized properly due to the open learning degrees which make it very difficult to design the subject course material and flexibility in education.

Tara, (2014) stated about the beginning of distance education for computer undeveloped country like Nepal is of great advantage and highly innovative. Even though the Open University Nepal is not materialized yet, the distance education offered has established the high carrier gain. The Distance Education For Computers is known for its alternative model of education in Nepal, while the technological development is getting stronger for careering feasible network for teacher and learner in fixed place, fixed time, fixed person for the purpose of training the learners. The Open University in Nepal has organized advanced computer-based education for rural Nepalese in department like heath, productivity, economic improvement sustainability disciplines and social system.

Parajuli, (2016) aims to research the mobile learning practice that has been integrated in Nepal for higher

education, as mobile technology is playing the leading technological role for 15 years. The semiurban as well as the rural undergraduate people can use the mobile education for their educational practices in Gorkha district of Nepal state. Even though mobile learning was not widely spread in Nepal, the uses of mobiles for educational purpose make the integration process more powerful and effective plan. Obviously, there are lots of significant distinctions between the e- learning and mobile learning as it has issues like small screen size, processing power and storage but mobile technology trying to break these barriers. E- learning are known for its real time and self-paced learning but mobile learning is also known for its informal presentation, self-paced and un-tethered quality.

According to Wagley, (2013) in Nepal, the Kathmandu university school of education offers elearning environment t for all its students. All the learning courses and the resources for learning each subject through the mode of face to face interaction are provided through online. The Educational Content Management System for e-learning strategies provides all the possible features for learning and assisting for students as well as teachers. ECMS has the most improved technological platform called the Moodle school of education is also being offered in the programs for distance learning through the web 2.0 technology. The couse activities and supported email messages are offered through model platform. Thus Nepal offers a completely interactive virtual learning through distance learning in Kathmandu University.

Bajarcharya, (2014) investigated about the ten most important dimensions of the distance learning in the state of Nepal. The open and distance learning for higher education are in need of improvising the quality assurance while comparing with the traditional learning in the Nepalese context. The development of quality assurance by integrating the qualified open and distance education programs can bring greater standardized learning process. The face to face classes offered in open and distance learning has the most important characteristics like teacher and learner separation, mix media course ware use, institutional accreditation, face to face meetings and tutorials, two ways of communication and process of industrializing the learning courses. E- Learning in Nepal also offers learning objectives instructional strategies through online, asynchronous designed learning material, satisfying learner's demands etc.

CDEC, (2009) expresses about the Open And Distance Learning (ODL) program in south Asian

countries like Bhutan, Pakistan, Nepal, Sri Lanka, etc, which has offered learners to practice various course programs by breaking the barriers like accessing, time, place, researching methodology, curriculum contents and combination of all these aspects. The organizational education program is the distance education which accredited wherever the teachers or learners is at any geographical place or time distance. ODL is known as a umbrella term for education which reaches all the learners from the educational institution or the tutors. In ODL, the student's advantages include, they can learn from remote or rural communities, migrant families, disabilities, poor parents, ethnic communities and even street children after disasters.

Pangeni, (2016) briefly explains the cultural practices in Nepal being dominated by the face to face learning can be broken by the open and distance learning programs. The most emerging practices of e- learning all gaining its popularity, so promoting and integrating e-learning and distance learning program in country like Nepal can bring rural students to the world of virtual education. The thematic issues in Nepal is modes of education culture flexible learning, Pedagogical tool of ODL for teacher's educations and implementing ODL in Nepal is the core focus for exploring. Many universities and open universities have acquired success in the implementation of ODL in this age of internet.

Kharkurel, (n.d) explores the potentiality of elearning in Nepal, as e- learning includes formal and informal learning programs through the electronic delivery. The learning tools like web baesd teaching and learning materials, CD-ROMs, educational animation and graphics and e- mail are included in this method. As Nepal is new to the role of developing country the e- leaning seems to be new stranger. However, the Nepal's education system which usually relied on traditional learning has recently got out of tract to e-leaning in the Nepalese cities. As the Nepal wants to exploit the e-learning strategies, the Nepal government has given its importance to the information and communication technology for build a knowledge-based society for city dwellers and rural people.

Nepal policy, (n.d) mentioned about the open and distance learning vision of Nepal, which are integrated in a full flow for the creating of opportunities for Nepal citizens. The ODL system expanded its full access in schools and higher educational institute for having a new and diversified learning program for children working people, housewives and out of school students. Through ICT

applications the open and distance learning gives the qualified education system similar to the traditional education by various delivery mechanisms offered in the several online courses. The ODL has created a conventional education system by expanding the access for interested learners in groups, women, poor people, and marginalized citizens and so on. This ODL is known for its flexible learning due overcome of barriers like physical, geographical and time strategies.

Lodhia (2006) analyzed about the e- learning programs offered in various countries for the welfare of the nations. Distance learning programs can offer valuable opportunities for adults who are working and for children who are basically poor or disable to go for traditional education system. The distance learning provides the dynamic career and qualified environment virtually from the database index, web indexing and book index. The distance teaching has also offered tutorial classes with instructional designs with various programs for each course offered in a better teaching and learning methodology. The capacity of the developing Nepal countries works with the support of the government for enhancing their ICT for the purpose of educating the country people.

Acharya, (2012) explains about the open and distance learning in the context of Nepal. Even though there are increase in popularity in the open and distance education in Nepal, there are also various challenges and prospects in it. In the industrial revolution the distance education concept started emerging. In account of Desmond Keegan, open and distance education made its way as an alternative model for the traditional education. The ODL has the main advantage of feasibility in learning and teaching with the innovative and creativity in the information and communication technological development. The separate teachers were trained to meet the learners need without the need of place, time or to meet particular person. The four stages of ODL undergone in Nepal were as follows: tele-learning model, multimedia model, interactive flexible learning model or Taylor model and flexible learning model. Western education system is mostly used in the ODL of Nepal.

CONCLUSION AND RECOMMENDATION

The conclusions were reached to the vitality of conducting in deep research on the area of online learning and distance education which considered the main component of learner and teacher at the time of teaching, a mainstream of the process of instruction

that content and instruction are conveyed largely over the Internet. It is important to fill the lack of studies that trying to solve the weak of utilizing e-learning technology to improve the dependence on the solutions of net-based learning for enhancing integrating of e- learning and distance education in Nepal. The research exposed that it is vital to of conducting in deep research to identify the underlying common factors of E-Learning & Distance Education, Policy/ Performance and beneficiaries Satisfaction. Also, it worthy to examine the impact of E-Learning & Distance Education on the beneficiaries Satisfaction, the Policy Performance beneficiaries Satisfaction and Policy/Performance as mediator Factor. It vital to of conducting to propose a model for E-Learning & Distance Education in Nepal with particular attention to the influence of the quality of knowledge management.

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