



نقش مؤثر تبادل اطلاعات الکترونیکی در سیستم آموزشی

پوهندوی سمیه میر^{۴۸}

تقریظ‌دهنده: پوهندوی یلدا عظیم

مجله‌ی علمی-تحقیقی حوزه‌ی علوم
اجتماعی پوهنتون کابل، ۱ (۴) ۱۴۰۰

چکیده

معلومات این مقاله در باره پلت‌فورمی به نام تبادل اطلاعات الکترونیکی (EdX) که یک برنامه مشهور در سیستم آموزشی آنلاین به‌ویژه در آموزش عالی می‌باشد، است. این پلت‌فورم استادان را در قسمت تنظیم مواد درسی تدریس از راه دور و اشتراک مقاله علمی- پژوهشی به شکل آنلاین کمک می‌کند. در ابتدا تعریفی از این پلت‌فورم و تاریخچه‌ی آن را خواهیم داشت. بر علاوه معلومات در قسمت استفاده این پلت‌فورم و طرز‌العمل آنرا مورد بحث گرفتیم. در ضمن استادان پوهنتون در کشور ما سعی می‌کنند اطلاعات بیشتری در مورد پلت‌فورم (EdX) و استفاده‌ی از آن در فعالیت‌های توسعه‌ی حرفه‌یی خود دریافت نمایند. بنابراین، من می‌خواستم اطلاعات بیشتری در مورد این پلت‌فورم پیدا کنم و در مورد آن بیشتر یاد بگیرم تا بتوانم از آن در بلندبردن مهارت آموزش آنلاین استفاده کنم. اول‌تر از همه، مهم است که در مورد تاریخچه و تعریف (EdX) بدانیم و نقش آنرا در سیستم آموزشی پیدا نمایم.

اصطلاحات کلیدی: تبادل اطلاعات الکترونیکی؛ آموزش الکترونیکی؛ آموزش؛ انترنیت؛ صنف‌های مجازی

The Effective Role of Electronic Data Exchange in Education System

Asstt. Prof. Somaiya Meer

Abstract

This paper introduces new Platform by the name of Electronic Data Exchange (EdX) to help university teachers to use that for distance teaching system. There is definition and background information about EdX; information about how to use and implement that platform. The EdX is a global and popular platform in education, especially in higher education; in my home country university teachers try to find more information about this platform and use that in their professional development activities and teaching their classes. Therefore, there is a need to find more information about that platform and to learn more about it in order to use it in teaching-learning career. First of all, it is important to know about the history and definition of EdX and then find out its role in higher education.

Keywords: Electronic Data Exchange; E-learning; Training; Internet; Virtual Classroom

ارجاع

میر، سمیه. (۱۴۰۰). نقش مؤثر تبادل اطلاعات الکترونیکی در سیستم آموزشی. مجله‌ی علمی-تحقیقی حوزه‌ی علوم اجتماعی پوهنتون کابل، شماره ۱ (۴)، صص ۱۷۳ - ۱۸۰.

^{۴۸} استاد پوهنځی زبان و ادبیات خارجی، پوهنتون کابل

Introduction

This platform was found by Harvard University and MIT in 2012. EdX is an online learning destination and MOOC provider, offering high-quality courses from the world's best universities and institutions to learners everywhere. This platform has more than 130 global partners, that the world's leading universities, nonprofits, and institutions are its members. In addition, it is a global learning community in which students come from every country around the world. Whether they are interested in Computer Science, Language, Engineering, Psychology, Writing, Electronics, biology, or Marketing, there are courses for each field of study. Therefore, this platform is effective for all fields of study and it is considered as a stepping stone to be involved with other students and teachers around the world. Thus, it would be more important to find out more about EdX.

According to Conway (2013), the first EdX course on circuits and electronics from MIT, drawing 155,000 students from 162 countries. In 2013; they partnered with Stanford and in June 2013 they reached 1 million students. On the other hand, Korn (2014) says that the Edx.org released as open source, creating Open EdX. MIT announced a high school initiative and Professional Education courses; its partnership with Microsoft and with Arizona State University to launch the Global Freshman Academy. These resources show that this platform has a close link with education for further information.

Purpose of the Study and Research Questions

This research studies over the changes in education system; recently because of Covit-19 it is needed to cover the lessons through online sources; and EdX could be a good option for teachers and students to follow up their online classes. The question is that why EdX; no other platforms; in case we have a variety of platforms; the response could be that through having an organized and international platform the value of educational system in a country will increase. Therefore, The Higher Education of Afghanistan could have access to EdX like the world's famous institutions.

Research Questions

1. What is EdX and how can it be used for online classes?
2. How to use EdX worldwide in education system?

Literature Review

According to Rocheleau (2014); EdX is a massive open online course (MOOC) provider. It hosts online university-level courses in a wide range of disciplines to a worldwide student body, including some courses at no charge. It also conducts research into learning based on how people use its platform. The EdX can:

- Increase access to high-quality education for everyone, everywhere;
- Enhance teaching and learning on campus and online and
- Advance teaching and learning through research

This platform was found and continues to be controlled by colleges and universities. This is only leading MOOC provider that is both nonprofit and open source. Open EdX is the open-source platform that powers EdX courses and is freely available. With Open EdX, educators and technologists can build learning tools and contribute new features to the platform, creating innovative solutions to benefit students all over the world. Consequently, this platform is effective to be implemented in the Kabul University; teachers and students could use that for their professional development and exchange their experiences. This platform has specific functionalities that are as follows:

- EdX courses consist of weekly learning sequences. Each learning sequence is composed of short videos interspersed with interactive learning exercises, where students can immediately practice the concepts from the videos.
- The courses often include tutorial videos that are similar to small on-campus discussion groups, an online textbook, and an online discussion forum.
- EdX offers certificates of successful completion and some courses are credit-eligible. Whether or not a college or university offers credit for an online course is within the sole discretion of the school.
- EdX offers a variety of ways to take courses, including verified courses where students have the option to audit the course (no cost) or to work toward an EdX verified certificate (Tamar, 2012).

As this platform is important for all fields of studies and in different fields, it is used for specific purposes by different characterizations; therefore, I found a number of that acronyms and definitions:

- EdX: As Acronym and Definition;
- EdX= Electronic Data Exchange;
- EdX = Extended Data Register;
- EdX = Event-Driven Executive (IBM Series/10S);
- EdX = Electromagnetic Data Exchange (Telecommunications);
- EdX = Event-Based Data Exchange (UPNet) and
- EdX = Energy Dispersive X-Ray (Spectroscopy).

These acronyms show that EdX could be used in all fields of study; in education it stands for (Electronic Data Exchange). Therefore, I believe in education it has a verity of usages, for example; in research, Kabul University teachers could use for their academic promotion through having access to international journal; academic papers; sharing ideas. Even through this platform; the research could be shared globally.

Methodology

This research study follows a qualitative research methodology, as the main objective is to gain a deep understanding of EdX platform; which the world's well-known institutions use and implement in their education system. Hence; a qualitative research uses that naturalistic approach that seeks to understand phenomena in context-specific settings.

In addition, qualitative methods can be used to better understand any phenomenon about which little is yet, qualitative research is a means for exploring and understanding the meaning individuals or groups ascribe to a social or human problem. This research involves a literature review about the use of EdX usage and suggests advantages of that; for further information its better to know about its functionality.

Findings and Discussion

EdX courses consist of weekly learning sequences. Each learning sequence is composed of short videos interspersed with interactive



learning exercises, where students can immediately practice the concepts from the videos.

The courses often include tutorial videos that are similar to small on-campus discussion groups, an online textbook, and an online discussion forum where students can post and review questions and comments to each other and teaching assistants; where applicable, online laboratories are incorporated into the course. For example, in EdX's first MOOC - a circuits and electronics course - students built virtual circuits in an online lab (Breslow, et al., 2013).

EdX offers certificates of successful completion and some courses are credit-eligible. Whether or not a college or university offers credit for an online course is within the sole discretion of the school. Therefore, EdX offers a variety of ways to take courses, including verified courses where students have the option to audit the course without any cost or participate in a course to receive a certificate by cost and the costs of classes varies based on the type that course for each subject. Consequently, courses in EdX platform are different and specific for each fields of study; as an example, through this platform in education research of authors could be uploaded and having access to international researches of other researchers are possible through global communication; and exchange of experience (Puckett, 2011).

Research Usage

EdX is empowering research on pedagogy or learning about learning. According to Breslow et al., (2013) the online environment provides a powerful platform to conduct experiments, exploring how students learn and how faculty can best teach using a variety of novel tools and techniques. Besides, through EdX a number of questions could be answered such as: What motivates students to learn and persist? What helps students retain knowledge? What are the best ways to teach complex ideas? How can we assess what students have learned? What is best taught in individual vs. online?

In addition to educational offerings, Laura (2012) states EdX is utilized for research into learning and distance education by collecting learners' clicks and analyzing the data, as well as collecting demographics from each registrant. A team of researchers at Harvard and

MIT, led by David Pritchard and Lori Breslow, released their initial findings in 2013 (Breslow et al, 2013).

As a result, EdX member universities and organizations also conduct their own research using data collected from their courses, research focuses on improving retention, course completion and learning outcomes.

EdX has engaged in a number of partnerships with educational institutions in the United States, China, Mongolia, Japan, and more to utilize EdX courses in large classrooms. Through this platform even traditional classes model could be included as an online interactive component. The research shows that this platform is effective to be implemented in the Kabul University and use as an online source to university teachers' academic promotions. Through which all university members inside and outside the country access to that; therefore, it is important to find out more about its usage.

Global Usage

Recently, a number of higher-education institutions use the Open EdX to provide MOOC services; such as St. George's University Online, MIT's MIT platform, and the University of La Serena. Besides, some private companies also use Open EdX to provide training to target populations.

Related to that Kabul University has plan to implement this platform in the near future and the training for university teachers' and staff is already started. Therefore, it is helpful to know more about other institutions participation and use their experiences for further information.

In this paper, in recent years, several countries and private entities announced their adoption of the EdX open source platform to launch new initiatives. Chinese universities joined together to form an online education initiative in China. In addition, higher education institutions in France offer online courses throughout France, and other universities use the EdX platform to pilot online training courses in economics and finance, and corporation is using the platform to expand its corporate training and education for the employees (Sangeeta, Monohar & Kr Sarma, 2011).

Conclusion

As a result; this platform is one of the effective sources for teaching online classes in a national and international level. Therefore; Kabul University could implement that as an online source for university teachers' academic promotion and teaching purposes. There is hope that Kabul University could register as a member of EdX and conduct its research data, improve research retention, completion of course and outcomes. As a result, EdX is an effective platform for all fields of study and effective for teaching and academic research papers.

References

- Breslow Lori & et al. (2013). "Studying Learning in the Worldwide Classroom: Research Into EdX's First MOOC". RPA Journal, June 14, 2013.
- Conway, M. R. (June 20, 2013). EdX Enrollment Reaches Seven Digits. The Harvard Crimson. Retrieved Oct 19, 2019.
- Korn, Melissa. (2014). Corporate Training Gets an Online Refresh. The Washington Post. Retrieved October 22, 2014.
- Laura, P. (2012). The Year of the MOOC, The New York Times. Retrieved August 20, 2020.
- Puckett, A. (2011). Online features. Georgia State University Library. (November 20th, 2012). Available at <http://research.library.gsu.edu>
- Rocheleau, Matt. (2014). Online education company edX offering free high school courses. The Boston Globe. Retrieved September 10, 2018.
- Sangeeta Kakoty, Monohar Lal, Kr Sarma Shikhar. (2011). E-learning as a Research Area: An Analytical Approach, International Journal of Advanced Computer Science and Applications, 2(9), pp. 214-234
- Tamar, L. (2012). Harvard and M.I.T. Team Up to Offer Free Online Courses. The New York Times. Retrieved March 3, 2021.