Research Journal of Social Sciences & Economics Review
Vol. 2, Issue 2, 2021 (April – June)
ISSN 2707-9023 (online), ISSN 2707-9015 (Print)
ISSN 2707-9015 (ISSN-L)
DOI: https://doi.org/10.36902/rjsser-vol2-iss2-2021(325-333)

RJSSER
Research Journal of Social Sciences & Economics Review

Online Education and its Effectiveness as an Alternative Approach to Professional Qualification: A Case Study of Overseas Pakistanis in Saudi Arabia

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Abstract

The development of a nation is highly dependent on the quality of education it provides to its citizens. A country's educational level decides its position among the world's nations. Countries that excel in the fields of education lead the world. Education is a game-changer that transforms a society by removing barriers to development and is the tool for empowering people. Education is learning where a community's knowledge, habits, and skills are passed down from generation to generation. One of the aspects of education is E-education which means "the use of any electronic technology to help in the acquisition and creation of information and understanding". The purpose of this paper is to give an in-depth understanding of e-learning along with its history, classification, levels, and reasons why it is important. However, the main objective of the paper is to assess the effectiveness of online education as an alternative approach to the professional qualification of overseas Pakistanis in the Kingdom of Saudi Arabia. The paper shows that online learning can bring positive results by providing flexible access to instructions, making learning easier for those who cannot attend traditional schools, and enhances teacher-students ratios. The paper is descriptive and analytical where mostly secondary data has been used and only a few telephonic interviews have been conducted with those who have spent life in KSA. Similarly, data have also been obtained from the various organizations which are actively involved in e-learning.

Keywords: Education, Online Education, E-learning, Blended Learning, and Tele-education

Introduction

Education is a doorway to progress and growth. Education is exclusively responsible for the advancement of science and technology. The educational level of a country determines its ranks among the nations of the world. In this regard, countries with high educational and scientific breakthroughs dominate the world. Education has an impact on living standards because it translates a country's workforce into productive human capital and acts as a catalyst for social change (Hoodbhoy, 1998). Education is often regarded as the most essential factor in overcoming people's challenges, as well as the most significant method for motivating and integrating them into the mainstream of production. Education not only provides individuals with the materials and skills they need to improve their health and well-being but also enables them to assume their due position in society and contribute to its progress. A person's standing and self-confidence in decision-making are enhanced by education. When individuals are illiterate, not only is a nation's human resource broken, but it also has minimal economic worth.

Education is a sort of learning where information, knowledge, habits, and abilities of a group are passed down from generation to generation through teaching, training, or study. E-learning is a broad concept that can be described as "the use of any electronic technology to help in the acquisition and creation of information and understanding". In the available literature, online education is referred to by a variety of names for example, "e-learning", "distance education", "online learning", "computer-based learning", "computerized electronic learning", "blended learning", "virtual learning", "tele-education", "web-based learning", "cyberlearning", "distributed learning", "Internet-based learning," etc. However, all of these types of E-education are termed "Online Education". Online education has been variously defined by scholars in the field. For example, McIsaac and

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Gunawardena (1996: 5) say that distance education is "no more than a hodgepodge of ideas and practices taken from traditional classroom settings and imposed on learners who just happen to be separated physically from an instructor". Moore and Kearsley (2012: 2) argue that "distance education is teaching and planned to learn in which teaching normally occurs in a different place from learning, requiring communication through technologies as well as a special institutional organization" while Finch and Jacobs (2012: 546) define it as "all forms of teaching and learning where the student and instructor are separated geographically and temporally".

Thus e-education is an Internet-supported instructional environment comprising a variety of programs using the Internet within and beyond educational institutions providing access to instructional material and at the same time facilitating interaction among the students and teachers. Online education can be delivered entirely online or in combination with face-to-face interactions. Fully online education is a sort of e-learning in which all of the instructions and assessments are delivered over the Internet (US Department of Education 2007; Picciano & Seaman, 2009). Fully online education includes both teacher-led teaching and resources designed to teach without the presence of a teacher if they include an instructional setting that can be accessed entirely through the Internet, whereas hybrid or blended learning allows learners to receive a significant portion of teaching through both face to face and online means. Blended learning is a halfway ground between totally online learning and entirely face-to-face learning (Graham, Allen, & Ure 2005). Adults who desire to complete their education without leaving their homes or jobs are most benefited from online education programs. Their offices are not only living spaces but also testing grounds for new ideas. They may have an impact on their work and personal lives after graduation.

In truth, just as face-to-face education comprises a diverse set of activities, online learning includes a diverse set of applications and practices (see, for example, Cavalluzzo 2004). Teachers can instruct, encourage group activities, or, more frequently, employ a variety of modalities in a single class in face-to-face education. New research reveals that certain online learning methods are just as successful as face-to-face learning (U.S. Department of Education, 2012). According to a survey, the key factors driving educational institutions in providing e-classes are; fulfilling learners' requests for elastic schedules (68%); providing access to educational institutions for learners who may not be able to attend (67%); expanding course offerings (46%); and trying to enhance student enrollments (45%) (Parsad, Lewis, & Tice, 2008).

Objectives of the Study

The main objectives of this study are:

1. To give an in-depth understanding of e-learning along with its history, classification, levels, and reasons why it is important.
2. To assess the effectiveness of online education as an alternative approach to the professional qualification of the overseas Pakistanis in the Kingdom of Saudi Arabia.

Methodology

The study is descriptive and analytical. It is library-based research where mostly secondary data in the form of books, journals, internet sources, etc. have been used and only a few telephonic interviews have been conducted with those who have spent life in KSA. These interviews were interpreted based on content analysis. Similarly, data for analysis has also been obtained from the various organizations which are actively involved in e-learning.

Significance of the Study

The study has much significance because no such study has ever been conducted in the area and the findings generated will help to expand the frontiers of knowledge by adding to the existing literature in the field. The finding and recommendations will assist in evolving appropriate measures and alternative policy options and guidelines that will enable the government and society to evolve effective mechanisms and strategies for addressing the issue at hand.

In what follow we give an in-depth understanding of e-learning along with its history and classification, the levels, and reasons why distance education is important.

History of Online Education

Online education for the first time started at the University of Chicago, US, in the 17th century when teachers and students while at different locations, interacted via correspondence programs. Following the introduction of radio as a means of communication during WWI, the technology was applied to online instructions at educational institutions, and the School of the Air was founded in Wisconsin in

the 1920s. When television was introduced in the second half of the 20th century, e-teaching started for the first time between the students and teachers living in different locations. Similarly, as computer technology got popular during the 1970s and 1980s, e-education significantly expanded and the first-ever fully online teaching courses were offered in 1981. Similarly, in the mid-1980s, online graduate and undergraduate courses were started to be offered by several educational institutions. In the late 1980s, because of the shortage of teachers for mathematics, foreign languages, science, etc., some educational institutions, particularly schools, started commercial courses through a new satellite technology, which further popularized the use of e-education (Mclsaac & Gunawardena, 1996).

The launch of the World Wide Web in 1991 was a game-changer for online learning, marking a turning point in the gradual development of the e-teaching-learning process. This development greatly influenced the spread of e-education. The concept of e-education slowly got popularity even in the developing countries outside the west. Maloney-Krichmar and Abras (2003: 4) believe that "WWW facilitated the wide-spread use of websites and the development of online community groups supported by web pages and various forms of communications software". Since 1991, educational institutions including universities and colleges not only in the US but worldwide have begun to deliver not just e-classes but also full degree-awarding programs (Wallace, 2003).

The Internet and the WWW have provided many educational advantages. Higher education institutions have been able to tap into new audiences and have opened up new markets through online teaching. The majority of the learners can benefit from the flexibility by balancing work, family commitments, and study. Universities' online programs can benefit from a broad range of technological advancements. These programs may help in enhancing the students-instructors interactions and also among students generally (Bell & Fedeman, 2013). As a result of encouraging such innovative approaches, online courses have exploded in popularity throughout the world. Many higher education institutions are gradually providing entirely online and/or hybrid courses that combine e-learning with face-to-face instruction (Sun & Chen, 2016). E-education uses the Internet to build learning communities. Usually, related materials are available on websites and are rarely included on CDs, Twitter, message boards, and forums. However, the effectiveness of e-education greatly dependent on a) collaborative and interactive relationships between learners and teachers; b) a constructivist and learner-centered approach; and c) providing support to students.

With the prevalence of the COVID-19 pandemic, the importance and popularity of e-education further galvanized. The education system throughout the world during the pandemic became dependent on this single aspect of education. To involve students in the learning process, all educational institutions throughout the world have started offering online classes. Even examination and evaluation are being made online. Defenses for higher degrees (MS, M. Phil, and Ph.D.) were arranged online. This sudden shock not only in education but also in other fields was easily absorbed by the developed countries but not by the developing countries including Pakistan. The majority of the students and even teachers were not familiar with the web technology. They were not trained and resultantly our education system greatly suffered during the pandemic.

Classification of E-Teaching

Online teaching may be variously classified. However, the possible important questions or decisions could be "How to put any course online with an effective way to engage students into the learning?" and "What technologies and tools are available to implement the teaching?" Various attempts have been made to initiate and provide optimal online facilities/programs. A few of them may be mentioned below.

a. University-Based E-learning: Used by those enrolled in the universities for obtaining diplomas or degrees;

b. Massively Open Online Courses/Classes (MOOC): Used usually by self-motivated learners and where the various programs are directed towards learners' learning goals, skills, knowledge, and related interests (McAuley, Stewart, Siemens, & Cormier, 2010). The system of MOOC was launched in 2008 for enhancing the accessibility of students to education at a higher level. This includes corporate-based and university-based e-courses. Corporate-based online facilities are either free or profit base. For example, Udacity was started in 2011 by Sebastian Thrun after resigning the Stanford University. This program "provides a variety of credential opportunities that are accepted by large technology organizations that regularly hire from the Udacity student body," (Sun & Chen, 2016). The bulk of these programs are free,

open, and accessible to the general public, indicating the institutions' efforts to increase public engagement in online learning. Learners are granted certificates, diplomas, credits, and degrees after completing their required credit courses, etc.

c. Similarly, Peer 2 Peer University (P2PU) is another e-learning facility where all courses are offered. It is an open and free site trying to disseminate knowledge and learning.

Besides these, there are several programs, models, and sites which have been initiated either free or for-profits which work as a game-changer in the field of education.

Discussion, Analysis, and Results

The important question we are faced with is "Why do we need distance education?" While thorough research studies are lacking, nine online learning applications have been presented which are considered as possible pathways to improve productivity. The first five applications help in improving educational effectiveness, and the latter four of them are related to probable cost reductions. These pathways are discussed below.

a. It broadens access to quality educational opportunities and experiences at a lower cost, especially for students in rural areas or in other circumstances where difficulties such as low student enrollments make the standard school model impractical. Online learning can expand learners' accessibility to courses taught by experienced teachers in educational institutions that they may not otherwise be able to attend;

b. It encourages active learning with accessibility to a bulk of resources that can help in adopting the best teaching-learning practices and research-based principles of learning. This function might help in improving students' outcomes without significantly raising costs. Online learning helps in improving learning outcomes by actively engaging learners in learning, imparting deeper learning and greater motivation (Twigg 2003a, 2003b);

c. It individualizes and differentiates teaching instructions that are based on students' performance, their assessments, and their preferred place of learning. This improves the students' efficiency. E-learning settings are frequently described as highly personalized and differentiated (Christensen & Horn 2008; Waldeck 2007; Waldeck 2008). Some of these settings are planned to meet the learning needs of a variety of students, such as disabled students, those learning English as a second language, and gifted students, while others are planned to suit players, the labor force, or because a student has been hospitalized or homebound or has another time-bound commitment;

d. It personalizes the learning process by taking into account students' interests which helps in increasing learners' motivation and better learning outcomes;

e. It makes optimal use of students and teachers' time where teachers' time is focused on high-value activities;

f. It improves students' learning by motivating them and assisting them in mastering subjects and demonstrating competence;

g. It saves money on education-related expenditures by employing home and community areas instead of traditional classrooms. Although online arrangements usually have little or no costs related to physical infrastructures, they have high costs of technology and instructional facilities. Besides hardware's cost, they have software, program development costs, etc;

h. It lowers wage expenses by transferring some teaching tasks to computers, resulting in a higher teacher-to-student ratio. Here the processes are redesigned which allows for effective utilization of teachers' time. The cost estimates vary greatly based on the type of online program employed (Watson et al. 2009); and

i. It achieves economies of scale by repurposing resources and widely disseminating them.

Similarly, in their study, Moore and Kearsley (2012: 8) have put forwards the following main reasons for e-education.

a. It increases access chances to learning, training, and schooling as a matter of fair play;

b. It provides chances for improving skills of the labor force;

c. It improves the cost-effectiveness (productivity) of educational capital;

d. It increases the educational structures' quality;

e. It enhances the educational system's capability;

f. It tries to balance the existing inequalities among the age groups;

g. It helps in targeting the particular audiences;

h. It helps in providing emergency training for those who are in the main target areas;
i. It helps in the development of educational capacity in new subject areas;
j. It makes it easier to combine school with employment and family obligations.; and
k. It provides a global perspective to the educational experience.

Finch and Jacobs (2012) while highlighting the best working practices in e-learning, argued that it helps in increasing opportunities to have access to learning; lowers the amount of time and money spent on travel; helps in collaborating with experienced professionals worldwide; helps in providing learners with the flexibility to have access to courses conveniently, and helps in having adjustments to various subjects and the needed contents. Online learning is gaining currency because of its professed capability of providing flexible access to instructions and contents by a) making learning experiences more accessible to students who are unable or unwilling to attend regular schools; b) gathering and sharing educational materials more effectively, and c) enhancing teacher-student ratios.

The effect of e-learning on the students' academic achievements was found to be insufficient in a study of the available research. There were no studies that compared the positive effects of an e-learning environment to classroom-based teaching in educational institutions. However, in a meta-analysis, the results of solely online teaching are comparable to face-to-face instruction. The meta-analysis's findings also indicate that the success of online learning is fairly consistent over a variety of content and learner groups (US Department of Education, 2012).

Decision-makers in almost every field desire to achieve something for less i.e. to increase productivity. Education is no exception. Educational institutions face the conundrum of improving results but still dealing with budget cuts. Cost-cutting without losing quality, or making the most of what is available, necessitates increased productivity and efficiency. One of the main aims of online learning programs is to increase productivity. In education, productivity means enhanced student academic achievement (Cohn and Geske 1990). Online learning is often proposed as a way to improve student performance while still widening access at a reduced cost than traditional methods (Christensen, Johnson, & Horn 2008). Educational institutions are implementing information technology intending to increase access, enhancing educational content, and lowering the costs associated with conventional teaching. Online technology may aid communities by supporting "participatory" education methods (Barab, Squire, & Dueber 2000).

The pedagogical practices which are extremely useful in practice are engagement, promoting relationships, communication, timeliness, technology, organization, high expectation, and flexibility. The observance of these practices has been highly important in online education. Fostering good communication between the students and teacher is vital and can be achieved by teachers' empathy and readiness to aid students to succeed. As far as communication is concerned, online teachers should be responsive, attentive, and prompt in responding to emails and text messages. They should be active in "giving prompt input on completed tasks, listening to written questions, communicating expectations, and reminding students of their assignments" (Bailey & Card, 2009: 154).

There is another concept called strategic instructions connected with distance education. Non-traditional learners with full-time jobs and families who have chosen to seek continuing education for professional development make up the vast majority of online students. They want well-designed classes that can improve their chances of completing their degrees etc. effectively, such as clear tasks and feedback that is consistent and timely. Since teacher-student relationships are so important in online learning, the more frequently such encounters happen the more interested students are in their classes (Rao & Tanners, 2011).

Levels of E-Learning

E-learning has four kinds, ranging from the most fundamental to the most advanced. These are explained below:

a. Knowledge databases: It is the most basic method of online learning where software sites provide indexed descriptions and guidance for technical queries, as well as step-by-step guidance for completing particular tasks. These are usually moderately interactive, allowing users to either type a keyword or phrase to scan the database or choose from an alphabetical list.
b. Online support: It is a form of online learning that works similarly to knowledge databases. Forum, groups, chat rooms, internet bulletin boards, e-mail, and live instant-messaging

support are examples of online support. Online support is somewhat more interactive than knowledge databases, allowing for more detailed questions and answers, as well as more immediate responses.

c. Asynchronous training: This is e-education in the strictest sense of the word. It entails self-paced learning through networks, CD, or the internet. It could provide access to teachers through online discussion groups, bulletin boards, and e-mail or it could be entirely self-contained, where links to reference materials are given.

d. Synchronous training: This type of teaching is conducted in real-time with the assistance of a live teacher. All learners signs in at the same time and have direct access to the teacher and each other. It lasts for a certain time (from a single session to weeks, months, or even years). This type of teaching usually takes place through internet websites, internet telephony, even two-way live broadcasts to students in a classroom or through video or audio conferencing (Sun & Chen, 2016).

However, distance education is not cost-free. Various studies have shown that as compared to traditional courses, teaching online courses take more (see, for example, Crawford-Ferre & Wiest, 2012). Keengwe and Kidd (2010: 4) also argue that "online delivery is more labor-intensive because of the amount of time required to grade papers and respond to questions". Therefore, online teachers "need additional support in the form of reduced teaching loads or provision of teaching assistance" and "most instructors new to online teaching begin with little to no training or preparation specific to this deliver mode" (Crawford-Ferre & Wiest, 2012: 13). Notwithstanding its cost, a growing number of education providers are using virtual classrooms (live online presentations) as an online learning classroom and platform. Social networks have become an important part of e-learning, in addition to virtual classroom settings. Social networks have been used to promote online learning communities around topics as disparate as language education and examination preparation.

The Need of Online Education for Overseas Pakistanis in the KSA

The dramatic spike in oil prices in the 1970s, along with the accompanying economic boom, resulted in massive labor migration to the Middle East. Pakistan has been sending its workers to the region and other areas of the globe, particularly the United States, the United Kingdom, and Europe, in response to the opening of job possibilities in these countries. In exchange, Pakistan has benefited from remittances sent by these workers which were estimated to US$ 13 billion via structured channels in 2012-13 and amounted to about 60% of the country's total export earnings and over 5% of its GDP (GOP, 2013).

Over the last three decades, a substantial body of literature has explored the impact of overseas labor migration and remittances on job creation, domestic economic development, and poverty reduction in Pakistan. However, there are few geographic or provincial surveys, owing to the lack of evidence on emigration. The provinces of Punjab and Khyber Pakhtunkhwa (KP)[1] send a bulk of the workforce to the Middle East region. According to popular belief, every third family in KP has a member working overseas, and these families are likely to get remittances from their relatives.

Much has been written about workforce exploitation but there is less information about labor's demands, requirements, and expertise. Informed decision-making by public and private institutions is hampered by a lack of knowledge about labor force qualifications, expertise, jobs, etc. This leads to missed opportunities or strategic planning errors for decision-makers. There is no scheme of reciprocal acknowledgment of professional achievement and learned skills. For example, for low-skilled or semi-skilled professions, there is no mechanism of reciprocal acknowledgment of educational attainment and learning abilities based on similar criteria.

[1] For distribution of overseas Pakistani workers by province and region of origin wise see R. Amjad and G. M. Arif. (2014). analyzing the impact of overseas migration and workers' remittances in Khyber Pakhtunkhwa (KP): Suggested measures for maximizing development benefits (study conducted for IGC Pakistan). A working paper (F-37108-PAK-1) at https://www.theigc.org/wp-content/uploads/2014/09/Amjad-Arif-2014-Working-Paper.pdf

According to the 2017 estimates, there are about 2600,000[2] overseas Pakistanis in Saudi Arabia. The majority of Pakistanis go to KSA for their livelihood. Their next generation has also visited the country. The problem is that these workers do not find opportunities to get higher education because of various problems like economic, social, cultural, dependency, big families, etc. The majority of the labor force has stopped education in the home country for a better job in the host countries. With time they became so skilled and experienced that they could compete with the graduates in their professional fields. For this purpose, innovative and non-conventional methods are adopted to certify them in the form of professional diplomas and certification. To meet this essential demand the government is playing a very limited role. Ayaz Khan, a teacher who spent life in KSA, while expressing his opinion about the issue said "The University of Punjab, Allama Iqbal Open University in the public sector and the Sarhad University, Abasyn University and Abasyn Institute of Medical and Modern Sciences in the private sector are playing some positive role but they do not cater to the urgency of the matter and the rising and particular demands of the workforce (personal communication, March 13, 2021). Some of the professional development and research institutes like pdri.org and aimms.edu.pk are also playing a very positive and constructive role in this respect and have conducted research studies keeping in view the urgency of the matter.

The overseas Pakistanis have the problem of certification. Muhammad Farooq, a teacher who has spent time in SA, while elaborating the issue said "The problem for skilled overseas Pakistanis is the delivery of qualification and graduation in their respective areas of jobs. However, it is difficult for overseas Pakistanis in KSA to manage traditionally customized ways of education. Some of the universities in the US and France have introduced the concept of certification with the introduction of concepts like Recognition on Bases of Prior Learning (RPL System of Education). According to this approach certification and even professional doctorate level certificates are awarded" (personal communication, March 07, 2021). PDRI, Pakistan has initiated such measures, and within one year has certified more than 100 overseas professionals in collaboration with a Canadian Based Organization, called Training Accreditation and Certification (TRACCERT). The organization keeps its record and awards quality e-education to overseas Pakistan at minimum cost. Out of the total overseas Pakistani students in KSA so far who graduated from the institution, about more than 60 percent have got a job promotion and 28 percent have enjoyed up to 20 % increase in their salary (see pdri.org). The government needs to encourage such initiatives. Such innovative methods of imparting education and measuring the competencies of the working force are the need of the day keeping in view the remittance share and its contribution to the already shaky economy of the country.

Conclusion and Recommendations

The foregoing discussion on the role and importance of distance education shows that e-learning has become a fast-growing enterprise. It has changed the concept of education. It has become a game-changer and is associated with many benefits, especially for those who desire to complete their education without leaving their homes or jobs. Their offices are not only living spaces but also testing grounds for new ideas. Online learning is gaining currency because of its professed capability of providing flexible access to instructions and content. The effectiveness of online education depends on collaborative and interactive relationships between learners and teachers and adopting a constructivist and learner-centered approach. However, the possible important questions would be "How to put any course online with an effective way to engage students into the learning?" and "What technologies and tools are available to implement the teaching?" These questions should be kept in mind while going for online education. Online teachers should have professional development which means all those activities that provide participants with relevant experience and improve students' learning. The observance of pedagogical practices becomes highly important in online education. Fostering good relationships and communication between the teacher and students is vital and can be achieved by teachers' empathy and compassion for students. The online instructors need to be responsive, attentive, and prompt in responses. They should be active in "giving prompt input on completed tasks, listening to written questions, communicating expectations, and reminding students when they are away" (Bailey & Card, 2009: 154).

[2] See https://beoe.gov.pk/files/statistics/2021/country.pdf. for the various categories of overseas Pakistanis see https://beoe.gov.pk/files/statistics/2021/category.pdf while for province wise overseas Pakistanis see https://beoe.gov.pk/files/statistics/2021/province.pdf

Recommendations

The following recommendations and suggestion are put forward for the policymakers:

a. Keeping in view the importance of e-learning, Pakistan needs to provide ample opportunities to the overseas Pakistanis to have access to quality education. These Pakistanis are a potential source of remittances from which Pakistan has benefited immensely.

b. The majority of the labor force has stopped education in the home country for a better job in the host countries, specifically Saudi Arabia. With time they became so skilled and experienced that they could compete with the graduates in their professional fields. For this purpose, an innovative and non-conventional method be adopted to certify them in the form of professional diplomas and certification. It is difficult for overseas Pakistanis in KSA to manage traditionally customized ways of education. Some of the universities in the US and France have introduced the concept of certification with the introduction of concepts like Recognition on Bases of Prior Learning (RPL System of Education). According to this approach certification and even professional doctorate level certificates are awarded. PDRI, Pakistan has initiated such measures and it needs to be encouraged, helped, and facilitated by the government.

c. To meet this essential demand, the government is playing a very limited role. The role of the government needs to be expanded.

d. There is no scheme of reciprocal acknowledgment of professional achievement and learned skills. The government needs to act with determination and will to benefit those who benefit the nation.

e. Some of the professional development and research institutes like pdri.org and aimms.edu.pk are also playing a very positive and constructive role in this respect and have conducted research studies keeping in view the urgency of the matter. These research institutions need to be encouraged, helped, and facilitated by the government and also should be involved in decision-making regarding the issue at hand. The government needs to encourage such initiatives. Such innovative methods of imparting education and measuring the competencies of the working force are the need of the day keeping in view the remittance share and its contribution to the already shaky economy of the country.

References

Bailey, C. J., & Card, K. A. (2009). Effective pedagogical practices for online teaching: Perception of experienced instructors. *Internet & Higher Education, 12*: 152-155.

Barab, S. A., Squire, K., & Dueber, B. (2000). Supporting authenticity through participatory learning. *Educational Technology Research 7 Development* 48 (2): 37–62.

Bell, B. S., & Federman, J. E. (2013). E-learning in postsecondary education. *The Future of Children, 23*(1): 165-185.

Christensen, C., & Horn, M. (2008). How do we transform our schools? *Education next,* 8(3):13-19 at http://educationnext.org/files/ednext_20083_12.pdf.

Christensen, C., Johnson, C., & Horn, M. (2008). *Disrupting class: How disruptive innovation will change the way the world learns.* New York: McGraw-Hill.

Cohn, E., & Geske, T. (1990). *The economics of education* (3rd Ed.). New York: Pergamon Press.

Crawford-Ferre, H. G., & Wiest, L. R. (2012). Effective online instruction in higher education. *The Quarterly Review of Distance Education, 13*(1): 11-14.

Finch, D., & Jacobs, K. (2012). Online education: Best practices to promote learning. *Proceedings of the Human Factors & Ergonomics 56th Annual Meeting* at https://journals.sagepub.com/ doi/abs/10.1177/1071181312561114.

Government of Pakistan – GOP (2013); Pakistan Economic Survey 2012-13, Government of Pakistan, Finance Division, Economic Advisors' Wing, Islamabad.

Graham, C. R., Allen, S., & Ure, D. (2005). Benefits & challenges of blended learning environments. In M. Khosrow-Pour (ed.), *Encyclopedia of information science & technology* (253–259). Hershey, PA: Idea Group.

Harasim, L. (2000). Shift happens online education as a new paradigm in learning. *Internet & Higher Education, 3*: 41-61.

Hoodbhoy, P. (1998). *Education & the state: Fifty years of Pakistan*. Karachi: Oxford University Press.

Keengwe, J., & Kidd, T. T. (2010). Towards best practices in online learning & teaching in higher education. *MERLOT Journal of Online Learning & Teaching, 6*(2): 533-541.

Maloney-Krichmar, D., & Abras, C. (2003). History of the emergence of online communities. In K. Christen-sen & D. Levinson (Eds.), *Encyclopedia of community: From village to virtual world.* Thousand Oaks: Sage Publication, 1023-1027.

McAuley, A., Stewart, B., Siemens, G., & Cormier, D. (2010). *The MOOC model for digital practice* at http://www.elearnspace.org/Articles/MOOC_Final.pdf

Mclsaac, M. S., & Gunawardena, C. N. (1996). Distance education. In D. H. Jonassen (Ed.), *Handbook of research for educational communication & technology: A project of the Association for Educational Communication & Technology* (403-437). New York: Simon & Schuster Macmillan.

Moore, M., & Kearsley, G. (2012). *Distance education: A systems view of online learning* (3rd Ed.). Belmont, CA: Wadsworth.

Parsad, B., Lewis, L., & Tice, P. (2008). *Distance education at degree-granting postsecondary institutions: 2006-07*. Washington D.C.: National Center for Education Statistics Institute of Education Sciences.

Picciano, A., & Seaman, J. (2009). *K–12 online learning: A 2008 follow-up of the survey of U.S. school district administrators.* Needham, MA: Sloan Consortium at http://www.sloanconsortium.org/publications/survey/pdf/k-12_online_ learning_2008.pdf.

Rao, K., & Tanners, A. (2011). Curb cuts in cyberspace: Universal instructional design for online courses. *Journal of Postsecondary Education & Disability, 24*(3): 211-229.

Sun, A., & Chen, X. (2016). Online education & its effective practice: A research review. *Journal of Information Technology Education: Research, 15*: 157-190. Retrieved from http://www.informingscience.org/Publications/3502. Thousand Oaks, CA: Sage Publications.

Twigg, C. (2003a). Improving learning & reducing costs: New models for online learning. *EDUCAUSE Review* 38 (5): 28–38.

Twigg, C. (2003b). Improving quality & reducing cost: Designs for effective learning. *Change* 35 (4): 22–29.

U.S. Department of Education, Office of Educational Technology (2012) *Understanding the Implications of Online Learning for Educational Productivity*. SRI International, Center for Technology in Learning.

U.S. Department of Education, Office of Innovation & Improvement. (2007). *connecting students to advanced courses online: Innovations in education.* Washington, DC:

Waldeck, J. (2007). Answering the question: Student perceptions of personalized education & the construct's relationship to learning outcomes. *Communication Education* 56 (4): 409–432.

Waldeck, J. (2008). The development of an industry-specific online learning center: Consulting lessons learned. *Communication Education* 57 (4): 452–463.

Wallace, R. (2003). Online learning in higher education: A review of research on interactions among teachers & students. *Education, Communication & Information, 3*(2), 241-280.