

Distance Learning in Saudi Arabia: The Revolution in Higher Education and the Needs of the New Academic

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Abstract. The recent academic revolution within higher education in the past half of century brought about remarkable developments in delivery and pursuit of higher education. The most notable achievement was birth of distance learning that has resulted in unprecedented transformation both in diversity and scope. Distance learning in Saudi Arabia may be attributed to emergence of instructional and information technologies as well as their influence on learning and teaching. This new learning trend has enshrined mandatory equipping of teachers and students alike in educational institutions with fundamental skills and knowledge to cope with emerging challenges. The urgent quest for distance learning in KSA arose from massive growth in population vis-à-vis scarcity of resources and teachers in quality and quantity, plus the need to cut down financial costs. From as early as 1954, distance learning in KSA has evolved over three generational developments, namely correspondence study, multimedia distance teaching and interactive, web based instructions. It gained traction, interest and recognition among academics, academic institutions and students, although at a relatively slow pace. The author of this paper devours into history, growth and future of distance learning in KSA analyzing potential need and overall consequences on different stakeholders. The author further discusses the modern evolutions in distance learning such as e-learning and m-learning.

Keywords: Distance Learning, Kingdom of Saudi Arabia (KSA), Correspondence study, Multimedia distance teaching, Interactive, web based instructions, E-learning, M-learning.

1.0 INTRODUCTION

The heightened quest for education mainly among the contemporary societies, study flexibility and reduction in overall cost coupled with presence of powerful computers and telecommunication systems have introduced implementation and investigation of variant modes of technology supported learning and teaching methods. Indeed, most of higher education students alike are increasingly fostering decentralization of educational and academic institutions. Many people are more than eager to access and improve their educational knowledge demanding decentralized units to reach them as well as justify economically on their educational existence. At the same time, these masses demand these units to maintain excellent educational and academic standards. Proponents of this stand consider distance teaching and learning methodology as a way to satisfy these requirements. They argue that distance learning and teaching suffice wherever and whenever there is insufficient teaching or economic resources.

Today, distance education technologies have rapidly grown to apply to great types of audiences, media and programs. Distance learning has become a process and system connecting learners with distributed and diversified learning resources. Often, distance learning takes multiple and various forms but key traits include:

✓ Separated time and/or place between learners and instructors, learners and learning resources and among learners.

✓ Interaction between instructor and learners, among learners and between learners and resources occurs through one or multiple media but not necessarily electronic media

The rapid growth in distance learning stems from increased quest for knowledge because it has become an integral force in the economy, rapidly expands over an increasingly short time, changed economic and social contexts and increased investment in human resources to steer sustainable development (Al Mousa, 2016). Consequently, distance education appears to be the most attractive and appropriate means to address the phenomenal changes in acquiring knowledge.

1.1 History of Distance Learning

The history of distance learning is incredibly rich. It begins with instructional media, namely print media to instructional media, namely television to the present interactive technologies, namely electronic and mobile learning. According to Schneider & Germann, there are three generational evolution of distance learning namely: first, secondly and third generations (Abdulaziz, 2015). They further call these three generations as correspondence study, multimedia distance learning and interactive, we based instructional learning respectively.

Correspondence study dates back to as early as 1883 and was popular in Sweden. It was practiced in the U.S in early 1890's. The advent of second generation or multimedia (teleconferencing/broadcast) distance learning improved the speed of communication between learners and instructors but the communication remained one way with instructions communicating to learners. However, two-way interactive distance education arose with the advent of third generation method of study following introduction of computer based technologies (Abdulaziz, 2015). As a result, instructors passed effective instructions to learners who sought clarity from the former creating an effective interaction and increased students' application and learning of the content material.

1.2 Technologies and Tools in Distance Learning

In spite of existence of contemporary methods of delivering distance learning to date, computer based distance learning has gained huge traction among students and educators. There are numerous options available to distance instructors both using modern or traditional distance learning approaches. However, they all fall under the following four tools:

- a) Instructional video technologies include pre-recorded moving images such as videotapes and film, still images such as slides and real time moving images such as individual and group teleconference chats.
- b) Instructional voice tools such as audio conferencing and interactive telephony
- c) Instructional print which is a foundational element of distance learning. Modern delivery systems in distance education have evolved from print. Print captures text books, eBooks, course syllabi, work books, case studies and study guides.
- d) Data describes the wide range of instructional tools that computers receive and send as information electronically. These include computer assisted instructions (CAI), computer managed instruction (CMI) and computer mediated education (CME).

In spite of the three generations of distance learning, it is notable that there is no one ideal or best distance learning technology. Instead, A argues that effective distance learning relies on the students' needs, demands of the content as well as the constraints that the instructors and students face. Nonetheless, B argues that technology plays a vital role delivery of distance learning but instructors must dedicate to the instructional outcomes instead of the technology of delivery.

2.0 DISTANCE LEARNING IN SAUDI ARABIA

According to Khan, Shazli, Khan A and Sait (2010), the quest for distance learning is higher where the student population is widely distributed making Saudi Arabia ideal. Still, the Gulf region suffers from high internet connectivity cost further increasing the potential for Saudi Arabia's universities to set up or invest in distance learning and education. The trio further adds that such an investment would be productive in spreading technical education within the Gulf region and beyond. Further, the increased Saudization in major economic sectors create

the need to accelerate and match capacities of the national labor force with the emerging demands of information society and knowledge. Consequently, distance learning will remedy the knowledge and technical skills shortage in the private and public sector. Regrettably, distance learning in the Kingdom is not entrenched as fast enough as to accommodate the emerging needs directly needed for the rigors of global competition.

Increased internet connectivity and smartphone in Saudi Arabia, organizations are set to look for personnel that can utilize the wealth of information, knowledge, data and best practices available on the internet. Considering the excellence of KSA's universities and colleges in the region based on faculties and state of the art equipment, distance learning is set for widespread sprouting. Increased electronic connectivity of the universities in Saudi Arabia to outside world, also determines the success of distance learning. Collaboration between universities and technical colleges such as those under the Technical and Vocational Training Corporation (TVTC) further reduces the resources needed to set up distance learning infrastructure.

Saudi Arabia is anxious to ameliorate the skills and knowledge of its citizen considering its experiences with higher education capacity issues. The modern government is eager to nurture, develop and adopt distance education in its development and educational strategies. Traditionally, Bachelor degrees are offered through conventional universities distance learning programs for the past decade encapsulating single mode, virtual tertiary and distance institutions under the Ministry of Higher Education. Nonetheless, a number of public universities such as Al-Imam Mohammad ibn Saud Islamic University and King Abdulaziz University operate dual mode although King Arab Open University is single-mode. The establishment of the Deanship and Faculty of Distance Learning at King Abdulaziz University in Jeddah in 2007/2008 academic year is a clear forecast into the recent developments in distance learning in the kingdom. The campus serves the western region of Saudi Arabia. Still, the campus offers courses through the Economics and Administration Faculty and Arts and Humanities Faculty.

3.0 RESEARCH METHODOLOGY

The researcher, in undertaking this research, developed the survey questionnaire and shared it online at surveymonkey.com. Targeted respondents were invited to complete the questionnaire by sharing the link to the survey via emails and social media platforms. The researcher assured the respondents of confidentiality, anonymity and privacy of their responses with a guarantee that the results would only be used for the purpose of this research. The researcher targeted 101 respondents but 99 respondents successfully responded and filled the questionnaire. This method of data collection was most preferred because it is relatively inexpensive, efficient and easy effective tool to gather data on scientific and social investigations (Huang & Hsieh, 2015). The objective of the survey questionnaire was to understand the evolution of distance learning and its revolution to meet the needs of the new academic.

3.1 Survey Design

The survey questionnaire was organized in five parts that tested the learner's background, ability to learn independently, interaction of learner with content, interaction of learner and instructors and interaction of learners amongst themselves. For this research survey, a five point likert scale was adopted to simplify but gather comprehensive, conclusive and complex data. A likert scale offers relatively highly valid and reliable responses as compared to other data collecting tools. In addition, it measures variance between perceptions among respondents with time. The high response rate perhaps arises from the inherent easy to complete nature of Likert scale because the respondent participates directly.

Table 1 Survey Questions

No	Questionnaire
1	Distance learner's background such as gender, area of specialization, prior experience with distance learning, age and ICT skills
2	Distance learner's ability to learn independently such as personalized learning,

	universal accessibility, affordability and suitability of learning content
3	Interaction between learner and the content such as learning process, motivation, knowledge, skills and capacity acquired and productivity
4	Interaction between learner and the instructor such as modern vs. traditional communication methods, level of closeness, availability and accessibility of the instructor
5	Interaction among learners such as personal vs online communication, chats and relationship, competition and group work, cooperation among learners

4.0 DATA ANALYSIS

After gathering the data, the researcher adopted scientific and mathematical models to process and interpreted the data. In this regard, the descriptive, inferential and regression analysis statistical approaches were adopted. For instance, measures of central dispersion were used to determine the variance of responses using median, mode and averages. The measures of central tendency were also used to compare the personal traits of respondents, degree of similarities as well as differences such as gender, age, and experience with distance learning and area of specialization. The data was also uploaded to SPSS 2.0 software for regression analysis.

4.1 Descriptive statistics

The researcher obtained 81.82% of responses or 81 people from male respondents and 18.18% or 18 people from female respondents. The researcher observed that male population in Saudi Arabia is most attracted to distance learning. Still, the researcher gathered that the largest population of people pursuing higher education in Saudi Arabia via distance lay in the 18 – 35 years age bracket. At least 42 people or 42.42% of the respondents were in the 18 – 35 years age bracket. In addition, 32.32% or 32 people of the respondents were aged between 36 and 45 years. Of the respondents, 17 distant learners were aged below 18 years accounting for 17.17% of the respondents. The rest were aged above 45 years. The researcher further learnt that distance learning in Saudi Arabia spans across all faculties. Nonetheless, from the survey, most learners enrolled in distance learning programs pursued sciences related programs accounting for 26.53% or 26 people. Those pursuing administration, IT, other, Mathematics and art related courses accounted for 24.49% (24 people), 21.43% (21 people), 14.29% (14 people), 21.43% (8 people) and 5.10% (5 people) respectively. Almost all the respondents have beginner to professional IT skills. The researcher observed that this was necessary for effective grasp, mastery and learning via distance method. Indeed, only two people lacked in IT skills.

Table 2 Survey Results

N0	Variable	Cronbach's Alpha	Mean
1	Independent learning	0.775	0.814
2	Interaction with content	0.783	0.816
3	Interaction with instructors	0.740	0.805
4	Interaction among learners	0.783	0.795
5	Accessibility	0.749	0.792
6.	Affordability	0.821	0.851

4.2 Validity and Reliability of Data

To test the responses obtained for validity and reliability, the researcher adopted the Cronbach's Alpha. The constant was set at 0.730 and using 42 items. Cronbach's Alpha was used to test the displacement of the responses for the 6 variables. From the analysis, the researcher noted all responses were above 0.500 indicating an above average reliability coefficient values. Indeed, coefficient values lying between 0.800 and 1 indicate a highly valid and reliable response. The researcher gathered that the respondents' choices were highly valid and reliable to assess the distance learning situation in Saudi Arabia's higher education. According to the constant, the responses were most valid and reliable in measuring affordability of distance learning in Saudi Arabia.

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6.0 CONCLUSION

From the onset, the researcher set out to assess the history, present and future prospects of distance learning in Saudi Arabia towards meeting the new demands and requirements of the latest academia. Drawing from the data gathered, processed and analyzed, it is eminent that Saudi Arabia is eager to adopt distance learning to meet the skills, knowledge and capacities of its people. The rising quest for knowledge, demand for equitable distribution of resources and inclusion of education at the epicenter of development strategies and demand for affordable and quality education has sprouted distance learning. The future of distance learning in Saudi Arabia is seemingly successful although fraught with technical, social, financial and economic huddles. Advance and detailed education planning for future developments in distance learning attention to international debate on distance learning coupled with scholarships for younger generation sets the next revolution for distance learning in Saudi Arabia.

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