ISSN: 2167-1435
v31 n3045

Saudi Students' Perceptions of Online Education versus On-ground Education in Saudi Arabia

Razak W. Abedalla
abedalla@calu.edu
California University of PA
California, PA USA

Jamie L. Pinchot
pinchot@rmu.edu
Robert Morris University
Pittsburgh, PA USA

Najwa Samrgandi
nhsamrgandi@uqu.edu.sa
Umm Al-Qura University
Mecca 24382, Saudi Arabia

Rana Al-Masri
ra_almasri@yu.edu.sa
Al-Yamamah University
Riyadh 13541, Saudi Arabia

Abstract

In the Kingdom of Saudi Arabia (KSA), education is one of the most important factors accompanying the development of Saudi society. The most popular mode of education in KSA is the traditional, face-to-face or on-ground education. In recent years, there was a movement towards the implementation of online education in the Saudi society to improve the knowledge and skills of the Saudi students and to eliminate the issue of gender segregation in the country. However, if compared to on-ground education, the movement to the online mode of education is still slow, and not welcomed by the Saudi Ministry of Higher Education, public or private employers and organizations, faculty, students, or their parents. This study attempts to answer the following research question: what are the Saudi students' perceptions toward online education vs. on-ground education in KSA? The aim of this research is to identify Saudi students' perceptions about their education system and also to find out whether they perceive any difference between online and on-ground education in quality and accreditation. The participants were 56 male and female college Saudi students and they were recruited from different majors of study at an institution in KSA. A quantitative (QUAN) research approach was used to examine the research problem. The researchers administrated an online questionnaire instrument to collect the data. The results indicate that Saudi students prefer the on-ground more than the online education due to quality and accreditation.

Keywords: Online Education, Online Learning, On-ground Education, On-ground Learning, Education in Saudi Arabia.

1. INTRODUCTION

Ury et al. (2005) define online course as "a course delivery method that is provided in an asynchronous mode through Internet technologies" (p. 2). However, an on-ground or face-to-face course is defined as "a traditional classroom delivery model used in typical residence programs in higher education. This is a synchronous method of instruction where students attend regularly scheduled classes in campus or satellite (off-campus) meeting rooms" (Ury et al., 2005, p. 2).

Higher education in Saudi Arabia has experienced tremendous growth and development over the past decades. According to Alamri (2011), the number of colleges, universities, and technical training institutes has increased due to the high demands for higher education. However, the rate of development in higher education has not matched the growth of population and their demand for education. This has led to a high number of students left with no college degrees (Krieger, 2007). As a result of this challenge, many Saudi youth could not find jobs. In 2003, for instance, KSA had over 22 million people served by only eight universities. Therefore, the Saudi Ministry of Higher Education (SMHE) was not able to handle the high number of learners who would like to pursue higher education. The government efforts to utilize the academic power in the job market have faced many challenges because its young population lacks necessary academic qualifications.

The Saudi education sector has faced many challenges in its core role of providing quality education in the country. Many of the universities in KSA have no strategy to incorporate certain motivational components into their systems (Alamri, 2011). For example, online education in universities has not been implemented due to poor infrastructure in many universities and colleges (Krieger, 2007). Their academic services are based on outdated systems that offer a poor quality of education.

Nevertheless, there are significant attempts to raise the standards of education in the country. For this reason, in 2005, the SMHE introduced King Abdullah scholarship programs for learners who are dedicated to pursuing higher education. It also initiated programs to sponsor students studying in private education (Krieger, 2007). This has been a major stride in promoting access to education in the country among young people because the scholarship program has enabled many students to study in overseas countries in different disciplines (Alamri, 2011). Moreover, a few online universities have also been established in KSA such as the launching of The Online Islamic University in 2010 and The Saudi Electronic University in 2011**.**

Although there are a few local online schools and programs in KSA, the problem is that the movement to the online mode of education in Saudi society is slower than many nations in the world. Online schools and programs are not highly welcomed or completely approved by SMHE*,* public or private employers and organizations, faculty, students and their parents.

Purpose of the Study

In order to further understand one facet of the resistance to online education in the Saudi society, this study seeks to identify Saudi students' perceptions about their education system and also to find out whether they perceive any difference between the online and on-ground education in KSA.

The study attempts to answer the following research question: What are the Saudi students' perceptions towards online education vs. on-ground education in KSA?

2. LITERATURE REVIEW

Related Studies

Several studies examined the differences between online and face-to-face learning. A study conducted by Ury et al. (2005) examined student's performance in online vs. on-ground courses based on their grade point average (GPA), number of credit hours completed, instructor, and method of instruction. The study observed more than 1300 students from seven classes at Northwest Missouri State University. The study found that there were no significant differences between online and on-ground students. Based on this finding, the researchers state that both methods of instruction were equal. Another study by Whitney (2006) at Drexel University examined the perceptual differences between online and face-to-face education. The finding of this study was that students' expectations differed only in the mode of study; however, the results did not vary.

To examine students' "performance, satisfaction, and retention of information" in online courses, Yatrakis and Simon (2002) surveyed 397

students who chose to enroll in courses available in both online and on-campus modes. The findings showed that the students who chose to enroll in the online courses performed well. They were also highly satisfied and perceived retention of information. Moreover, there are other studies, such as Stansfield et al. (2004); Ali & Elfessi (2004); McLaren (2004); and Brown (2002) that examined the differences between online and on-ground education and showed that there were no significant differences in students' performance in both modes of study. Another study was conducted by Benson et al. (2005) to examine the students' satisfaction and motivation in online and on-campus courses. The researchers surveyed 112 students enrolled in online classes and 81 students enrolled in on-ground courses. The results were that online courses provide flexibility for students. It also showed the performance of both the online and on-ground students were equal. This study also revealed that online students appear to be as "motivated and satisfied" as on-ground students.

Advantages and Disadvantages of Online Learning

An effective learning environment can be fostered in both online and face-to-face courses. The goal of learning effectiveness can be summarized as "learners who complete an online program receive educations that represent the distinctive quality of the institution. The goal is that online learning is at least equivalent to learning through the institution's other delivery modes, in particular through its traditional face-to-face, classroom-based instruction" (Sloan Consortium, cited by Swan, 2003, p. 1).

The popularity of online education is increasing because more students see this method of learning as more flexible, while also meeting their academic needs. In their study "Comparative analysis of online learning vs. classroom learning," Redding & Rotzien (2001) state that the online instructions were more effective than the classroom instructions as the online students performed better in their examinations. However, online learning requires more time for preparation than regular face-to-face learning (Gifford, 1998). Other authors reported that online learning offers more convenient scheduling and saves time where the students do not require traveling to campus and can complete their online course from anywhere (House et al., 2007).

Literature showed that the number of students enrolled in the online classes is increasing over the years. Based on the 2010 Sloan Consortium research, Allen and Seaman revealed that over 5.6 million students enrolled in online classes in 2010. This number was more than a million higher than the number of the students enrolled in online classes in 2009. According to the 2010 Sloan Consortium report, the enrollment growth percentage in the online classes is increased to 21%, but the growth percentage in the traditional classes is only 2%. Brecht (2011) stated that the reason behind this increased growth in the online classes and why the students prefer to enroll in virtual instead of live classes is because it is more convenient. It is also efficient (Radović-Marković, 2010) and provides a great potential for success for students with disabilities (Falkofske, 2009).

Although online learning has several advantages, "faculty attitude towards the quality of online education and its ability to equal the traditional face-to-face instruction is still conservative" (Allen & Seaman, 2003, cited by Fabry, 2009, p. 258). Educators such as Ury & Ury (2005) said that online education is "inferior" because there is no body language involved in the learning mode. Therefore, one of the online learning challenges is the lack of the interpersonal environment that occurs when students and teachers communicate face-to-face. Another challenge of online learning is the students do not have a "tutor at home." Thus, they have to depend either on themselves or seek their own tutoring to learn more about any subject materials (Geyer, 2007).

On-Ground Education in Saudi Arabia

On-ground or face-to face education is widely used in KSA where the learners receive instructions from their tutors directly in class (Alkhatnai, 2011). On-ground education engages students to participate in learning through active discussion and physical presence in classrooms, labs and seminar rooms where the learner and the tutor meet physically in the same place and at the same time.

Saudi learners are used to on-ground education where the teacher is always physically present (Bingimlas, 2009). However, on-ground education faced many challenges because of the high student-teacher ratio in classrooms (Alkhatnai, 2011). In recent years, the pressure has increased in higher education institutions due to a higher number of students graduating

from high schools (Albalawi, 2007). This negatively impacts the quality of education offered in the higher education sector. Learners are also in contact with their peers and other friends, who influence their attitude toward the on-ground mode of education. On-ground education also may not nurture creativeness of the students because the teacher assumes the role of the leader as compared to online education where teachers often assume the role of a facilitator.

Online Education in Saudi Arabia

Despite the huge focus on Internet use, the rate of Internet consumption in the Saudi Arabian population has remained as low as 2.6% in 2014. The Saudi government permitted the Internet and online access in 1979 (Ali et al., 2003). The use of online education is at the initial stages in KSA. Students can advance in higher education at their own pace through e-learning education. E-learning education can provide solutions to the overcrowding issue in classrooms and to the poor quality of education. The government has initiated several strategies to incorporate online education in higher education. For instance, the WATANI schools' net project is a brilliant idea to promote online education in the country. In addition, it has developed new curricula where information communication technology is at the center stage of promoting quality education (Ali et al., 2003). Major universities in KSA, such as King Saud University, King Abdul Aziz University and King Fahd University of Petroleum and Minerals in Dhahran, have established web-based learning within higher education and blended learning to develop the quality of teaching and learning (Alebaikan, 2010).

There have also been attempts to blend on-ground education with online education in Saudi higher education systems. However, most of the students do not have adequate knowledge about online education (Alebaikan, 2010). There is also unwillingness among the faculty to provide web-based instructions in their education (Alkhalaf et al., 2010). This is because many professors are not adequately trained to use online tools and platforms in their teaching instructions and how to include it in their teaching curricula.

3. RESEARCH METHODOLOGY

The purpose of this study is to identify the Saudi students' perceptions about their education system and also to find out whether they perceive any difference between online and on-ground education in KSA.

Data Collection Procedures

A quantitative (QUAN) research approach was used to examine the research problem. A questionnaire was developed by the researchers and was tested in a pilot study for validity and reliability. The questionnaire consisted of seven closed-ended questions and one rating question to measure the respondent's perceptions about online education versus on-ground education in KSA. The rating question used a five-point Likert scale, with 1=Strongly Disagree (SD); 2=Disagree (D); 3=Neutral (N); 4=Agree (A); and 5=Strongly Agree (SA). The researchers administered the questionnaire as an online survey. The participants were 56 male and female Saudi college students and they were recruited from different majors of study at an institution in KSA. The participants agreed to participate in this study on a voluntary basis to share their perceptions about online and on-ground education in KSA. The questionnaire was administered in English and not in Arabic. Although their native language is Arabic, all the participants were fluent in English and could complete the questionnaire easily. The welcome statement also stated the amount of time estimate that would take participants to complete the questionnaire, which was 5 minutes. The full questionnaire is available in the appendix.

4. RESULTS

The questionnaire results were collected and analyzed using QuestionPro Online Survey Software, from QuestionPro, Inc. To answer the research question "What are the Saudi students' perceptions toward online education vs. on-ground education in KSA?" the researchers measured the following variables:

Age

The distribution of participating students (*N= 56*) by age was as follows: 39 participants (69.64%) were between the age of 18 - 25; nine (16.07%) were in the 26 - 34 age group; six (10.71%) were in the 35 - 44 group; two (3.57%) in the 45 - 50 group; and no one (0.00%) was 51 and up. The results indicate the majority of population was between the age of 18 – 25 years old.

ISSN: 2167-1435
v31 n3045

Gender
The distribution of the participants (*N=56*) by gender was as follows: 16 participants (28.57%) were male and 40 participants (71.43%) were female. Based on these results, the female population was larger than the male population.

Native Language
The distribution of the participants (*N=56*) by native language was as follows: 55 participants (98.21%) were native speakers of Arabic and one participant (1.79%) was native speaker of English. The Arabic speakers were fluent in English and English was their second language.

Nationality
All participants (N=56) were Saudi citizens (100%). The researchers used this question as a filter in the survey to remove any non Saudi citizen because this study focuses only on Saudi students' perceptions on online education vs. on-ground education in KSA. We received few responses from Jordanian, Pakistani, or Indian students and we removed those responses from the data base.

Attending an Online and On-ground School
The participants were from online and on-ground programs. The distribution of the participants (*N=56*) by studying at online school or on-ground school was as follows: 54 participants (96.43%) were on-ground and two participants (3.57%) were online as in Figure 1 below. The high percentage of on-ground education gives us an indication that on-ground education is the only popular and preferred mode of education in KSA.

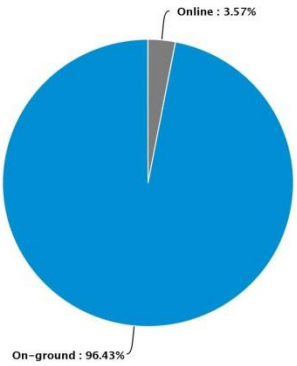

Figure 1. Attending Online and On-ground School

Level of Education
The distribution of the participants (*N=56*) by level of education was as follows: 32 participants (57.14%) were undergraduate students, 21 participants (37.50%) were graduate students, and three participants (5.36%) had graduated. The researchers found out that the Saudi undergraduate, graduate and alumni students have the same perceptions on the online education vs. the on-ground education where both have tendency to attend on-ground education and not online education.

Method of Education Preference
The results showed that 45 participants (80.36%) preferred on-ground education and 11 participants (19.64%) preferred online education as in Figure 2 below. This percentage gives further proof that online education is not highly preferred in KSA even though there are initiatives to expand it in the Saudi society.

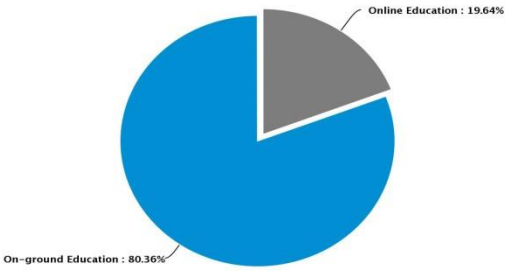

Figure 2. Method of Education Preference

Perceptions on online education vs. on-ground education in Saudi Arabia
In order to answer the research question (i.e., *What are the Saudi students' perceptions towards online education vs. on-ground education in KSA?)* the questionnaire asked participants to rate fifteen questions as *Strongly Agree* (value = 5), *Agree* (value = 4), *Neutral* (value = 3), *Disagree* (value = 2), and *Strongly Disagree* (value = 1). The results are summarized in Table 1 (see Appendix 2).

As Table 1 illustrates, over 39% of the respondents *Agreed* that *online education is more flexible than on-ground education*. The rest responses were between *Strongly Agree* (28.57%), *Neutral* (19.64%), *Disagree* (5.36%), and *Strongly Disagree* (7.14%). This high percentage of *strongly agreed* and *agreed* responses means that the participants felt that online education is more flexible and does not require much preparation and commitment. This supports Swan's (2003) view that online learning is flexible.

As the results in Table 1 indicate that *online education is not accredited as the on-ground education* received over 44 % of the responses in the *Agree* category. The rest of the responses were between *Strongly Agree* (28.57%), *Neutral* (14.29%), *Disagree* (8.93%), and *Strongly Disagree* (3.57%). This means that the participants believed that online education is not as accredited as the on-ground education.

Most research participants selected *Strongly Agree* (35.71%) and *Agree* (33.93%) in regard to the question *I learn more in on-ground classes than online classes*. The others were between *Neutral* (17.86%), *Disagree* (10.71%), and *Strongly Disagree* (1.79%). Although literature shows that there were no significance differences between online and on-ground students, the majority of our participants stated that they learn more in the on-ground classes than the on-line classes. It seems the methods of learning in KSA was not the same and the on-ground classes are better for our participants.

Gifford (1998) stated that online learning requires more time for preparation than regular face-to-face learning. Our study shows that over 33% *Disagreed* that *online classes require too much work than the on-ground education*. 32.14% were *Neutral* and the other responses were between *Strongly Agree* (14.29%), *Agree* (12.50%), and *Strongly Disagree* (7.14%). Based on these results, most of our participants did not agree that online classes require more time for preparation.

Based on our findings that the factor, *online classes lack the face-to-face interaction with peers and instructor, received* 44.64% *Strongly Agreed;* (33.93%) *Agreed*, (14.29%) *Neutral*, (7.14%) *Disagreed*, and (0.00%) *Strongly Disagreed responses.* This verifies what educators such as Ury & Ury (2005) said about interaction in online classes where they stated that online education is "inferior" because there is no body language involved in the learning mode.

As for *online degree graduates can find jobs as easily as on-ground degree graduates*, the responses were 0.00% *Strongly Agreed;* 7.14% *Agreed*, 21.43% *Neutral*, 53.57% *Disagreed*, and 17.86% *Strongly Disagreed responses.* This indicates that students feel that it will not be easy for online education graduates to find jobs in KSA. Over 53% disagreed with the statement and this gives us an indication that online degrees are not at the students' best interest for future careers in the Saudi market.

The participants were also asked if *online education is cheaper than on-ground education* and their responses fell between (16.07%) *Strongly Agreed;* (50.00%) *Agreed*, (19.64%) *Neutral*, (12.50%) *Disagreed*, and (1.79%) *Strongly Disagreed.* It appears that online education in KSA is cheaper than on-ground education.

The factor, *online classes are easier than on-ground classes,* received (10.71%) *Strongly Agreed;* (32.14%) *Agreed*, (35.71%) *Neutral*, (16.07%) *Disagreed*, and (5.36%) *Strongly Disagreed* responses. Although Benson's et al. (2005) study showed that the performance of online and on-ground students were equal, our participants believe that online education is not hard when compared to on-ground education.

As we can see in Table 1 that the factor, *online education is not popular as the on-ground education*, received (33.93%) *Strongly Agreed;* (46.43%) *Agreed*, (10.71%) *Neutral*, (7.14%) *Disagreed*, and (1.79%) *Strongly Disagreed responses.* The popularity of online education is increasing (Hartman et al., 2008), but it seems not in the Saudi society where over 33% *Strongly Agreed* and over 46% *Agreed* that online education is not popular in KSA.

As we can see in Table 1 that our participants (23.21%) *Strongly Agreed;* (41.07%) *Agreed*, (14.29%) *Neutral*, (19.64%) *Disagreed*, and (1.79%) *Strongly Disagreed* with the factor that *online classes are not as effective as the on-ground classes.* These results were completely different from Redding & Rotzien's (2001) study in which they found out that the online instructions were more effective than the classroom instructions as the online students performed better in their examinations.

Over 35% agreed that *online education is good to solve the issue of gender segregation.* Over 32% and 14% were between *Neutral* and *Strongly Agree.* The rest of the responses were 14.29% *Disagreed* and 3.57% *Strongly Disagreed.* This means that the participants perceived that online education is good to help with the issue of gender segregation where both male and female students can together attend the online education, but they can't be together in the on-ground education.

As for the factor, *online education can be accessed at anytime from anywhere, but this is not the case with on-ground education,* the results show that (41.07%) *Strongly Agreed;* (46.43%) *Agreed*, (8.93%) *Neutral*, (3.57%) *Disagreed*, and (0.00%) *Strongly Disagreed* with this factor. Authors, such as House et al., (2007), reported that online learning is more convenient for scheduling and the students can access the online classes from anywhere. The majority of our participants' responses were between *Strongly Agreed* and *Agreed* which proves this finding.

Based on their study findings, Allen & Seaman (2003) indicated the quality of online education is still conservative. Accordingly, our participants supported these findings. The results indicate that the factor, *there is no difference in quality between online education and on-ground education,* received (5.36%) *Strongly Agreed;* (17.86%) *Agreed*, (23.21%) *Neutral*, (39.29%) *Disagreed*, and (14.29%) *Strongly Disagreed responses.* Our Saudi participants believed there is a difference in quality between online education and on-ground education.

Regarding *online education saves time,* the results indicate positive responses where our participants (25.00%) *Strongly Agreed;* (55.36%) *Agreed*, (8.93%) *Neutral*, (10.71%) *Disagreed*, and (0.00%) *Strongly Disagreed.* This explains that online education saves time where the students do not require traveling to campus and can complete their online course from anywhere (House et al., 2007).

The researchers also found out that the factor, *online education improves communication between teachers and students, received* (5.36%) *Strongly Agreed;* (12.50%) *Agreed*, (21.43%) *Neutral*, (48.21%) *Disagreed*, and (12.50%) *Strongly Disagreed responses.* This supports the statement that online education lacks the face-to-face interaction (Ury & Ury, 2005).

5. CONCLUSIONS

Due to the high demand in higher education in KSA, most universities are overcrowded and lacked sufficient traditional facilities. Moreover, they have also not fully adopted online education and do not provide appropriate educational services.

Online education is an attractive mode of learning for many students worldwide, but it is still new to the Saudi society. Overall, the responses by the Saudi students, in this study, are positive for on-ground education and less positive for online education. The results showed that Saudi students believed there is a big difference between the online and on-ground education in quality and accreditation.

Although there are initiatives to implement online education to enhance the on-ground education in KSA, the implementation has been slow and requires several strategic plans. Based on their educational needs and to improve the knowledge and skills of the Saudi students and to eliminate the issue of gender segregation in the country, launching online education requires a full cooperation between the government personnel and the universities' administration to raise awareness among students, their families, and faculty members about how effective and powerful online education can be in KSA. Online education is an appropriate strategy to solve the adverse problems facing the country in the higher education sector. It can also offer opportunities for students to pursue education in the comfort of their homes (Alkhalaf et al., 2010). Furthermore, KSA is a vast country with many of its citizens living far away from the major campuses and cities. Therefore, online education will help students to remotely access education from work or home. In addition, it offers an opportunity of education to many women and men inhibited by social and cultural barriers (Alkhalaf et al., 2010).

6. REFERENCES

Alamri, M. (2011). Higher education in Saudi Arabia. *Journal of Higher Education Theory and Practice*, *11*(4), 88-91.

Albalawi, M. S. (2007). *Critical factors related to the implementation of web-based instruction by higher-education faculty at three universities in the Kingdom of Saudi Arabia* (Doctoral dissertation, The University of West Florida). Retrieved from http://amazingdiv.brinkster.net/teacher/research/factors.pdf

Alebaikan, R. A. (2010). *Perceptions of blended learning in Saudi universities* (Doctoral dissertation, University of Exeter). Retrieved from https://ore.exeter.ac.uk/repository/bitstream

ISSN: 2167-1435
v31 n3045

/handle/10036/117486/AlebaikanR.pdf?sequence=2

Ali, Ahmed and Elfessi, Abdulaziz (2004). Examining Students Performance and Attitude s Towards the Use of Information Technology in a Virtual and Conventional Setting. *The Journal of Interactive Online Learning Volume 2, Number 3, Winter 2004.* Retrieved from: http://www.ncolr.org/jiol/issues/pdf/2.3.5.pdf

Ali, S. H., Sait, S. M., & Al-Tawil, K. M. (2003, April). Perceptions about e-learning in Saudi Arabia. *ICASE World Conference on Science & Technology Education*, 393-399, Penang: Malaysia. Retrieved from http://www.ccse.kfupm.edu.sa/~sadiq/research/conferences-pdf/Ali_ICASE_Apr2003.pdf

Alkhalaf, S., Nguyen, A., & Drew, S. (2010). Assessing e-learning systems in the Kingdom of Saudi Arabia's higher education sector. *International Conference on Intelligent Network and Computing (ICINC 2010)*, Kuala Lumpur: Malaysia. Retrieved from http://publicationslist.org/data/salem.alkhalaf/ref-1/Salem%20Alkhalaf.pdf

Alkhatnai, M. (2011). *Learning styles of EFL Saudi college-level students in on-line and traditional educational environments* (Doctoral dissertation, Indiana University of Pennsylvania). Retrieved from http://ncys.ksu.edu.sa/sites/ncys.ksu.edu.sa/files/Language18.pdf

Benson. A. D., Johnson, S.D., Taylor, G.D., Treat, T., Shinkareva, O.N., Duncan, J. (2005). Achievement in online and campus-based career and technical education (CTE) courses. Community College Journal of Research and Practice, 29: 369–394. Retrieved from: http://cis.msjc.edu/courses/evoc/638/References/AcheivementInOnlineAndCampus-Based-CTE-Courses.pdf

Bingimlas, K. A. (2009). Barriers to the successful integration of ICT in teaching and learning environments: A review of the literature. *Eurasia Journal of Mathematics, Science & Technology Education*, *5*(3), 235-245.

Brecht, Daniel (2011). Comparison of Online vs Traditional Classes. Edited by Malburg, Sarah. Retrieved from: http://www.brighthub.com/education/online-learning/articles/40250.aspx

Brown, B., Liedholm, C. (2002) "Can Web Courses Replace the Classroom in Principles of Microeconomics?" The American Economic Review, 92(2), 444-448.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of Information technology, MIS Quarterly, 13(3), 319-340. Retrieved from: http://iris.nyit.edu/~kkhoo/Spring2008/Topics/TAM/PercieveUsefulness_MIS.pdf

Fabry, Dee L. (2009). Designing online and on-ground courses to ensure comparability and consistency in meeting learning outcomes. Information Age Publishing, Inc. The Quarterly Review of Distance Education, Volume 10(3), 2009, pp. 253–261. Retrieved from:http://anitacrawley.net/Articles/Fabry2009.pdf

Geyer, Clemens (2007). Distance learning - advantages and disadvantages of take-home hardware. Vienna University of Technology. Retrieved from: http://ti.tuwien.ac.at/ecs/teaching/courses/dinf-ws07/papers/geyer.pdf

Gifford, L. J. (1998). *Graduate students perceptions of time spent in taking a course by Internet versus taking a course in a regular classroom.* Paper presented at the annual Mid-South Educational Research Association Conference, New Orleans.

Hartman, Freda Z., Goldsmith, K. and Morgan, H. D. (2008). Student Learning Success: A Comparative Examination in Ground versus Online Classrooms. *Volume 3: Finding Common Ground: Programs, Strategies, and Structures to Support Student Success.* Retrieved from: http://www.franciscan.edu/home2/Content/dean/PAPERS/Inovation%20and%20change/3063.pdf

House, L., Weldon, Richard N. and Wysocki, Allen F. (2007). Student Perceptions of Online Distance Education in Undergraduate Agricultural Economic Programs. Journal of Agricultural and Applied Economics>Volume

39, Number 02. Retrieved from: http://ageconsearch.umn.edu/bitstream/6563/2/39020275.pdf

Krieger, Z. (2007). Saudi Arabia puts its billions behind Western-style higher education. *The Chronicle of Higher Education*, *54*(3), A1.

McLaren, C. (2004) "A Comparison of Student Persistence and Performance in Online and Classroom Business Statistics Experiences." Decision Sciences 2(1), 1-10.

Radović-Marković, M. (2010). Advantages And Disadvantages Of E-Learning In Comparison To Traditional Forms Of Learning. *Annals of the University of Petrosani, Economics*, 2010, vol. 10, issue 2, pp. 289-298. Retrieved from: http://upet.ro/annals/economics/pdf/2010/20100227.pdf

Redding, T. R., & Rotzien, J. (2001). Comparative analysis of online learning vs. classroom learning. *Journal of Interactive Instruction Development, 13*(4), 3-12.

Stansfield, M., McLellan, E., Connolly, T. (2004). "Enhancing Student Performance in Online Learning and Traditional Face-To-Face Class Delivery." Journal of Information Technology Education, 3,173-188.

Swan, K. (2003). Learning effectiveness online: What the research tells us. In: J. Bourne, J.C. Moore (Eds.), Elements of quality online education: Practice and direction, Vol. 4 in the Sloan C Series, Sloan Center for Online Education, Needham, MA , pp. 13–45. Retrieved from: http://cguevara.commons.gc.cuny.edu/files/2009/09/learning-effectiveness.pdf

Ury, G., McDonald, M., McDonald, G. and Dorn, B. (2005). Student Performance Online Vs. Onground: A Statistical Analysis of IS Courses. Proc ISECON 2005, v22 (Columbus OH): §3162 (refereed). Retrieved from: http://faculty.ist.unomaha.edu/bdorn/papers/ISECON05.pdf

Ury, G. and Ury, C. (2005). Online, on-ground: What's the difference. 21st Annual conference on distance teaching and learning. Retrieved from: http://www.uwex.edu/disted/conference/Resource_library/proceedings/05_1794.pdf

Whitney, K. 2006. Online and traditional degrees differ in expectations, not results. Retrieved from:http://clomedia.com/articles/view/online_and_traditional_degrees_differ_in_expectations_not_results

Yatrakis, P., & Simon, H. (2002). *The effect of self-selection on student satisfaction and performance in online classes*. The international review of research in open and distance education, Vol 3, No 2. Retrieved from: http://www.irrodl.org/index.php/irrodl/article/view/93/172

ISSN: 2167-1435
v31 n3045

APPENDIX 1: QUESTIONNAIRE

Survey of Saudi Students' Perceptions of Online Education versus On-ground Education in Saudi Arabia

1) **Select your age range**
   - ☐ 18 - 25
   - ☐ 26 - 34
   - ☐ 35 - 44
   - ☐ 45 - 50
   - ☐ 51 and up

2) **Select your gender**
   - ☐ Male
   - ☐ Female

3) **What is your native language?**
   - ☐ Arabic
   - ☐ English
   - ☐ Other (please specify) …….

4) **What is your nationality?**
   - ☐ Saudi
   - ☐ Other (please specify) …….

5) **Do you attend an online or on-ground school?**
   - ☐ Online
   - ☐ On-ground
   - ☐ Other (please specify) …….

6) **Are you currently an undergraduate or graduate student?**
   - ☐ Undergraduate
   - ☐ Graduate
   - ☐ Other (please specify) ……..

7) **Which method of education did you prefer, the online or on-ground?**
   - ☐ Online Education
   - ☐ On-ground Education

8) **Rate each statement below based on your education preference about online education vs. on-ground education in Saudi Arabia:**

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Online education is more flexible than on-ground education	❑	❑	❑	❑	❑
Online education is not accredited as the on-ground education	❑	❑	❑	❑	❑
I learn more in on-ground classes than online classes	❑	❑	❑	❑	❑
Online classes require too much work than the on-ground education	❑	❑	❑	❑	❑
Online classes lack the face-to-face interaction with peers and instructor	❑	❑	❑	❑	❑
Online degree graduates can find jobs as easily as on-ground degree graduates	❑	❑	❑	❑	❑

ISSN: 2167-1435
v31 n3045

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Online education is cheaper than on-ground education	❑	❑	❑	❑	❑
Online classes are easier than on-ground classes	❑	❑	❑	❑	❑
Online education is not popular as the on-ground education	❑	❑	❑	❑	❑
Online classes are not effective as the on-ground classes	❑	❑	❑	❑	❑
Online education is good to solve the issue of gender segregation	❑	❑	❑	❑	❑
Online education can be accessed at anytime from anywhere, but this is not the case with on-ground education	❑	❑	❑	❑	❑
There is no difference in quality between online education and on-ground education	❑	❑	❑	❑	❑
Online education saves time	❑	❑	❑	❑	❑
Online education improves communication between teachers and students	❑	❑	❑	❑	❑

Thank you for participating in this survey!

ISSN: 2167-1435
v31 n3045

APPENDIX 2: TABLE 1

Factors: *N=56*	***Strongly Agree***		***Agree***		***Neutral***		***Disagree***		***Strongly Disagree***	
	Count	**Percent**	**Count**	**Percent**	**Count**	**Percent**	**Count**	**Percent**	**Count**	**Percent**
Online education is more flexible than on-ground education.	16	28.57%	22	39.29%	11	19.64%	3	5.36%	4	7.14%
Online education is not accredited as the on-ground education.	16	28.57%	25	44.64%	8	14.29%	5	8.93%	2	3.57%
I learn more in on-ground classes than online classes.	20	35.71%	19	33.93%	10	17.86%	6	10.71%	1	1.79%
Online classes require too much work than the on-ground education.	8	14.29%	7	12.50%	18	32.14%	19	33.93%	4	7.14%
Online classes lack the face-to-face interaction with peers and instructor.	25	44.64%	19	33.93%	8	14.29%	4	7.14%	0	0.00%
Online degree graduates can find jobs as easily as on-ground degree graduates	0	0.00%	4	7.14%	12	21.43%	30	53.57%	10	17.86%
Online education is cheaper than on-ground education	9	16.07%	28	50.00%	11	19.64%	7	12.50%	1	1.79%
Online classes are easier than on-ground classes	6	10.71%	18	32.14%	20	35.71%	9	16.07%	3	5.36%
Online education is not popular as the on-ground education	19	33.93%	26	46.43%	6	10.71%	4	7.14%	1	1.79%
Online classes are not effective as the on-ground classes	13	23.21%	23	41.07%	8	14.29%	11	19.64%	1	1.79%
Online education is good to solve the issue of gender segregation	8	14.29%	20	35.71%	18	32.14%	8	14.29%	2	3.57%
Online education can be accessed at anytime from anywhere, but this is not the case with on-ground education	23	41.07%	26	46.43%	5	8.93%	2	3.57%	0	0.00%
There is no difference in quality between online education and on-ground education	3	5.36%	10	17.86%	13	23.21%	22	39.29%	8	14.29%
Online education saves time	14	25.00%	31	55.36%	5	8.93%	6	10.71%	0	0.00%
Online education improves communication between teachers and students	3	5.36%	7	12.50%	12	21.43%	27	48.21%	7	12.50%

Table 1. The Saudi students' perceptions towards the online education vs. the on-ground education in KSA