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**The Attitudes of Saudi Students toward E-Learning  
at Midwest University in USA**

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**Abstract**

International students' attitudes toward online learning need to be explored in order to understand the impact of the transition from less virtualized education environments to highly extensive ones. The current study aims at an in-depth investigation of the situation of Saudi international students studying at Northern Illinois University. To know the factors that have an effect on such students' academic adaptation, a qualitative approach was implemented and qualitative data were collected by means of structured interviews. The study sample consisted of five Saudi Arabian international postsecondary students at an American institution. Results were discussed in terms of Roger's theory of adoption. Both descriptive and analytical analyses were conducted directly after the collection of the data. The findings of the study revealed that Saudi international students have difficulty struggling through the educational system of the host countries. The main challenge for Saudi international students is the fact that online learning is a new experience for them. Learning in an online environment is sudden experience, which can be hurting and dangerous if not addressed carefully and prepared for before hand. In fact the experience can impact student motivation and consequently grades and scores as well as retention and completion rates.

**Keywords:** online learning, academic self-discipline, adaptation, interaction,, students' attitudes, self-regulation.

## اتجاهات الطلاب السعوديين نحو استخدام التعلم الإلكتروني في جامعة بالوسط الغربي بالولايات المتحدة الأمريكية” من وجهة نظرهم

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قسم تقنيات التعليم – كلية التربية

### ملخص الدراسة

اتجاهات الطلاب المبتعثين نحو التعليم الإلكتروني تحتاج إلى أن يتم اكتشافها لكي يسهل فهم التأثير الذي قد يحدثه التحول من بيئات تعليمية أقل استخداماً للتقنيات إلى بيئات تعليمية ذات استخدام مكثف لها.

وقد هدفت هذه الدراسة إلى التعرف على اتجاهات الطلاب السعوديين نحو التعلم الإلكتروني من خلال تحقيق معمق لحالة الطلاب السعوديين المبتعثين الدارسين في جامعة بالوسط الغربي بالولايات المتحدة الأمريكية.

ولمعرفة العوامل التي قد تؤثر على التكيف مع الوسط التعليمي لمثل هؤلاء الطلاب، تم القيام بهذه الدراسة النوعية وتم جمع البيانات اللازمة بواسطة استخدام مقابلات شخصية منظمة مسبقاً.

وقد تكونت العينة من عدد خمسة طلاب سعوديين مبتعثين مسجلين في عدة مستويات جامعية. كما تمت مناقشة واستعراض نتائج الدراسة في ضوء نظرية روجرز لتبني الأفكار الجديدة (Adoption of Innovation) وتم اعداد كل من التحليلات والوصف مباشرة بعد استكمال مراحل جمع البيانات. وقد أظهرت نتائج الدراسة بأن الطلاب السعوديين المبتعثين يجدون صعوبات في تكيفهم مع النظام التعليمي للبلد المضيف.

وتتمثل أهم الصعوبات في حقيقة أن التعلم الإلكتروني هو خبرة جديدة بالنسبة لهم وقد تؤثر بشكل كبير على مستواهم التعليمي إذا لم تتخذ بعناية ولم يسبقها اعداد جيد قبل كل شيء. وفي الحقيقة مثل هذه الخبرات يمكنها أن تؤثر على مستويات التحفيز لدى الطلاب مما قد يؤدي إلى التأثير على الدرجات والتقديرية الدراسية وكذلك التأثير على معدلات مواصلة الدراسة وإكمال التعليم في بلدان الابتعاث.

الكلمات المفتاحية: التعليم الإلكتروني ، الانضباط الذاتي الأكاديمي ، التكيف ، التفاعل، اتجاهات الطلاب ، التنظيم الذاتي.

## **Introduction**

Technological advancements in online learning have shifted the paradigm of the way that we view the incorporation of technology with education. Though, just decades ago, the thought of distance education would have been a strange concept, online learning is now a widely accepted form of learning and training because of the flexibility and standardization of the educational processes it offers (Southern & Guo, 2015). According to Murugaiah, and Thang (2010), educational technology has played an important part in enhancing distance/online learning and providing the students with technological tools to overcome problems of distance and time. Online learning also allows adult students to have more autonomy over both their learning ability and educational experiences (Bouchard, 2009).

Higher Education attracts international students to study in English speaking countries such as US, Canada, Australia ...etc., where universities are fast moving into online learning format. According to the Institution of International Education releases, 40 % of scholarship program sponsored international students in US come from Saudi Arabian government programs such as Saudi Arabia King Abdullah Scholarship Program, KASP (IIE, 2013). Saudi international students come from different educational backgrounds than the ones they encounter in the host countries. Challenges such as the teaching styles of their teachers, interaction, and self-regulation are on top of the problems facing international students, who suddenly find themselves required to engage in a form of learning that is completely strange from that they have experienced in their home education system (Çetin, 2015; McLawhon, & Cutright, 2012). Measuring the students' attitudes might bring forward some conclusions to facilitate their learning and avoid them the loss that is usually caused by a sudden merging of technology with education in their learning experiences. Various research studies have recommended further research and investigation to determine challenges encountered by international students in general and those who are studying in online courses in particular (Alanazy, 2011; Al-Gahtani, 2003; Martirosyan, Hwang, & Wanjohi, 2015).

For the purpose of this paper, it is important to define 'online learning'; firstly, because the term is new, and secondly, in order to gain some insight into the issue of using online learning in higher education and the notions that the definitions might imply. Various scholars have

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offered their own definitions for online learning. According to Nichols (2003), online learning is “the use of various technological tools that are either Web-based, Web-distributed or Web-capable for the purposes of education” (p. 2). Some people, especially laymen outside of the field of education, assume that online education simply refers to having a computer device and performing work on such a device. Nichol’s definition of online education goes much deeper than simply doing assignments on a computer or any mobile device. Nichol’s key point is that technical tools must specifically have access to the World Wide Web in order to qualify as devices that are sufficient for the purposes of performing online learning. This is due to the fact that online education can only exist when technology allows various people to communicate with others and receive feedback. One particular scholar, Wang (2007), states that online learning combines and implements various activities used for learning and teaching knowledge via electronic media tools. This definition gives significance to the notion of activities that both students and their teachers are required to do in online learning. This study will focus of the activities of student engagement, student self-regulation and teacher-student interaction as these activities form the main challenges to the international student. Online learning has enhanced the opportunities that instructors have for sharing knowledge, and also advanced the ability of students to receive this knowledge. From the definition, it is clear that the surge of online learning is directly related to advancements in information and communication technology. This advancement is not only affecting the fields of education in general, but also it has its influence on students performance in particular, especially international students.

In a world where instructional design and online learning is increasing, there needs to emphasize and study students’ attitudes toward online education. More specifically, there is a need to investigate international students’ attitudes towards online learning in order to introduce strategies that can further enhance their online experience. Given the fact that students arrive into online courses with unequal exposure to online learning, online learning and teaching methods vary from place-to-place and from one country to another, this paper specifically will focus on the attitudes of Saudi international students on online education within Northern Illinois University. Research shows that previous studies investigated international students’ academic

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success, satisfaction and engagement (Korobova, & Starobin, 2015); as well as impact of proficiency in English language (Martirosyan, Hwang, & Wanjohi, 2015). Also, two of the Saudi Arabian recent studies found positive relationships between online learning and local students' attitudes (Asiri, 2009); as well as confirming perceptions of Saudi female students toward online learning (Alanazy, 2011). However, there is a need for research efforts toward determining impact of online learning on international students, especially the perceptions of Saudi international students in the US.

### **Statement of Problem**

International Saudi students coming to study in higher education institutions in the US as part of the Saudi government scholarship program have to adapt rapidly to a second language and new learning environments as part of hosting cultural venues. While having to undertake online learning courses at Northern Illinois University, they must use strategies of self-discipline, dedication, and self-regulation to motivate themselves and overcome online learning challenges. Some reasons for this is that American universities such as Northern Illinois University have a diverse and wide range of instructional teaching methods, classroom diversity and demographics, and mixed gender diversity plus online course structures. In addition to the exposure to new levels of diversity, there are also language barriers and technological knowledge, which Saudi international students often times have to address. Adoption to modern technologies related to distance/online education in Saudi Arabia is far less extensive than it is in America.

Some Saudi students arrive with little or no background history of having to utilize online learning. These issues directly impact the quality of their education experience. In specific regards to teaching methods, education in Saudi Arabia follows a traditional teaching structure where most classes are face-to-face. Compared to the US as a host country, online learning is not extensive in Saudi Arabia and most instructors utilize traditional teachings methods. Whereas most institutions in America have online learning classes, there are some institutions in Saudi Arabia, which do not offer such courses. Also, some of the Saudi institutions with online courses have yet to adopt efficient modes of synchronized e-learning (Alghanmi, 2014).

### **Literature Review**

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This literature review is a synthesis of what some academic scholars have reported about online education concerning the themes of students' engagement, self-regulation, and student-teacher interaction. At the same time the researcher is using the views of the scholars as a guidance scale for determining the relevance of Northern Illinois University's distance education policies to international students' perceptions and attitudes. To avoid any potential confusion, the terms online education, distance education, and distance learning will be used interchangeably in this study.

### **Students' Engagement**

Many research studies have investigated the use of Learning Management Systems in higher education to enhance students' thinking qualities, reading abilities, and writing skills. It has been proved that using LMS increases the students' motivation to learn. In addition to realizing that participation is a part of the course requirements, higher education students show enthusiasm toward using this tool because it gives them more excitement about learning in an online format. For example, Southern and Guo (2015) conducted a study to investigate higher education students' engagement in distance and online educational settings. The paper sought to introduce the role of guest lecturing in engaging higher education students. As technology advances, online learning becomes more and more essential for higher education. Student engagement is providing higher education students with active and interesting learning opportunities (Southern & Guo, 2015).

Sahar Alghanmi (2014) approached the topics of motivation and blended learning in Saudi Arabia. Her study included the investigation of factors such as interpersonal and contextual. Her paper aimed at the determining of factors that are responsible of blending online learning and face-to-face education together in the Saudi context. The main research question of her study was to find the possible correlation between personal and contextual factors on one hand and Saudi faculty members' motivation on the other. Her study was a qualitative case study within the theoretical framework of Self-determination theory (SDT). The study concluded that there are fears and concerns associated with individualizing learning through the introduction of online instructional technology to Saudi Arabian higher education contexts. According to Southern and Guo (2015), student engagement is the main issue in online learning because it is more concerning for the student of online learning

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than a student in face-to-face learning. Students' perceptions of engagement positively impacts both participation and self-regulation on the part of the students who are studying in an online setting.

### **Student Self-Regulation**

Zimmerman (2008) conducted a study to investigate the relationships between self-regulation and success in mastering academic performance. According to Zimmerman, "self-regulated learning (SRL) refers to the self-directive processes and self-beliefs that enable learners to transform their mental abilities, such as verbal aptitude, into an academic performance skill, such as writing" (p. 166). Zimmerman (2008) also cited Zimmerman & Schunk (2007) who found that the significance of SRL to online learning lies in the fact that it improves the learning processes of determining goals, getting involved in discovery learning activities, self and peer assessments, and all strategies that lead to experiences of self-studying, reaching out for help from others, and utilizing technology to help in obtaining information for accomplishing an academic task.

In a similar study, Çetin (2015) investigated the impact of motivation and learner's characteristic of self-regulation on the academic achievements of students. The study used a survey instrument that included 28 items plus factors measuring both extrinsic and intrinsic motivation. This study was consistent with previous research in proving that self-regulation and academic motivation are in positive relationships. According to the author, it is self-regulated learning rather than academic achievement that is affected by motivation. The study concluded that motivation does not impact academic achievement directly, instead it affects the characteristic of setting goals, which is part of self-regulation, and so it was the predictor of the students GPA (Çetin, 2015). This means that not only can self-regulation affect the results of higher education students, but also it has influence on motivation. There need to be more of self-regulated learning through interacting with the instructors' materials and the course design in order to achieve higher scores (Çetin, 2015; Wang, H. H., Chen, H. T., Lin, H. S., & Hong, Z. R. 2017).

### **Teacher-Student Interaction**

Interaction in online learning comes in the form of student-student interaction, student-teacher interaction or student-course-material interaction (Kivunja, 2015). However, in this study the focus will be on

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students' interaction with their faculty as it has been recommended that international students should interact effectively with their instructors (Korobova, & Starobin, 2015), to maintain balanced use of institutional supportive endeavor toward academic success. International students in particular should always keep high levels of interaction with their instructors as a result to their unfamiliarity with the system and with online learning environments. According to Murugaiah, & Thang (2010), Interaction and collaboration among students and instructors is considered a cornerstone in online learning because it allows the students to use learning strategies and styles that are psychologically important for learning in higher education. Also it provides opportunities for the students in terms of time and place. Convenience of synchronous and asynchronous learning and participation is another challenge for international students, especially if their previous schooling was limited to traditional classroom practice. The sample of one study, Murugaiah, and Thang (2010), included students of higher education who are registered in the School of Distance Education (SDE), Universiti Sains Malaysia (USM), and who were adults from around the country whose ages ranged from 23 to 72 years. The participants in Murugaiah, and Thang's (2010) study reported that online interactions and reflections during the courses motivated them to participate in the academic writing activities which enhanced their writing skills.

Kivunja (2015) conducted a study to examine how using social media and technology might help both students and teachers in higher education. The study was conducted on some second year Bachelor of Education students in an Australian university. The author wanted to collect data and reach conclusions regarding the effectiveness of utilizing technology in educational experiences such as posting materials, creating learning chances, giving feedback, and assessing the students' work, and for the students part taking part in discussions and evaluating the students. The author analyzed faculty instructions, course tasks and feedback, student and peer comments, and responses made by the students to their peers and to their instructors as well as materials posted by the students related to the lectures such as You Tube sources and video clips in association with the course materials of the academic lectures. The study reported that the participants also used their own smart phones to take pictures and download materials to be shared in the course by peers. Students exhibited eagerness and enthusiasm to learn

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from technology because they think it is more authentic and they felt self-regulated when they use different technological tools suitable for their personal choice, preference and ability and when they invite their peers to share knowledge and materials they have discovered by themselves. The decision is personal and they find themselves taking control over their own learning in a natural and spontaneous way(Kivunja, 2015).

Abrami, Bernard, Bures, Borokhovski, & Tamim, (2011) investigated the importance of interaction in online learning and how it is related to the principles of collaborative learning, self-regulation and motivation. According to the authors “Distance and online learning provide exciting opportunities for not only increasing the reach of education and reducing its cost, but, most important to us, for increasing the quality of teaching and learning” (p. 83). They recommended further researchers, designers and software developers to investigate the issues of instructional design with technology to meet the requirement for more interactive learning environment in online education in general. According to Abrami, et al. (2011), “research and development is still in its infancy with regards to our ability to engineer successful interaction among students, between teachers and students and between students and content” (p. 98). They concluded that learner strategies and cognitive tasks should be incorporated in the instructional design of online programs so that the students benefit from integrating technology into the content of their academic practice. Additionally, once the instructors are prepared into principles of self-regulated learning, multimedia learning, motivational design, and instructional planning, they will be able provide the student with exactly the right amount of information required for internalizing the content material of the knowledge of a given major/discipline.

The importance of self-regulation and interaction in helping Saudi international students adapt to the use of online learning and American teaching methods in general at Northern Illinois University (NIU) was a consistent theme in interviews that were conducted for this research. However, a more in-depth description of the findings of the interviews will be presented later in this research paper.

### **Conceptual Framework**

E-learning is considered as an innovation because it can transform how students approach learning using e-learning as an alternative

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learning source (Duan, Y., He, Q., Feng, W., Li, D., & Fu, Z., 2010, Tyilo, 2017). There are many theories that focus individual's acceptance of new innovations however; Rogers' diffusion of innovation is the most popular theoretical framework on adoption new technologies into higher education environment (Sahin, 2006). Rogers' (1995) diffusion of innovation theory states that, "diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system" (p. 11). Diffusion is weak in places where people have less long term exposure to a particular technology. This would mean that students from a place such as Saudi Arabia will face difficulties and challenges when they arrive into an American educational setting and have to undertake online university courses. Rogers' theory consists of four stages: (1) four main elements in diffusion of innovation (2) diffusion of innovation process (3) five attributes of innovation (4) adopters' categories (Hoerup, 2001; Richardson, 2011). Each stage focus on essential aspect of adoption of innovation for example; five attributes of innovation stage examines the characteristic of an innovation in term of relative advantage, compatibility, complexity, trialability and observability (Al-Gahtani, 2003 ; Bush & Cameron, 2011). These attributes provide help adopters to comprehend the nature of innovation. The conceptual framework of this study will help guide the researcher into relationships among Roger's five attributes and the challenges that Saudi international students have to face because of their unfamiliarity with the online learning situation. In other words, improving an international student's learning experiences in a US university needs high levels of engagement and self-regulation plus high level of academic interaction with the institutional environment of online education.

### **Purpose of the Study**

Many students studying abroad in any context have issues getting acclimated to the instructional methods of the host nation. Saudi international student at Northern Illinois University in specific may become prone to experiencing personal and educational shocks when they commit themselves to studying at Northern Illinois University. The purpose of the study is to investigate the attitudes of Saudi scholarship program students' attitudes toward e-learning at Northern Illinois University and determine how they transitioned from studying in Saudi

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Arabia to using online learning in America in general and at Northern Illinois University in particular.

This study will also discuss the results in the light of issues related to cultural shock that Saudi international students may, or may not experience when transitioning to America's online educational methods. For example, the problems of implementing and developing online learning environments include challenges that Saudi students have while striving to achieve high levels of interaction, appropriate quality of engagement, and satisfactory academic success in the middle of completely new educational practices ( Asiri, 2009).

### **Research Questions**

Three research questions will be addressed in this research study.

- What is the attitude of Saudi students toward e-learning at NIU?
- What cultural barriers (if any) have they had to overcome while studying abroad?
- What improvements could be made to better enhance the education experience of Saudi international students, who are studying in US in terms of using online education?

### **Methodology**

#### **Data Collection**

Five Saudi international students participated in this study. Qualitative data was collected through the use of individual interviews. All the participants were fulltime students enrolled and attending Northern Illinois University undergraduate and graduate programs. The individual interviews were audio recorded, then transcribed to paper. According to Weiss (1994), transcriptions are extremely time consuming and he recommended only recording useful information. I transcribed the entire interviews and found this to be true. However, I felt that my data would be better represented if I could transcribe my interviews in order to visual my interviews. The individual interviews are given a higher level of prominence to the researcher since this was the first cycle of resource data collected.

#### **Descriptive Analysis**

The data analysis was conducted following the interviews. The interviews were printed then sorted by alias. The informants were not listed by government names, instead they were sorted alphabetically as code name "ABD", "AD", "AN", "F", and "M". The analysis of the data

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focused on strong similarities and also differences between the responses of the informants, which will be discussed in the findings. The interview was structured; i. e. the informants did not simply speak at random. The informants were asked specific questions, which allowed for the responses to be directly compared. Later, the researcher listened to the recordings four times, after which he noticed reoccurring themes such as “adaptation”, “self-discipline”, and “dedication”.

Some of the code words that were highlighted were “hate”, “love”, “like”, “hard”, “difficult”, “different”, and “culture”. These words were highlighted because they offered a descriptive picture of the thoughts and moods of the informants towards online learning. However, finding code words is not as easy as it seems to be, because when you go into an interview already looking for code words, you do not know what the response of the informant can be so they may not use any of the words you are trying to focus on. Most of the informants had a favorable impression of both online education in general and their experience at Northern Illinois University. The researcher did not expect the widespread positive feedback that he received from the informants. There were only a few instances of negative code words occurring, and even in this case the informant was simply distinguishing between one form of distance education he preferred and a different one, which he disliked. Overall, this particular informant also had a positive perception of online learning and Northern Illinois University.

### **Analytical Process**

Sorting the data out allowed convenient tracking of the specific responses of the informants despite using aliases. After sorting and organizing the responses, the researcher was able to identify the themes and factors which were related to them. The theme of ‘adaptation’ was related to concepts such as language barriers, new cultural experiences, and eventual success, which were discovered in the interviews. One of the remarks was that regardless of the initial difficulties that the informants faced, they eventually reached a level of adaptation. The reoccurring theme of self-discipline emerged through related concepts such as the ability of the informants to work alone and complete their work on time. Two words that could sum up these concepts found among the responses related to self-discipline would be independence and timeliness. The informants stressed the importance of accountability and being able to take ownership of their own experience within the context

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of adjusting to a new learning environment. A third theme that emerged was the theme of dedication, concepts related to dedication include persistence, and commitment. The informants stuck with the contents of their courses despite difficulties. In many ways, the themes of adaptation, self-discipline, and dedication are also related.

The themes are important for answering the three main research questions. To restate the core questions, this study is concerned with the attitude of Saudi students toward e-learning at NIU, the cultural barriers (if any) have they had to overcome while studying abroad, and what improvements could be made to better enhance the online education experience of Saudi students attending NIU? These three core questions were not the only questions asked. In fact, there were 11 total questions asked. Additional questions were asked to induce the informants into using their critical and analytical thinking skills. Since this is a qualitative study, it is simply not enough just for informants to say “yes” or “no”, their answers needed to have thought, reason, and rationale to supplement it.

### **Research Relationship and Ethics**

The researcher knew before hand that Ethics play a major role in all research studies thus he wanted to emphasize this issue in a separate section. Moreover, studies that are deliberately made ambiguous or try to influence the response of informants are completely unethical, so several strategies were used in this report to promote research ethics. First of all, the informants were asked prior to beginning the audio recording if they would consent to their voice being recorded. Fortunately, none of the participants objected to this. The informants were also debriefed about the meaning and purpose of the study before conducting the interview. Even though it is not mandatory to disclose the purpose of experiments, in this particular one, disclosing the information allowed for a more open and honest conversation without the participating fearing a hidden motive.

All the informants were people, whom I had known well and significantly before conducting the interviews. For this reason, they were given code names in this paper, instead of their real names. They expressed their views about Northern Illinois University in which they are attending online classes as part of their academic requirement, and that is another reason why I chose false identities. It was also important for me to accurately depict the views that the informants expressed. This

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is why though no direction quotes from informants are used, their quotes are paraphrased and designated to belonging to a specific informant. I also tried to come into this study with an open mind, the questions were designed not to steer the informants in any direction. Nothing was put in this paper that would upset any of the informants, expose anyone, or ruin their experience while at Northern Illinois University. The informants were also allowed to express themselves freely without fear of their views being distorted to propagate the ideas of the researcher.

### **Findings and discussion of Results**

#### **Descriptive Findings**

The informants were found through relationships that I had with the Saudi community at Northern Illinois University. Before selecting the informants, I already had an idea of potential informants that I thought would be useful for this study. Our first meeting occurred after I called these potential informants to meet me at an IHOP restaurant to eat. Prior to arriving at the meeting, I had not told them that I wanted them to participate in a study. They were led to believe that they were simply meeting for social purposes. It was not until this meeting occurred that I then propositioned them to participate in the study.

The interviews occurred in two primary locations. Some of the interviews occurred in my house and some occurred at the library of Northern Illinois University. Prior to conducting the interviews, I already had key aspects that I was trying to decipher from the responses. During the first interview I felt nervous because this was the first time I have recorded interviews for a qualitative research study. Also, English is not my first language. Therefore, I am also experiencing the same language barriers as the informant. Given the fact that this study was conducted for English speaking audiences, I had to be careful to speak clear so that I could receive clear answers and feedback.

Informant “M” was the first interview I conducted. Informant M was invited to my house at 6:00 PM. I provided him coffee then debriefed him the purpose and goal of my research. I then told permission to record his audio. The interaction between us felt nature, I felt like I was able to get an honest response from him. The only issue that I had was that at the beginning of the interview, he spoke too fast, so I then requested for him to speak slowly. Informant M slowed down his pace and there were no issues afterwards. Informant M raised a good point that I had not considered which is that online learning is costly.

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Speaking to him and other informants became an educational experience for me. Though I was the one asking the questions, their answers me and reanalyze my own notions about online learning.

### **Analytical Findings**

As stated in previous sections of this paper, the analytical findings mostly found a positive response towards online education at Northern Illinois University, as well as a general ability to adapt to learning methods in the United States. Online learning in Saudi Arabia is not as extensive there as it is in America. This is why Saudi foreign born students are a good group to analyze for a study like this which combines cultural adaptation and technological exposure to new ways of learning. Innovation diffusion also differs from country to country. Several of the informants mentioned that they liked the fact that distance education allowed to have more free time and also saved money because they did not have to drive to school.

The informants had similar interpretations of what e-learning consisted of. Each informants held the perception that distance education involved some electronic form of communication that provides web access. The definitions provided by the informants are extremely similar to the definition provided by Nichols (2003). Informant “AN” discussed the fact that online education allowed him the chance to learn from any university in the world without being present. He liked the fact that anyone in the world could connect to an educational environment. He also could theoretically be in another state from the school that he attended online. Informant “M” saw distance educational as an enhancement tool to facilitate learning. It allows him to understand concepts that he may not be able to understand in a face-to-face traditional setting. In a face-to-face setting, language barriers because more apparent because you cannot rewind or go back in time when you do not understand a concept. Also, sometimes classes are so big that it is hard to approach the professor and ask him to repeat concepts.

All if the informants said that they liked online education in general. However, Informant “F” stressed the fact that he preferred synchronized learning over a-synchronized learning. He founded synchronized learning to be more engaging. Each respondent was asked about advantages and disadvantages to distance education. Informant “M” reiterated that online learning helped him understand concepts, especially comes from Saudi Arabia to America where teaching methods

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are different. Informant “AN” mentioned the fact that sometimes students, especially foreign students, sometimes feel shy to ask questions in class. Online learning programs such as BlackBoard at Northern Illinois University, allows for students to ask questions without feeling ashamed or afraid of being embarrassed for not knowing something.

As mentioned before, Informant “M” brought up an important point that online learning is expensive for schools to implement. This negative disadvantage is something that few students think about, which surprised me that he raised this concern. This issue happens more on an institutional level. Students who desire online courses can simply chose not to enroll in a school lacking such programs. However, the schools who lack these programs do not have as much choice and freedom to maneuver. Informant “M” also mentioned that staff has to be retrained in order for schools to implement online learning programs. Another disadvantage sited by Informant “AN” is that some students learn both in the presence of the scholar and online. Technology is another issue, because technology can fail, stop working, and have a host of complications. Informant “M” mentioned that fact that a person may not have the technology required, referring to software and applications, at home to succeed in an online course. Also, you can only receive help from a professor on an online learning program when that professor is logged on. Therefore, questions you have for the professor may go a day or even longer without a response. On the contrary, face-to-face classes, in which the international student was educated, allowed immediate feedback. The responses of the informants show that there are advantages and disadvantages to distance education. What can be taken from the respondents’ statements is that online education is a great tool, but does not work well for everyone. Some people only thrive in the traditional environment.

In terms of the impact of multi-media on distance education, the informants viewed it as an enhancement. Informant “M” said that pictures and videos helped him to understand more concepts because Arabic is his first language. Informant “ABD” also gave the same response, saying that pictures and videos are more engaging for him as a foreign-born learner. Informant “F” said that without multimedia Web 2.0 tools, online learning would be boring. Visual aids play a major role in the ability of Saudi international students in grasping English concepts. The importance of these aids tends to be less apparent to native

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English speakers. The amount of autonomy that Web 2.0 tools give to online learners also provides confidence to Saudi international students.

When the informants were asked if they felt that online learning encouraged learners to share rather than receive information, they answered positively. Informant “M” said that feedback and receiving information helps him learn by exposing him to multiple perspectives. Various people exposed to the same knowledge may take different approaches or interpretations towards that knowledge. When a student is exposed to the viewpoint of others, it can change the way he views a particular concept. This is a universal point not just for foreign-born Saudi students, but also all students in general. In some regards, the Saudi students do not appear to be that much different from the typical American student in terms of what engages them and motivates them to learn.

The informants were also asked what they thought made a good and a bad online learning facilitator. Informant “M” said that teachers who communicate are good facilitators, and those who do not are inefficient. He said that good facilitators encourage group discussion, engage in feedback, and have a neat and organized systematic way of linking students to their online assignments. Not all teachers are equal in terms of the way they utilize technological tools and programs such as the LMS BlackBoard. Navigation is important to international students, whose English proficiency does not help them communicate easily in face-to-face international education and items from downloads would be easily accessible and it is what makes the difference.

### **Validity Issue**

Validity is a key factor to any research study, and can render a study unreliable if preformed improperly. Creswell (2013) discusses the fact that studies that are “self-fulfilling prophecies” are rendered invalid. This is why I tried to come into this study without bias or showing to any informants that I belong to a specific side of the argument in terms of the experience of Saudi students undergoing distance education at NIU. I am also Saudi foreign-born, but I left my personal views out of the study and never showed them to the informants. I also addressed the issue of validity by the use of repetition. The interviews were not conducted more than once, however I replayed the interviews several times to make sure that whatever data I recorded was accurate. Also, when I was transcribing the interviews, I played the interviews repeatedly. None of

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the interviews lasted over thirty minutes, however it took an hour or more to transcribe the individual interviews so that there would not be mistakes.

### **Answers to the Research Questions**

- What is the attitude of Saudi students toward e-learning at NIU?

The attitude of Saudi foreign-born students towards e-learning at NIU was generally positive. Each of the informants stressed the fact that they may have had difficulties, but ultimately adjusted and feel as if they are succeeding. The informants also liked the freedom and autonomy that online learning gave them. They could do their work anyplace and anytime, as well as interact with other students. Complicated concepts also became easier to understand through multimedia.

- What cultural barriers (if any) have they had to overcome while studying abroad?

The innovation diffusion in terms of online learning is stronger in America than Saudi Arabia. There is a gap between the innovation diffusion Saudi Arabia and America in terms of online learning because Saudi Arabia does not have the same lengthy history of e-learning. Therefore, some students from Saudi Arabia never had experience with e-learning before coming to America and Northern Illinois University.

- What improvements could be made to better enhance the education experience of Saudi foreign-born students in terms of using distance education?

The informants offered their submissions on how to enhance the experience of Saudi international students at NIU. Informant “AN” recommended that teachers should use a wider range of Web 2.0 Tools such as Google Docs, and Google Phone. These programs are user friendly, and fit the parameters of the user-centered system design theory. The informants responded positively to multi-media since it helped them to understand concepts. Informant “F” suggested that there should be one day of training for incoming Saudi students, and other students who do not speak English as their first language. Informant “AD” also mentioned that teachers should increase

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their use of graphics and animation to engage students. Informant “ABD” suggested that teachers should use Adobe Captivate and Articulate more often. Informant “M” said that schools should provide internet access at an affordable cost, though he did not exactly specify how. All of the informants in general made suggestions that would benefit all students at large, despite their foreign background.

### **Discussion**

As previously mentioned, during the interview the respondents consistently highlighted three elements as important themes to the perceptions of international students who are enrolled and studying in online courses: adaptation, self-discipline, and dedication. The results of the study indicated that these three factors are important in the measurement of Saudi international students’ perceptions about undertaking online education. The students’ adaptation factor is the most important factor influencing participation and attitudes of online learning, so it is the factor that can be used to predict perception most.

Analyses and interpretations of the interviews show that the participants felt most strongly about adapting themselves to the new learning environment. Adaptation was important because it helped them to engage with the course and the materials. Their answers reflected aspects of engagement especially their comments that engagement depends on the course structure of the institution. Student adaptation issues included being flexible and getting used to frequent access to course materials posted online. Moreover, the majority of informants believed that their online course materials are actively involved in their learning, and that their participation was dependent on communicating seriously with the course instructors. These results reflected positive perceptions toward online learning despite the challenges that the cultural gap between the two educational systems is creating for the Saudi international students.

Secondly, students’ self-discipline issues were less important than issues associated with students’ adaptation. Questions that are related to the issues of self-discipline and behavior were less important to the participants and they gave answers, which tended to be varied and less informative. For example, “how do you feel about e-learning, and how

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would you define it” and ‘what activities in online classes challenged you or encouraged you to use your cognitive abilities?’ received answers that were short and without explanations. The questions, which addressed the instructor’s presence and facilitating abilities attracted more answers despite the students’ unfamiliarity with online learning characteristics of self-regulation and adaptation.

Finally, dedication factor also seemed important to online international students because it can influence motivation and success. However, none of the five questions that are connected with dedication received comments or any additional opinion explanations. The question with the least comments was ‘Do you think that e-learning encourages learners to share and generate rather than receive knowledge? If so, how?’ This can be explained saying that the Saudi international students’ have concerns about learning with online courses as compared to traditional courses as it the case in the Saudi educational system. The majority of respondents’ comments showed that instructors were helpful and willing to facilitate but the international students’ problems originate from their unfamiliarity with the American education system and academic challenges in an online course. The findings of this study exhibited consistency with previous literature that addressed online learning and concluded that this format of education is effective and more student-centered than traditional face-to-face learning and teaching (Bouchard, 2009; Southern & Guo, 2015).

One of the study results was that there were some limitations that accompanied the findings and thus need to be reported. On limitation was small size of the sample, which must have affected the size of the data and the generalizability of the results. Another limitation was the fact that all the data analyzed in this study were self-reported data. Therefore, generalizing the results of this study should only happen if the future readers of this paper take into their consideration all the facts and limitations mentioned above. The researcher also recommends that further research studies should be conducted and should address a larger population of online international students so more insights into the issue of international students perceptions about online learning can be covered.

Since this study is mostly concerned with the quality of the online experience of Saudi international students, it is important to note that the instructional design components of an online learning course have a

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direct impact on the success of students. Good instructional online programs should be user-focused, however cultural barriers also shape the way that Saudi Arabian transition or struggle in terms of adapting to the instructional methods of distance education. Some of the informants have discussed the ways that they have struggled with this transition. Online learning is a very recent trend in Saudi Arabia, and Saudi Arabian students in general have to adapt to the American educational system.

### **Conclusion**

International students' attitudes include all the fears, concerns, worries and hopes that the international students bring with them to the educational setting. These perceptions are of great importance because they can indicate factors and predictors for improving the learning experience of those students to meet not only their expectations but also their instructors and institutions goals. For an international student such as Saudi scholarship program students, learning in an online environment is sudden experience, which can be hurting and dangerous if not addressed carefully and prepared for before hand. In fact the experience can impact student motivation and consequently grades and scores as well as retention and completion rates.

Ultimately, this study shows that Saudi international students basically have the same needs and desires as native students. The only differences are that they are coming from a different culture and different background. However, their need for feedback and Web 2.0 tools are universal needs. It appears that after adjusting to the cultural change and language barriers, Saudi students become just like their peers around them.

**Appendix A**

**Interview Questions**

1. Have you had any general difficulties while studying abroad in America?
2. What would you define e-learning to be, and how do you feel about e-learning?
3. Could you give me a general explanation about the advantages and disadvantages of e-learning?
4. Could you describe your experiences of being involved in e-learning at NIU?
5. Do you think that multimedia enhances the e-learning experience? If so, how?
6. Do you know of any specific tools that could help online teachers be more responsive and engage students more efficiently in e-learning?
7. Which activities in your e-learning course challenged you or encouraged you to use your cognitive abilities?
8. What do you think makes a good facilitator in an e-learning environment, and what makes a bad facilitator?
9. Do you think that e-learning encourage learners to share and generate rather than receive knowledge? If so, how?
10. What sort of motivation do you receive from your teacher when you engage in e-learning?
11. What improvements could be made to better enhance the education experience of Saudi foreign-born students in terms of using distance education?

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