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#### Résumé de l'article

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Regional Focus Issue: Bridge over Troubled Waters ~ Cengiz Hakan Aydin and Yoram Eshet-Alkalai, IRRODL Regional Editors for the Middle East

# Exploring Open Distance Learning at a Jordanian University: A Case Study

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#### **Abstract**

This case study explores an open distance learning program offered by the Information Technology and Computing (ITC) department at AOUJ, a major university in Jordan. It provides an overview of e-learning in the Arab region and explores factors that affect ODL quality in the Arab Open University in Jordan (AOUJ). The research utilized a qualitative approach, which included five lengthy semi-structured interviews with the program director, two instructors, and three students. Three important conclusions can be drawn from the study about e-learning in the Arab region: (1) the existence of adverse conditions, (2) the presence of strong instructional practices, and (3) the need to improve administrative support.

#### Introduction

The field of open and distance learning (ODL) has many well-respected journals and ample documentation of institutional success stories and student learning, especially in developed countries (Allen & Seaman, 2004; Ashby, 2004). Numerous position papers from authorities are now documenting the potential of the "Read/Reflect/Write/Participate" Web (Richardson, 2006, pp. 125-133). ODL was started as an alternative and secondary form of education utilizing communication technologies within an information transmission model. It is now recognized as a ground-breaking form of teaching and learning in which technology, information, media, and interaction converge.

For several years, distance education has been used as an instructional mode in numerous countries around the world. Well-known universities, such as the University of Georgia (USA), Open University (UK), and the Open University of Japan, to name a few, have been utilizing distance education in programs to teach engineering, business, education, and arts etc. This mode of teaching, according to Knowles' theory of andragogy, helps learners take control of their education and provides them with opportunities to learn at their own pace and at times and places compatible with their life commitments (Knowles, 1984). In addition, instructional delivery methods and technologies are changing and constantly improving the effectiveness of distance education.

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However, a quick review of the literature shows that distance learning programs face challenges. For example, Moiduser et al. (2000) found that many online programs do not exhibit evidence of innovative pedagogical approaches, such as using constructivist learning principles. Vygotsky's social construction theory states that learning is a social, active, and interactive process, and such theory highlights the needs for actively incorporating principles of collaborative and cooperative learning. A third challenge to distance education is students' motivation and commitment to engaging in new learning methods. Masie (2002) stated that beginning e-learners should be exposed to simple and single methods of instruction in order for them to master the online material.

In developing countries, the growth of ODL has been severely deterred due to the lack of technological infrastructure, negative perceptions of online degrees and learning, and unstable socio-political environments (Enuku & Ojogwu, 2006; Rennie & Mason, 2007). About a decade ago, Jamlan (1995) stated that higher education in the Arab region has underserved public and societal needs and duplicates work and resources between competing institutions. He also pointed out that most universities in the Arab region create their own policies and make decisions about curriculum and specialization based on the needs of the host country without cross-national or institutional comparisons. To counter this ineffectiveness, Jamlan proposed an Open University model. Despite the good intentions of governments and institutions, the growth of ODL in the region seems to have been much slower than the advancement of ODL in many other nations. With modern ODL technologies providing greater opportunities for access and sharing of quality education, it is critical to examine the contextual factors that interfere with the development and integration of ODL program models.

The literature reveals that the success of ODL in developed countries does not come without challenges. Researchers state that a successful ODL program is a result of coordinated efforts between a strong organization, instructional and program staff members, and learners (Owen & Demb, 2004; Yoon, 2003). For cross-national ODL ventures, flexible and supportive policies and institutional adjustments are viewed as additional necessities (Bailey, 1999). The quality and

success of student learning and ODL programs are affected by numerous instructional and administrative factors. Critical factors include faculty development and student assessment (see the *Journal of Asynchronous Learning Network*, volume 4, issues 2 and 3), instructional design (Garner, 2005), program business models (Vignare, Geith, & Schiffman, 2006), blended learning (Osguthorpe & Graham, 2003), and student retention (for a review, see the *Journal of Open Learning*, volume 19, issue 1), to name a few. Among these topics, proper design and implementation of interactive courses and institutional, learner, and technology support are viewed as particularly important (Phipps & Merisotis, 2000).

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In view of the challenges mentioned above (i.e., multiple factors affecting the quality of ODL, less established technological infrastructure in developing countries, and less supportive cultural and socio-political environments for ODL in the Arab region), this study attempted to explore pedagogical and administrative models in the region. To do so, the Arab Open University at Jordan (AOUJ) was purposefully selected for this study. AOUJ was envisioned and initiated in the late 1990's by Prince Talal Bin Abdul Aziz, President of the Arab Gulf Program for the United Nations Development Organizations (AGFUND). The structure of the university was a collaborative effort among multiple participating Arab countries. The mission was to provide higher and continuing education to underserved populations and regions through advanced technologies. For the above reasons, AOUJ presented an appropriate context. In exploring suitable program models, we examined the selected institution's various ODL practices, which use the widely supported Instructional Systems Design model of analyzing, designing, developing, implementing, and evaluating (ADDIE) as a framework (Dick, Carey, & Carey, 2000). We explored the factors affecting ODL quality in one specific program at AOUJ. To better understand the issues of this case, we used the following research questions to guide our study: (1) What is the general condition of e-learning in the Arab region? (2) What are the factors affecting ODL in one educational program at AOUJ? (3) How does AOUJ manage the support of faculty and students as well as administration?

#### Method

A single case study design was used to obtain a better understanding of the setting and phenomena (Creswell, 1998). The case study was conducted between May and September 2008 and focused on an open distance learning program offered by the Information Technology and Computing (ITC) department at AOUJ, a major university in Jordan. The open learning program provides online learning modules for university students to increase their learning achievements and fulfill curriculum and personal goals. Courses offered in the program contribute to the completion of a degree certificate. A key component of this program is its emphasis on online activities in the form of blogs, Web pages, discussion boards, and other asynchronous online communications that aim to impact students' performance.

The research utilized a qualitative approach, which included conducting five lengthy, semistructured interviews with the program director, two instructors, and three students. The first interview with the program director investigated the formal structures, processes, and background of the program. The director also had teaching and program coordination experience at AOUJ. The second interview was with the program's two senior instructors, called staff tutors, and investigated the preparation for and perceptions of the program, attitudes towards students, and opinions about some factors that affect the learning process. In addition, three students, one male and two females, were interviewed to get their perceptions of the program and whether and how it helped them learn better and develop new skills. All interviews were done by phone, and followup conversations were carried out through e-mail to clarify certain ideas. Guidelines for creating interview questions and triangulating multiple data sources for analysis were used (Merriam, 1998; Yin, 1994). To validate the researchers' interpretations of the interviews, member check was conducted and reviews of the program's online material and Web site were performed. An expert, a faculty member of instructional design and technology, checked all interview questions for face validity and appropriateness before the questions were sent to the contacts (Merriam, 1998).

### Data Collection and Analysis

Our contacts provided us with answers and further resources to the list of questions we formulated over the course of this study. To answer the research questions guiding the study, exploratory questions based on the ADDIE model were formulated (Dick, Carey, & Carey, 2000). Additional questions were used to gather information about the administrative structure and practices of the program. The researchers also collected related information and supporting evidence from secondary sources, including the AOUJ Web site and other published articles. Once all the data were collected, the authors sought to clarify interpretations of findings, implications, and conclusions through frequent discussions and reviews. We attempted to highlight important themes that emerged from descriptions of various ODL practices. We also included data about administrative changes that were required in view of surrounding cultures and environments. In the discussion section, we drew out common and disparate themes as well as implications for practice and followed these with recommendations for further research.

Two major limitations of this study should be noted. First, the findings of this study could be affected by the observer's subjectivity. While the depth of investigation gives a thorough understanding of one single study, it is likely that it is only specific to the case at hand and thus unsuited to generalization. Results of this study should be interpreted with caution and might be compared only to highly similar settings. This study followed a case study methodology for data collection. Different quantitative research and data gathering methods, such as using a survey

instrument, can provide different information and affect the interpretation and generalizability of the results.

### **Case Setting and Context**

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Jordan is a small Arab country with limited natural resources and a population of six million. Since the mid 1990s, the Jordanian government has undertaken a program of economic reform and has a development priority of leveraging human capital through education. Over the past 10 years, education in Jordan has been stressed as a main pillar for development and was adopted at all levels. Recognizing the value of academic partnership between countries and the potential benefits of ODL, the government signed an agreement in 2002 to support the AOU's mission and to provide physical and administrative resources. Thus AOUJ was created and academic instruction began in the fall of 2002. Since then, student enrollment has been growing continuously.

According to the AOUJ Web site and the director we interviewed, AOU consists of seven branches in seven countries with five deanships centered at the University's headquarters in Kuwait. Among the participants, Jordan was the first branch to be established in 2002. Since the program's inception, AOU has been licensed as a private Arab institution of higher education of special status.

Based on the concepts of open, flexible, and accommodating learning, the AOUJ lists six program goals and objectives on its Web page: (a) promote an open system of higher education that provides wide opportunities of studies for professional development and lifelong learning, (b) adopt the highest standards of excellence in the qualification and training of its students and in the stimulation of work generated by its faculty and staff, (c) graduate students capable of embracing current and emerging technologies and competent in working in a global economy, (d) foster an environment of intellectual development and pursuit of research dedicated to the service of the Arab and human societies, and (e) instill the spirit of upholding deeply rooted social and ethical values of the Arab-Islamic heritage and an appreciation for other human cultures and heritages.

The AOUJ open learning system is a form of distance education with enhancements for quality education. In order to avoid the limitations of correspondence study, which usually lacks lectures and faculty-student interaction, AOUJ's open learning philosophy adopted a tutoring process aimed at promoting a proactive environment of teaching and learning. This philosophy is supported by course lectures presented in a programmed and progressive mode using well-prepared textbooks, supporting notes, and other forms of delivery media (audio and video cassettes, CD-ROMs, online material). A library system and other computer-based resources are also deployed at AOUJ and are augmented by a number of Learning Centers (LCs), which are

distributed around the country.

AUOJ is trying to establish itself as a leading institution of open learning and a forum for lifelong education. Currently, AOUJ offers four programs: (1) English Language and Literature, (2) Information Technology and Computing (ITC), (3) Business Administration, and (4) Bachelor of Education. In this study, the ITC program was of interest.

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The four programs at AOUJ differ in exact numbers of staff members but are fairly comparable. Within the ITC program, there are five full-time and 16 part-time faculty members. The full-time faculty members include two doctorate degree holders, who are called staff tutors, and three master's degree holders, who are called tutors. The demographics of students attending the ITC program reflect those of AOUJ students. The majority come from Jordan with a few from Saudi Arabia, Syria, Iraq, the Czech Republic, and the U.S.A. The male representation is a little higher than the female, and the majority of students are within the age group of 25 – 29 years.

### **Findings**

This section is organized in accordance with the research questions. The results begin with the general conditions of e-learning in the Arab region and are followed by an overview of ODL at AOUJ then end with an exploration of the factors affecting the program.

### Overview of E-Learning in the Arab World

According to the ITC program director, e-learning in the Arab world is still new, and benefits and challenges coexist. As of this writing, AOUJ is the only university in Jordan that provides elearning programs. When asked to identify the current status and major challenges of e-learning at AOUJ and across the region, four issues were articulated by our interviewees. The first issue mentioned by all interviewees was low public esteem for online learning. The program director, for example, pointed out the high level of skepticism the public has toward online degrees and the public perception of low job prospects afterwards. As well, our interviewees agreed that competition from well-known higher education institutions, especially from reputable and accredited Western universities, was a major challenge to attracting quality applicants. The third issue that emerged from our interviews was the failure to use online management systems fully. The interviewees indicated that most universities in the region were using course management systems (such as WebCT) as limited and supplementary tools to support courses. One staff tutor considered this issue to be similar to "driving a sports car using only the first two gears." The fourth issue that emerged was the unsatisfactory level of Internet connectivity, which frustrates both universities and students. The program director informed us that "university Internet speed sometimes fails to be as fast as needed and this discourages students to continue to be patient

especially when things are not downloading fast enough. Also, one of the students stated that "personal Internet connections operate at a very low speed and this adds to [their] frustration."

These challenges are major reasons for the weakness of ODL in Jordan, but based on their responses, our interviewees seemed to be aware of the need for change and for developing and improving new technologies and implementing system-wide training to enhance the quality of ODL.

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Data analysis did not provide enough evidence on how external environments (e.g., language, economy, culture, and socio-political environments) affected administrative or managerial aspects of the distance learning program, or whether they constituted a major influence. Rather, one of the respondents stated that the driver for AOUJ programs "has always been the quality of students' educational experiences."

### Instructional Approaches

Our data provided us with salient information about recommended instructional approaches. A standing policy of the ITC program and AOUJ in general is to encourage and promote various means of communication between students and their instructors or tutors and amongst students. In addition, the program provided different information technology (IT) and Internet-based resources that helped achieve this goal.

### Course Design and Development

A typical e-learning process involves planning, design, development, evaluation, delivery, and maintenance (Khan, 2004). The e-learning process is iterative in nature. In the ITC program, the components of the program have been updated and redesigned frequently. At AOUJ, program plans are developed and changed in accordance with local and regional market needs. Faculty revises the programs once every two years.

The program director informed us that the general course coordinator (GCC) takes responsibility for course design and development processes. Usually, the GCC designs and develops courses based on program requirements, student needs, and instructors' feedback. AOUJ provides several support resources for the course designers, such as the course calendar, tutorials, final examinations, homework, and quizzes (including model answers). Courses are designed based on a course enrollment of 20 students per class. This number is decided on the basis of the roster capacity for best learning outcomes, tutor load, and support equipment needed.

The ITC Department uses Moodle, an open source learning management system (LMS). The

LMS enables content to be organized and delivered in a standardized way, as a course divided into modules and lessons, supported with quizzes, tests, and discussions. As well, the LMS is integrated into the university's student information system.

The content and courseware is updated each academic year through the regular meeting schedule for departments at both the branch level (AOUJ) and the university level (AOU). Once developed, these courses are monitored by external examiners, such as the Quality Assurance Agency for higher education (QAA) and the Open University Validation Services (OUVS), to ensure the quality of the content.

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### Course Delivery

According to the program director, it takes four months on average (one semester) for students to complete a course and five years to fulfill the requirements of the whole program. Tutorial sessions are planned as a means of useful and effective face-to-face interaction between students and their tutors. Tutors are expected to schedule office hours and arrange other means of communication with their students including email, chat platforms, and Web-based resources. Students are, in turn, encouraged to take advantage of these resources and to keep in contact with their tutors.

Common components of distance learning courses at AOUJ include tutorials, textbooks, online forums, teacher marked assignments (TMAs), homework, quizzes, final examinations, online group work for projects, PowerPoint presentations, and summaries. Some courses have audio/video tapes and software to simulate an environment for some practical activities. In addition, group work and student collaboration are highly encouraged, especially when doing course research work. Student collaboration is supported through the utilization of different tools and technologies, such as email, chat, discussion forums, and Web-based resources.

#### **Evaluation**

The quality of teaching and the delivery of information to target students are major concerns at AOUJ, which emphasizes evaluation, whether it relates to teachers, students, courses, or technologies. Staff tutors and external examiners conduct evaluations, and evaluation questionnaires are filled in by students. Teacher evaluation results are used for personnel decisions, such as performance appraisals and year-end incentives.

Course evaluations provide important data and determine the degree of success of the courses and the program. Both staff tutors (interviewees) indicated that "course evaluations are presented via face-to-face meetings between tutors and the GCC and are also available online." In addition,

"instructors complete a special Tutors' Form every semester and for every course." Other evaluations include a forum that is used by course teachers and the course coordinator and a course questionnaire completed at the end of the semester.

The collected data showed that student evaluations are presented through staff tutors, TMAs, computer managed assignments (CMAs), quizzes, and final examinations. They are presented using the log file of the LMS for students. The program director indicated that future plans for enhancement include activating student self-assessment quizzes.

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Respondents indicated that they assessed the technology in use at least once. These evaluations are presented in the form of user satisfaction surveys, which are performed on three levels: administration, tutors, and students. The satisfaction rates are mostly above 80%. Other technology measures that only the program director mentioned include tutors' assessment, course delivery, quality of the program used, software cost, software support system, and software performance (measured by troubleshooting occurrences per semester).

### Support for Faculty, Students, and Administration

While the former questions address instructional practices at AOUJ, this section focuses on managerial and administrative practices within the program.

### Faculty recruitment and training.

When hiring new tutors, AOUJ attempts to recruit the best candidates. The search committee, usually led by the GCC, considers the candidates' academic qualifications, research record, experience, and computer literacy, among other skills. The director of the ITC program at AOUJ informed us that preference is given to candidates who have some experience and familiarity with distance learning tools, but this is not a necessary condition since the AOU concept is new. Training and support is available to tutors who design and develop the online instruction. They attend course briefings at the beginning of each semester. The GCC has the greatest role in bridging technology and education.

At AOUJ, the percentage for full-time vs. part-time tutors is 50%. Usually, full-time tutors are more qualified than part-time tutors. This is reflected in the disparity in quality and management between courses taught by the two groups. As a requirement to teach an online course, new instructors, whether full-time or part-time, should finish several training workshops before leading their classes. These workshops cover various subjects. For example, one workshop introduces trainees to the open learning philosophy and distance learning concepts, goals, tools, and scope, etc. Another workshop provides trainees the skills and knowledge needed to use the

Moodle LMS. A third workshop helps tutors to manage online course assignments, to conduct online quizzes and final examinations, and to mark TMAs. In addition, training and technical support is provided to all instructors of new courses (e.g., troubleshooting).

### Student support.

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To assist students with their technology problems and needs, there is internal technical systems support within the ITC department at AOUJ. To complete a distance learning course, different technologies are used, such as the LMS, Web server, regular PCs, and specific software for some students. Along with the technologies provided to students, technical support is provided via a help desk that utilizes LMS forums, blended learning techniques, email, telephone, Web site links, site visits during office hours, and face-to-face tutorials. Technical support is usually available 12 hours per day.

Other support services available to online students include an online library, list of library books, list of sites, and course summaries. In addition, with each course, students receive a complete package of textbooks, CDs, equipment (e.g., calculator) and all the necessary instructions. Usually the GCC makes technology-related decisions with assistance from the tutors (e.g., purchasing, technical support methods, updates).

Data collected revealed that the students' perceptions about the effectiveness of the online courses in the ITC program were positive in general. For example, all three students interviewed agreed that the content of the courses was well prepared, and the delivery of the courses was satisfactory. They stated that their contributions to online participation were higher than within face-to-face classes. One student noted, "...I was shy in class, and it is easier for me to participate in discussions and dialogues online." A second student offered this comment:

As a student, I am usually reluctant to participate in discussions, what if I am wrong? But for some reason, I feel comfortable with online dialogues and do state my opinions even though I do not know others opinions about the topic!

These responses reflect the collectivist nature of Arab culture (Gillespie & Riddle, 2003). They also reveal the innovative pedagogy ODL offers to a region in need of educational system reform, where old learning habits such as lecturing and memorization are still heavily practiced.

The students made important suggestions to improve the program. All three students identified the use of technology as a challenge that affected their learning experiences. One student offered this observation:

It is a learning curve, it was challenging at the beginning to learn about the new medium, but I got help from my colleagues and tutors. My colleagues shared valuable information with me and my tutors were available to answer any questions, and that helped tremendously.

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On the same topic, one tutor added "We [tutors] guide students to learn about the model in a relatively short period. We usually prepare them by having simple activities and discussions to introduce them to the system and to familiarize them with the content."

One of the main concerns of distance learning is the attrition rate. Student drop-out rates in such programs far exceed those of students who enroll in traditional face-to-face programs. Yukselturk and Inan (2004) reported a 35% attrition rate for a three year period for an online program. At AOUJ, the program director indicated that about 95% of admitted students successfully complete their program of study, which is a percentage that AOUJ prides itself on accomplishing. The program director attributed this low drop-out rate to the dedication and seriousness of the AOUJ and to the quality of course content.

#### **Discussion**

ODL is a viable and legitimate form of teaching and learning (Bernard et al., 2004). It is worth noting that due to modern collaboration technologies and stable communication tools, the majority of faculty members view online education as equal or superior to onsite education (Allen & Seaman, 2006). However, the transfer of successful ODL theory and practices from the Western hemisphere will not occur instantly in the Arab region. Findings from this case study provided three important themes and conclusions: (1) the existence of adverse conditions, (2) the presence of strong instructional practices, and (3) the need to improve administrative support. Implications for practice are presented within each theme.

### **Existing Adverse Conditions**

The penetration rate of distance learning in Arab countries is low. Several measures of economic and social development suggest that countries in the Arab region are more divergent than convergent in their e-learning practices. Although most of these countries have begun to develop an infrastructure for the Internet, these are baby steps compared to the developments in other countries, such as the USA, Korea, Japan, and countries in Europe. The insufficient Internet infrastructure experienced by our interviewees supports this conclusion. Organizational leaders are cognizant of the fact that modernization hinges upon introducing technology, and they support the incorporation of e-learning and technology into educational and training programs. Still, they have done little to widen access to e-learning technologies (UNDP, 2003). The fact that the AOUJ

was launched based on such recognition but is the only e-learning oasis in Jordan provides evidence that it will take some time to expand the concept of e-learning within the region.

Challenges to e-learning also come from educational policy makers themselves. Some educators resist change. They fear that e-learning might shift traditional education abruptly, and they will be unfamiliar with the objectives, content, and learning outcomes of a new pedagogical model (Nasser & Abouchedid, 2003). On a related note, the program director shared that the lack of familiarity with e-learning techniques and methods (know-how) were major challenges to enhancing instructional effectiveness within the ITC program at AOUJ. Our findings showed that faculty development and personnel decisions rewarded innovators and adopters of new technologies, but little was found at the policy level to encourage participation from larger faculty bodies. Professionals who do not change or who do not accept such change are left behind or may become a stumbling block and a source of frustration for those who do.

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### Instructional Development Practices

Instructional development practices seem to be based on established models and practices. Still, utilization of technology can be improved. Our findings showed that a variety of instructional methods and communications were welcomed and used in courses offered at AOUJ. For instance, planning courses always started with an assessment of the needs of the surrounding community, and updating courses regularly was based on the results of evaluations from multiple sources. These practices reflect AOUJ's advancement in terms of curriculum and course development. Other practices support this conclusion. AOUJ followed a team-based approach to quality assurance. For instance, the collaboration among the general course coordinator, instructors, and other personnel at the Open University is a quality assurance mechanism (Phipps & Merisotis, 2000). Determining student numbers based on the feasibility of accomplishing course objectives, tutor load, and equipment support capacity shows that priority goes to quality over quantity. The annual update of contents and the courseware through regular meetings between departments at the branch and at the university level, as well as the presence of expert external evaluators, is another quality assurance measure. Lastly, strict implementation of research-supported practices, such as tutoring, group collaborations, and homework, show that pedagogical decisions are strongly grounded in established instructional practices (Hannum, 2008).

As for the use of technology, findings showed that a variety of tools were used throughout the courses. Technology was used with tutorials, textbooks, online forums, homework, examinations, online group work, and PowerPoint presentations. But our findings showed that the use of cognition-facilitating tools, such as simulations and audiovisual content, was not consistent across courses. According to the program director, using powerful instructional tools, such as a learning management system, was mostly limited to supplementary support for existing courses at most

universities in the region.

Regarding technology for student interaction, students were trained as they went through the courses, but there was strong support from the tutors and within the student community. Still, it is critical to explore design approaches that facilitate effective and efficient learner interactions with (a) contents, peers, instructor, experts, and interface (Hirumi, 2002) and (b) virtual simulations and collaborations (Nelson et al., 2005).

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### Administrative Structure and Support

Findings from this study indicated that AOUJ administrative leaders work hard to make instructional and administrative practices systematic. Still, some areas of administrative practices are rather anecdotal and more systematic approaches are necessary for areas such as hiring, resource sharing, and research. AOUJ seeks qualified instructors, but due to the short history of open learning in the region, there is a lack of experienced applicants. AOUJ tries to compensate for this with mandatory systems training.

With priority given to course development and teaching, it was not certain how many staffing decisions, such as hiring and training, must be handled by each branch or by the headquarters of AOU. The AOU Web site is informative and comprehensive. Employment information is available and clear at the headquarters and at all branch campuses. However, comparing Web sites of the different AOU branches revealed little consistency in the organization of information and layout. In addition, little information was found regarding how resources were shared or how collaborations occurred between branches or with the headquarters. Since we could not obtain access to learning management systems, we need to be cautious about our interpretation related to the lack of sharing. Still, the observed inconsistency in the structure of information across branches and the lack of information regarding collaboration or resource sharing across branches indicate that cross-institutional collaborations can improve.

Positive signs emerged from the findings; for example, AOUJ values the benefits of strong research and evaluation and is actively using results from evaluations to inform administrative decisions. Various types of evaluation as well as student satisfaction with program services and other support services and how these services affect academic performance are important topics to be examined further (Kember, 1989; Rovai, 2003; Tinto, 1993).

It is our conclusion that the prevalent paradigm of open distance education in the Arab World, based on the case of AOUJ, falls somewhere between the "equal education" and the "new domain" beyond the "replication" paradigm (Lee, Owens, & Benson, 2002, pp. 407-410). Quality experiences emphasized throughout the program and attempts to utilize various instructional and

communication technologies to enhance educational experiences support this conclusion. It is unlikely that a single pedagogical and administrative model will dominate in the context of an open university that serves multiple countries in the region. Although our interviewees did not think that cultural and socio-political environments affected instructional and administrative practices as much as students' educational experiences, stability of political and economic conditions differ in other branches of AOU, and unique variations in national cultures, levels of development, education of the labor force, and legal-political forces should be taken into consideration when developing distance education programs in the region.

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Another important finding was that the development and implementation of the program modules helped AOUJ save money on operational costs by hosting online cohorts. However, there are no financial considerations driving the shaping of program models because AOUJ is a non-profit university.

Pedagogical practices can be more consistent across countries with the utilization of familiar approaches, such as the ADDIE model, and with the integration of additional guidelines for fostering online interaction (Hirumi, 2002), virtual simulations, and collaboration (Nelson et al., 2005). On the other hand, less consistent and systematic administrative practices discovered in this study point to the need for more experimentation, support, research, and sharing of findings in this area.

#### **Conclusion**

Understanding ODL concepts and applications in the Arab region is imperative. This study focused on ODL in the Jordanian context. Measuring ODL in different countries and environments is important and is a recommendation for future research. Also, comparing differences between the Arab region and other international settings is another possible topic to be studied.

This study serves as a proposal to integrate the best practices in e-learning and ODL into the Arab region and to continue working in the best interests of the students, the communities, and the people of the region. Friedman (1999) argued that to be competitive in the global economy, individuals, organizations, and countries must be able to adapt quickly to change. One way to do this is to adapt e-learning, ODL, and modern learning and teaching concepts to the culture and educational systems of the region.

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