Leapfrogging Across Generations of Open and Distance Learning at Al-Quds Open University: A Case Study

Kathleen Matheos, Ph.D.
University of Manitoba
matheos@cc.umanitoba.ca

Christina Rogoza, Ed.D.
University of Manitoba
rogoza@cc.umanitoba.ca

Majid Hamayil, Ph.D.
Al-Quds Open University
mhamayil@gou.edu

Abstract

Al-Quds Open University (QOU) serves just over 40% of the undergraduate students within Palestine, who for multiple reasons are studying within the open system. Established nearly 20 years ago, the institution is built on the Open University United Kingdom model of regional centers and print based correspondence. In 2007, a Comprehensive Evaluation of QOU, funded by the World Bank and the European Union, resulted in recommendations that emphasized the development of teaching excellence in distance, open, and online environments (Matheos, MacDonald, McLean, Luterbach, Baidoun, & Nakashhian, 2007). QOU administration responded with the development of a course redesign project, aimed at moving from a correspondence model to a blended learning environment that integrated technology into curricular design. This paper shares the experiences of QOU, in its efforts to meet the conflicting demands of this situation as it leapfrogged into new forms of distance learning. This analysis of our experience may provide insight for administrators in other institutions that are at similar stages of distance delivery programming.

Introduction

The administration and delivery of higher education in Palestine is mired with challenges, foremost the associated issues of mobility, security, and difficult socio-economic conditions. Despite this harsh environment, universities and colleges have continued to operate, for the most part, delivering a range of undergraduate and graduate programs, across Palestine. Unique to the Palestinian system is the large number of learners studying within an open university. Currently, over 40% of the undergraduate students within the West Bank, Gaza, and East Jerusalem are served by Al-Quds Open University (QOU). QOU is the only institution within Palestinian Higher Education Statutes that provides distance education courses and programs in Palestine. It currently serves 53,000 students and for the majority of these constituents provides their sole opportunity for higher education.

QOU programming is based on a traditional correspondence model augmented with face-to-face tutorials. Although this appeared to be functional and continued to attract students, a comprehensive evaluation of QOU, funded by the World Bank and the European Union, resulted in a series of recommendations, paramount being the development of the scholarship of teaching within distance, open, and online environments.

QOU was positioned to respond to the recommendations. The use of technology and an available infrastructure in QOU made it possible to consider the reconstruction of distance learning offerings to integrate online learning into curriculum design. In 2008, QOU initiated a course redesign project, aimed at moving from a correspondence model to a blended learning environment. This move posed both challenges and opportunities. This paper shares the experiences of QOU and may provide useful guidelines for other institutions that are at a similar stage in transforming their distance delivery programs.

Background

Founded in 1991, QOU is the only institution within Palestinian Higher Education Statutes that provides distance education courses and programs in Palestine. It is a solely undergraduate institution offering five

programs: Technology and Applied Sciences, Agriculture, Social and Family Development, Administrative and Economic Sciences, and Education. Similar to distance and open education institutions throughout the world, QOU has undergone exponential growth. In 2000, QOU had just under 25,000 students, whereas in 2007 it served 50,000 learners. As an open university, its central goal was accessibility, providing an opportunity to mature learners to achieve a higher education credential. Although QOU does serve mature students who could access a traditional system, the challenges of mobility, security, and a deteriorating economy resulted in an increasing number of students graduating from high school opting for open education. Study was flexible allowing learning while earning, fees were slightly lower than the traditional system, and it was possible to study close to home reducing both the cost and difficulty of travel.

QOU was built on the Open University United Kingdom (OUUK) model structurally comprised of Regional Centers that served as the face of the university in the community. As the only Palestinian University using solely Arabic as a medium of instruction, the university developed its own teaching materials consisting of self-directed learning textbooks for each subject area. As technology became more available, the text materials were augmented by CDs and other multi-media resources. Tutorial sessions were also provided on a bi-weekly basis at the Regional Centers, as were weekly practica for courses requiring a laboratory or practicum component. Tutorial sessions were recommended but not compulsory; although there was a minimal attendance requirement in order to sit for the examination. However, this requirement could be satisfied through attendance at the midterm, final, and at registration time, hence participation in tutorials varied greatly. Some students revealed that they did not attend the tutorials because they did not see the value in doing so, that is, no marks were attached to their participation. Moreover all course material on which assessment was done, was found in the self-study textbooks. Students were neither required to explore secondary resources, nor did faculty use resources beyond the textbook in the tutorials. Thus, it was possible for the students to complete the courses studying the textbook at home, with no interaction with the instructor or any other students.

Assessment was based on two assignments, a mid-term, and a final examination. Students were required to submit the assignments in order to sit for the examination. An overall grade of 50% constituted a pass in the subject area. Teaching and learning could be considered as most akin to First Generation Distance Education (Garrison, 1985; Garrison & Archer, 2000; Archer, 2001), print-based correspondence. Although there were bi-weekly tutorials, these were not compulsory and in the majority of subject areas with the exception of Applied Sciences and Accounting, students did not attend.

In 2006-2007, the World Bank and European Union funded a Comprehensive Evaluation of QOU as a component of a larger tertiary education initiative in Palestine. QOU responded to the proposed recommendations with the establishment of the Open and Distance Learning Centre (ODLC) with a mission to develop and enhance excellence in distance teaching and learning across the institution. A Director, who held a PhD in education with undergraduate and graduate degrees in engineering, was appointed with a direct report to the Vice-President Academic Affairs. The establishment of the ODLC provided the forum to revisit teaching and learning at QOU. The ODLC Director identified the need to move to a more interactive model of course delivery and spearheaded a course redesign project for 10 QOU courses that integrated technology and online learning.

Central to the redesign project was the development of a course blueprint linking outcomes, activities (face-to-face and online), resources, and assessments (Collins, 2005). The blueprint was a tool for designing for curricular alignment. For most instructors, this was a new experience. As with most large open universities, curriculum was standardized. Course materials were prepared centrally including assignments and examinations. Instructors' roles were confined to teaching the prescribed curriculum and in the case of QOU, this translated into bi-weekly tutorials, office hours, and grading the assignments and examinations.

The redesign required instructors to identify resources, and develop activities and assignments to augment the textbook. The addition of online course resources challenged the epistemology of QOU traditional distance offerings and the limitation of the use of only one resource, the course textbook. Furthermore the online activities required students to explicitly interact with content and with each other. Finally the provision of student marks for online activities allowed for pacing and formative feedback throughout the course. Marks normally allocated to assignments, the midterm exam, and the final exam, were redistributed to these new activities.

Faculty had reservations about the time commitment to not only develop the courses but the instruction in the new format. Administrators as well were concerned that students may not be receptive to the redesign. Many students, they believed, had enrolled in the university in order to receive a credential in the traditional format. The extra work involved to be successful in the blended learning approach and the technology demands could

become an issue. Students may withdraw from the university, and this would be become for problem for QOU which depended on tuition dollars to a great extent. However both faculty and administration could see that technology was a major driver in transforming pedagogy in higher education. QOU needed to move into online and blended learning to be current and credible as an open and distance learning institution.

After lengthy discussion, QOU Academic Council ratified a request to embark on a pilot project to redesign 10 QOU courses to improve student engagement and interaction. Curriculum delivery via distance education requires focused attention to course design (Moore and Kearsley, 1996) and curricular alignment is essential to ensure quality programming. Therefore, ODLC provided a course redesign workshop, focusing on both pedagogy and technology, and the coordination of ongoing design and technological support for academic supervisors and students throughout the redesign and delivery process. Each course redesign included the following elements:

- The use of a learning management system (Moodle) and a virtual classroom (Elluminate).
- The inclusion of online learning activities.
- Development of a course blueprint.
- Redistribution of marks normally allocated to assignments and midterm to online activities. (The final exam remained as required in its institutional format).

This initiative was a milestone in QOU's development to build capacity in offering quality programming through the sustained use of technology in teaching. This move positioned them for leadership in demonstrating best practices in distance learning for open and distance higher education institutions.

Literature Review

The first challenge for the QOU redesign project was to define and develop a model for blended learning appropriate for an open and distance institution that had utilized print-based study with optional face-to-face tutorials for over ten years. For the purpose of this discussion, blended learning is conceptualized as a learning environment where multimodal approaches to instruction utilize face-to-face and online technologies. The benefit of a using a variety of modalities is that it appeals to different learning styles with the online components allowing for ease of access. Building on the definition presented by (Garrison, 2003; Garrison and Vaughan, 2007), blended learning at QOU was defined as the thoughtful fusion of oral and written communication, as well as interaction and engagement with multiple resources, such as audio, video, graphics, simulations, and immersive environments. Critical to this model is the concept that academic program and course goals and objectives drive the pedagogical approaches and technologies used.

Blended learning addresses the challenges as presented in transactional distance theory. According to this theory, the concept of distance transcends the geographical and spatial distance that separates learners from instructors. Distance is transactional and can be mitigated through pedagogical approaches. Moore (1993) defined transactional distance as, "a psychological and communications space to be crossed, a space of potential misunderstanding between the inputs of instructor and those of the learner" (p. 23). Interactivity and communication have been proposed as key components to reduce transactional distance.

Moore (1993) described three types of interaction in distance education; learner to instructor, leaner-to-learner, and learner to content interaction. In all three of these 'spaces', transactional distance exists. Garrison and Archer (2000) remind us that the theory of distance education is situated within the context of emerging communications technology that present enormous possibilities for addressing the issues in transactional distance. The diffusion of technologies such as learning management systems, virtual classrooms, online discussion forums, immersive environments such as Second Life, podcasting, and collaborative production platforms, such as wikis, in educational institutions has changed the paradigm of distance education from the industrial model to a postmodern approach. This era has seen the shift from independent study and correspondence delivery to a collaborative modality that connects learners to learners, learners to instructors, and learners to content. In addition, learners can now access content in a variety of ways using mobile devices, wireless technology, and Web 2.0 technologies.

For QOU, the move to blended learning involved a fundamental redesign that transformed the structure of, and approach to, teaching and learning. Although QOU also had a well developed Information Technology and Communications Technology (ITCT) unit and a university portal, the primary use of this was for administrative purposes and email capability. The availability of new technologies and their affordances compelled a reassessment of the design of instructional approaches. Clearly developing and delivering such learning activities

within this new environment called for administration, faculty, and students to leapfrog across a generation of distance learning modalities.

A number of scholars studying distance education have applied a generational analogy to describe its evolution. Perhaps the most clearly formulated of these analogies is the one first stated by Garrison in 1985, then modified and developed by Garrison and Archer (Garrison, 1985; Archer, 1999; Garrison & Archer, 2000). This formulation describes the generations differently from most other descriptions, and builds from a base in pedagogical theory. Rather than trying to link generational change to the appearance or disappearance of particular delivery technologies, it defines the transition point between generations as the moment of change in the primary mode of two-way communication between (among) student(s) and instructor (Matheos & Archer, 2004). The following provides a summary of the generational evolution model.

Generation 1: Slow asynchronous

- communication between instructor and student by postal mail
- individualized study only, communication among the students in a given course is possible in theory but not generally in practice
- advantage of great flexibility, students can work from wherever there is postal service and on their own schedule
- very low cost to institution and student
- frequently has high dropout rate

Generation 2: Synchronous

- communication among students and instructor by audio or video conference
- group instruction is the norm and may be supplemented by individual consultations via individual telephone conversations
- inflexible scheduling and some limits on locations where students can participate
- can be high cost, particularly multi-site videoconferencing
- low dropout rate, similar to face-to-face instruction with similar types of students

Generation 3: Fast asynchronous

- computer mediated communication among students and instructors linked via the Internet; in recent years the World Wide Web technology has become by far the most common means of interaction over the Internet for educational purposes
- group instruction is the norm supplemented by one-to-one interaction by e-mail or telephone
- flexibility approaches that of Generation 1, as students can work on their own schedule from any place where there is an Internet connection
- can be high cost to the institution (course preparation) and to the student (purchase of computer) but total ongoing cost is similar to face-to-face instruction
- typically low dropout rate, similar to face-to-face instruction with similar types of students

New technologies have allowed for a fourth generation that enables fast synchronous communication via Internet. The students may now be geographically separated but can be connected in the same time and the same virtual space. For QOU, the move to the new blended learning approach constituted a leap from the current context of Generation 1 and 2 to Generation 4.

The shift from correspondence based delivery to a more interactive approach to learning required support from senior administration and faculty. Why change? The current model seemed to work well. Student numbers were growing steadily, and it was very cost effective. QOU had, despite the difficult socio-economic situation remained financially secure. Many of the administrators stated that existing policies and procedures appeared to work well, and faculty understood and met institutional expectations. The institution was in a state of comfortable equilibrium or inertia. Weick & Quinn (1999) cite Miller (1993, 1994) stating that "inertia is often the unintended consequence of successful performance" (p. 369). However, change would be required in response to internal and external forces and what was successful in the past may not be defined as successful in the present or the future.

The redesign proposed pedagogical changes that would enable technologically mediated interaction. However faculty were concerned about the higher workload that would be involved with enhanced student-teacher interaction, such as formative feedback. Surveys have shown that the most prevalent barriers as perceived by

faculty for engaging in any online teaching activity were excessive workload and time requirements (Cavanaugh, 2005; Zuckweiler, Schniederjans & Ball, 2004). Hence for QOU faculty, the reaction to the new instructional approach was cautious. In the present system, faculty workload was prescriptive; using only the textbook, conducting tutorials if there was attendance, maintaining office hours, and grading assignments and examinations. Prior to the establishment of the ODLC, there was neither a teaching centre with a mandate for promoting excellence in teaching practice, nor did students evaluate the teaching and their learning experience.

While excellent teachers could be found at QOU, as in any institution, it was not the result of any plan to build teaching capacity. The concept of course redesign was new to the majority of faculty, and many did not see it as necessary. For administrators, it meant higher costs associated with the technology and support, and the potential for reduced student numbers if learners were not willing to move beyond the print-based model. The hook, however for both administration (to approve the initiative) and faculty (to implement) was the integration of technology into course design. Both faculty and administration were aware that on a global scale, higher education is currently undergoing what may be its most significant change since the advent of the printing press in the fifteenth century. The impact of the Internet has been transformational. It has had an irrevocable influence on all aspects of higher education, from teaching and learning to research and administration (Clarke, 2004). Faculty recognized that educational technology can provide the opportunity to enhance course quality and enable a level of technological literacy for students. Administrators realized that QOU needed to incorporate technology, and were prepared to move the initiative ahead.

Higher education and the external environment were also changing in Palestine. Student demographics revealed that increasingly younger students were enrolling directly from high school. Since 2004, registrarial data indicated that 50% of the annual admissions were direct entry students. The pervasive use of cell phones and Internet use in homes and Internet cafes in Palestine indicated that these students were using technology in their daily lives to a greater degree than the previous generation. Clearly these were signposts for change and the impetus that drove the initiative.

Methodology

This study constitutes the report of an evaluation which was conducted at QOU. The sample included five academic supervisors who were recommended by their Deans and 67 students who volunteered to be interviewed. A qualitative approach was taken to investigate faculty and student response to participation in the course redesign project.

Procedure

The project was initiated with the redesign of 10 courses in June 2008, with courses to be offered in September 2008. The courses were selected by the Academic Program Directors from across academic program and geographic areas. Selected faculty were recommended by the Deans. They were paid a stipend, participated in a course redesign workshop, and were provided with ongoing online instructional technology support.

In November 2008, an evaluation was conducted on five of the pilot courses. Ethics approval was granted through the University of Manitoba research office, and all procedures adhered to. The evaluation was comprised of face-to-face interviews with five academic supervisors, representing different geographical regions and courses. A translator was involved in the interviews. The translator was an employee of the ODLC at QOU, and was selected because of her understanding of terminology associated with open and distance learning. She held a mid-management administrative position, and was responsible for technology support. She was not in a position of power over either the students or the academic supervisors. The translator was fully apprised of the need for anonymity and confidentiality and was in agreement with process. Extensive notes were kept in both languages, which were then translated and reviewed for salient themes. The following questions were used to guide the academic supervisor interviews:

1. How has new technology affected your institution in the last five years within these four areas: administration, academic responsibilities, student affairs, and educational support services?
2. What types of technology do you use and how are these used (learning management systems, email, social networking)?
3. Are the terms “blended/online learning” and “distributed learning” terms that are widely used in your institution? If so, how are they defined locally? If not, please explain what words are used and how they are defined locally.

4. Do you have a current plan for technology in teaching and learning?
5. What are the conditions at the institution that facilitate the adoption of new technologies?
6. Having spoken to the conditions that facilitate adoption, what barriers, if any, need to be addressed?
7. How do you compare your experience in the teaching of the redesigned course with the traditional DE courses? Do you believe you "taught better" in this new environment?
8. How do you envision your institution in the next five years?

An important consideration for the success and improvement of the redesign project was to explore student reception to the changes. Student attitudes were investigated with respect to the use of technology and the pedagogical move to blended learning. Five focus groups with students in each of the five courses were conducted.

During the focus group with students, the instructor was requested to leave the room in order to ensure confidentiality. As student participation in the focus group was voluntary, numbers varied between sessions with a total of 67 participants for all sessions. The same translator was used as was for the academic supervisor interviews. Questions were asked in English and translated as required, with responses provided again in English or Arabic depending on the English capacity of the respondents. Extensive notes were kept in both languages, which were then translated and reviewed for salient themes. The following questions were used to guide the student interviews:

1. How has new technology affected you in the last two years?
2. What types of technology do you use for learning and for personal use? (Probe: do you think your personal use is surpassing your use in learning?)
3. Where do you usually access technology?
4. Do your professors use technology? What types? Is their choice and use effective?
5. Does your institution facilitate the use of technology for learning? Explain your answer.
6. What could be improved at your institution regarding the integration of technology?
7. How do the blended learning courses compare with the traditional DE models at your institution? (Probe: learning, access, assessment). Was blended learning a positive experience for you?
8. What recommendation would you make for your institution for the next two years around the use of technology?
9. Do you have any questions?

Limitations

There were two limitations inherent in the methodology, (1) faculty involved in the redesign were selected by their respective Deans, but had the right of refusal, and (2) students registered in the redesigned courses by choice. As a result the group of faculty and students may not have been representative of the institution, but rather were the early adopters and innovators.

Summary of Findings

Academic Supervisor Responses

Responses were themed in the following categories, (1) personal use of technology (2) institutional use of technology, (3) use of technology in teaching practice, (4) barriers to use of technology, (5) experience in teaching in the new format, (6) future recommendations.

Personal use of technology

- All faculty interviewed used online tools for chat and voice, as well as email. In particular, they used MSN, SKYPE, and Yahoo to keep in touch with family and friends across and beyond Palestine. Access to these tools was from their home computer.
- Faculty were aware of social networking sites such as Facebook, but viewed these as "young people" technology. For those that allowed the use of Facebook in their home, their children were the ones who were accessing it.

Institutional use of technology and future use

- QOU portal has been the primary technological initiative, and all the individuals interviewed used the portal's functions. However, they were not certain that other faculty used the functions to the same extent.
- Faculty were aware of a streaming video initiative through the ITCT unit, although this initiative was not integrated with the course redesign project.
- The ODLC introduced both Moodle and Elluminate for redesigned courses with the intent to provide these resources across the institution. Faculty identified that training and support were key for the dissemination of these technologies.
- Faculty voiced the need for an integrated model for blended and online learning.
- Faculty believed that their support for blended and online learning was not necessarily reflective of the larger faculty body and that many faculty would opt for the traditional delivery model.
- Faculty felt that students for the most part, were ready and willing to use technology, but were concerned that the added time commitment required in the blended learning courses might be a deterrent for some students. Faculty echoed concerns of administrators about a potential for a decrease in student numbers due to the move to blended learning.
- Faculty felt that QOU administration was supportive of the integration of technology in a blended learning model, but were not aware of any written documents presenting this direction, rather the information was gained by word of mouth.

Use of technology in teaching practice

- All faculty within the group were comfortable with Moodle and Elluminate.
- Faculty had little knowledge of open resources such as Open Yale where lectures were available on YouTube; hence did not incorporate these into their teaching.
- Faculty were aware of resources such as Wikipedia, and had accessed it but had not added resources.
- All faculty respondents were open to using new technologies in their teaching practice.

Barriers to use of technology

- Insufficient computers for both faculty members and students at Regional Centers.
- Limited connectivity speed at Regional Centers.
- Limited connectivity in Palestine, particularly in villages.
- Economic barriers to owning a home computer and purchasing Internet access.
- Mobility and travel costs for students to travel from villages to Regional Centers to access technology.
- Some societal barriers for female students to access Internet at home, in Internet cafes or at other locations.

Experience in teaching in the new format

- All faculty found the blended learning courses required more time and effort from the instructor and the students. However they found the students to be more engaged and active in the blended learning courses, attributing this to the improved design and assessment, and offering marks for online activities.
- All but one faculty found the experience positive. They believed they became better teachers in the redesigned courses, and would continue to teach in this mode providing workload issues could be addressed.
- One faculty member did not wish to use blended learning in the future but would return to the traditional method of print and tutorials.

Future Recommendations

- All but one faculty stated that the move to blended/online learning was essential to QOU, but cautioned administration to pay attention to the provision of training and support for faculty and students.
- All faculty stated that more computers were needed across the institution for both faculty and students,

faster connectivity speed, and sufficient technical support.
- Faculty stated the need to review and revise current assessment practices across the institution.
- Faculty stated that workload policies and practices must be reviewed in light of blended learning.

Student Responses

Responses were themed in the following categories, (1) personal use of technology, (2) educational use of technology, (3) barriers to use of technology, (4) learning experience in the new format, (5) future recommendations.

Personal use of technology

- All students were active users of technology and personal use of the technology was higher than what was used for academic course work. All students were users of synchronous online tools, (both text chat and voice) predominantly Yahoo, MSN, and SKYPE. They used these tools to connect with family and friends within other regions of Palestine, and abroad such as the U.S., UAE, and Jordan. For all students, computer mediated chats were the preferred methods of communication for contacts beyond Palestine, because of the cost factor.
- Over 75% of the students had computer and Internet connections in their home, but used Internet cafes for real time chats when necessary.
- All students were familiar with social networking sites such as Facebook, and although less than half of them declared they had Facebook sites, all had visited Facebook at some time.
- All were aware of YouTube and viewed videos for personal interest.
- Students used Wikipedia but no one reported adding their own content.
- A few students had read blogs but no one had hosted their own blog.
- Those that did not have access to technology for personal use found ways to access the technology through relatives, friends and cafes.

Educational use of technology

- Students were not aware of the U.S. and European universities lectures on YouTube, such as the Yale psychology lectures, and Berkley and Stanford science programs, but were aware of the QOU streaming video initiatives.
- Students stated that the use of technology for learning increased exponentially with the introduction of blended learning.
- Students used email on a regular basis. A few students reported using email to contact professors in other QOU courses and found that the majority of the professors responded. However email was a feature that was not used in all QOU courses and communication occurred mainly in person or by phone.
- Students used online discussions on a regular basis and were required to find additional web-based resources.

Barriers to use of technology

- All students stated there was an insufficient number of computers in the centers, connectivity speed was slow, hours of operation were inadequate (closed at 3:30 pm), and access to certain sites was blocked.
- Some computers were older and did not support certain technologies and software.
- Cost of both hardware and Internet access was an issue for certain students, and posed limitations for the overall student body especially those in lower economic groups.

Learning experience in the new format

- All students found the blended learning a positive experience, and believed they were more engaged and focused in these courses. All but one student would take another blended learning course and would recommend the mode of delivery to other students.
- All students found the blended learning courses required more work and more effort than the traditional

delivery, often requiring them to be online daily. While students felt they learned more in the blended environment they did not feel that they could commit the time to take all courses in this modality. One student would not take any other courses in this format (due to the amount of work) nor would recommend blended learning to others.

- Students felt a key attribute of the course was pacing. They were required to do weekly activities and as result kept up with course content. In traditional courses, they often left course work until submission of assignments (confirming in their comments that copying of assignments was rampant), midterm, and final examination time.
- Students stated that they regularly attended the face-to-face sessions within the blended learning offerings.
- Students believed the formative assessment (with attached marks) within the blended learning format was critical, and enabled them to identify areas of difficulty much earlier in the course than with traditional courses.
- Students commented that they had regular interaction with both the instructor and other students, and found this to be a positive experience.
- Some students also stated that the technological skills they acquired in the blended learning courses would be transferrable and necessary in the workplace.

Future Recommendations

- All but one student felt that blended learning was a key initiative at QOU and should be expanded across the institution, but ensuring that sufficient training and support was available.
- Access to computers should be increased, no sites should be blocked, and hours of lab operation should be increased to include evening hours.
- All faculty should be required to use technology in teaching and use the online tools to share information and respond to questions.
- The formative assessment with marks for online activities was an excellent initiative, and structure and content of final examinations should be revisited to better assess learning.

Discussion and Conclusion

Clearly academic supervisors and students found blended learning a positive teaching and learning experience, and believed that it was both a timely and necessary agenda for QOU. Both teachers and students recognized that the new mode of delivery was more work, but that formative assessment, interaction among students, and online discussions were valuable learning tools. Both teachers and students used technology for personal use to a greater extent than for educational purposes, although students clearly used new technologies more than the instructors. Teachers and students both identified the need for more computers, and better connectivity, although only students commented on the need to expand hours of operation of computer labs, and the need to ensure access to all websites for search purposes. Although teachers and students both raised concerns about costs of home computers and Internet connections for those in lower economic classes, only faculty members raised the concerns about access issues for female students. Many students also commented on the importance of the transferability of technological skills from the classroom to the workplace.

All students supported the redistribution of marks and the formative assessment. They confirmed that many of them submitted copied assignments in traditional courses, rarely attended tutorials, and often only opened the self-study textbook before the mid-term or final. The blended learning redesign required them to engage weekly with the content, instructor, and other students, promoting a better learning environment. All students stated that the final examinations should be reviewed for both content and structure.

The redistribution of marks remained a controversial issue within QOU with underlying concerns that students in the redesigned courses may not be as well prepared for the final examinations. Data was collected for both traditional and blended learning courses and final grade results reflected no difference.

This study chronicles the experience of one open and distance university as it leapfrogged into new forms of distance education. For QOU, the study confirmed the need for change, and the institution will now face new challenges along with opportunities, as it operationalizes a blended learning agenda. This study will inform QOU as it moves in this new direction, and we hope this record and analysis of our experience will be useful to other institutions and administrators in similar situations.

Acknowledgements

The authors wish to acknowledge the support of the World Bank, the European Union, Education Management Europe, and Al-Quds Open University, specifically the Office of the President and Vice-President Academic Affairs and the Open and Distance Learning Centre. Without their support this study would not have been possible. The authors wish to thank Ms. Hanan Naser for her translation support which was essential to the study.

References

Archer, W. (1999). Delivering university-level communications programs at a distance: Benefits, costs, and disruptions. *Canadian Journal of Communication, 24*(3), 367–383.

Archer, W. (2001). Distance education for adults. In D. H. Poonwassie & A. Poonwassie (Eds.), *Fundamentals of adult education: Issues and practices for lifelong learning*. Toronto: Thompson.

Cavanaugh, J. (2005). Teaching online - A time comparison. *Online Journal of Distance Learning Administration, 8*(1).Retrieved February 22, 2007, from http://www.westga.edu/~distance/ojdla/spring81/cavanaugh81.htm

Clark, D. (2004). *Higher education and e-learning*. Epic Group. Retrieved January 5, 2007, from http://www.epic.co.uk/content/resources/white_papers_index.htm

Collins, M. (2005). *The Design Questions Are Easy, It's the Answers That Are Hard*. Workshop at Manitoba Association for Distributed Learning and Training (MADLAT), Winnipeg, MB, May 5-6, 2006.

Garrison, D.R. (1985). Three generations of technological innovation in distance education. *Distance Education, 6*, 235–241.

Garrison, D.R. (2003). *Blended approaches to teaching and learning: A position paper*. Unpublished paper, University of Calgary.

Garrison, D.R., & Archer, W. (2000). *A transactional perspective on teaching and learning: A framework for adult and higher education*. Oxford: Pergamon.

Garrison, R. & Vaughan, N. (2007). *Blended Learning In Higher Education: Framework, Principles, And Guidelines*. Jossey Bass. San Francisco.

Matheos, K. & Archer, W. (2004) From distance education to distributed learning: Surviving and thriving. *Online Journal of Distance Education Administration,* 7(4) Retrieved August 1, 2009 from http://www.westga.edu/%7Edistance/ojdla/winter74/matheos74.htm

Matheos, K., MacDonald, M., McLean, C., Luterbach, B., Baidoun, S., Nakashhian, S. (2007). *A comprehensive evaluation of Al-Quds Open University*. Retrieved July 1, 2009 from http://www.qou.edu/homePage/english/manitobaReport/qouFullReport.pdf

Moore, M. (1993). Theory of transactional distance: The evolution of theory in distance education. In D. Keegan, (Ed.), *Theoretical principles of distance education* (pp. 22-38). London:Routledge.

Moore, M. & Kearsley, G. (1996). *Distance education: A systems view*. Toronto:Wadsworth.

Weick, K. E. & Quinn R. E. (1999). Organizational Change and Development. *Annual Review Psychology, 50*(361), 86.

Zuckweiler, K., Schniederjans, M., & Ball, D. (2004). Methodologies to determine class sizes for fair faculty work load in web courses. *International Journal of Distance Education Technologies*, *2*(2), 46-59.
