

ONLINE EDUCATION PILOT IMPLEMENTATION: Challenges, Insights and Implications

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The permeation of ICTs in daily life and its impact on education makes it imperative for higher education institutions to offer a new kind of education that will optimize the potentials of technology for teaching and learning in the 21st century. Teacher training institutions in particular, are committed to provide access to education so its clientele can upgrade their professional competencies, acquire additional degrees and improve their teaching effectiveness. Pulled by the forces of tradition and culture, and the rapid developments in technology, these institutions are challenged to transform their educational delivery modes to cater to the demands of a new era. Inertia may render these institutions irrelevant if they fail to meet the requirements of the Digital and Information Age.

Amid resource constraints and a conservative organizational context, they must adapt to the times. This study describes how a teacher training university in the Philippines attempted to embark on an online distance education program to respond to the needs of lifelong learners. It documented the challenges met and the insights gained in its pilot implementation of a technology-enhanced educational delivery system. The results of four survey instruments namely, the Students' Evaluation of Teaching, the Online Education Program Evaluation, the Online Course Evaluation, the Online Faculty Survey Questionnaire, the documented experience of the implementation and students' Information Sheets provided important information on the readiness of the institution to offer an ICT-driven educational mode. Implications for the success and sustained operation of an online distance education program is discussed.

INTRODUCTION

The technological advancements driving the world today and the institutional commitment to provide a relevant and accessible education compel higher education institutions to offer a more flexible kind of education to those who cannot attend residential classes. All over the world, colleges and universities are transforming their teaching practices to be more responsive to the needs of the times. In the summer term 2008, a leading teacher education institution in the Philippines ventured into a new kind of education to gain an actual experience in conducting a technology-enhanced delivery system to address the clamor for a more accessible education. The aim of the pilot implementation was to develop a more responsive education and to determine the factors that may impede or facilitate the university's thrust to make education available to learners who want to upgrade their credentials and professional competencies despite their personal, career and geographical constraints.

But what does it take to implement an education system that is suitable for learners in the context of a Digital and Information Age? Given the institution's resource constraints and

conservative organizational outlook, how can change in teaching and learning be introduced and sustained? This paper specifically intends to investigate the readiness of the university to offer an online distance education program by looking into the 1) institutional implementation challenges; 2) the faculty and students' readiness; 3) the online education program; 4) the factors that could impede or facilitate the university's thrust to offer an accessible education; 5) and implications derived from the results of the study to guide other institutions intending to implement distance learning.

According to Matthewson (1998), distance education must be planned and managed holistically. She also emphasized that there is no one right distance education model, nor is there one right way to manage it. Three important subsystems must be considered: 1) course development; 2) student support; and 3) administration. Khanser (2003) also underscored the importance of these three components for the successful implementation of e-learning. Lever-Duffy, McDonald and Mizell (2003) identified issues in distance and alternative delivery systems: teacher and student readiness, preparation and classroom management time, technical support and instructional support. Padolina (2005a) cited quality and efficiency, the learning process, accreditation from non-traditional sources and appropriate use of technology as institutional challenges. Carague (2005) on the other hand, offers 12 organizational challenges for change: 1) having a vision for teaching and learning; 2) funding re-allocation; 3) strategies for inclusion; 4) technology infrastructure; 5) people (technical support, media production and services, educational services); 6) student computer access; 7) new teaching models; 8) faculty agreements and training; 9) project management (per module); 10) new organizational structure (flexible teaching units); 11) collaboration and consortia; 12) research and evaluation. Mariasingam and Hanna (2008) identified essential criteria for determining quality in online degree programs which can be categorized into three general areas: institutional requirements, learner requirements and faculty requirements. Davis, Little and Stewart (2008) suggested that learners' needs, the curriculum and the context for the project be studied well before embarking on an online learning system. Planning, structural and organizational issues, the components of a system and interfaces among them, and other related issues focusing on human resources, decision-making, training, governance and change issues must be carefully addressed.

METHODOLOGY

This study describes an actual experience of piloting an online distance education program. Documentation of the activities conducted and the challenges met was undertaken by the unit tasked to test the program and data from the faculty and students who participated in the try-out were drawn from four survey instruments, namely, the Students' Evaluation of Teaching, the Online Education Program Evaluation, the Online Course Evaluation and the Online Faculty Survey Questionnaire. Other data were drawn from students' Information Sheets.

Four faculty and 52 learners participated in the try-out. The Certificate in Teaching Program was chosen because it had a high market of learners who need a more flexible education. The

class size for each online course varied depending on the enrollees' need, the faculty's online teaching experience and their technology-integration skills. The total enrollment was 70, distributed as follows: Education 1 - 12 students; Education 3 - 7 students; Education 7 – 19 students and Education 8 – 32 students. Seventy percent of the online learners were working professionals and thirty percent were full-time students with a mean age of 31 years, youngest of which is 23 and oldest is 56 years old.

The pilot try-out of the program went through three phases: 1) Planning and Preparation; 2) Implementation; and 3) Evaluation. The first phase was conducted in the second semester of Academic Year 2007-2008. A needs analysis was carried out first, which involved the identification of the physical infrastructure, available facilities and equipment, and the Learning Management System. Then the target program was identified, the faculty, the consultant for instructional design and the training needs of the course facilitators. The possible faculty underwent a series of workshops on basic ICT skills, Online Teaching Strategies and the learning management system to be used. The delivery method, enrollment and evaluation procedures were also determined including specific policies and guidelines of the program. Posters and brochures were prepared to disseminate the program.

Only four faculty among the 28 who attended the workshops volunteered to teach online. Education 1 (Foundations of Education) was taught by a 32-year old Associate Professor, with 12-year teaching experience, three years in the online mode and has advanced level ICT skills. Education 3 (Human Growth, Learning and Development), was handled by a 39-year old Associate Professor, with 13 years of teaching experience, none in online teaching, and who has moderate level ICT skills. Education 7 (Measurement and Evaluation) was taught by a 69-year old Professorial Lecturer, with 17 years of tertiary level teaching experience and five years in the online mode. He has advanced level ICT skills and works part-time as an e-Learning Consultant. Education 8 (Introduction to Guidance and Counseling) was taught by a 31-year old Assistant Professor, with 7 years of teaching experience, none in the online mode but applies blended approaches in teaching. She considers her ICT skills in the moderate level.

The students who signified interest in online education went through a screening process made up of self-assessment, interview and orientation-workshop. In the program, the teacher-student contact was flexible. The delivery mechanism was blended consisting of 70-80% online asynchronous interactions and 10-20% face-to-face sessions. Synchronous communications were allowed as needed, using any available technology. The AERVLES developed by Dr. Antonio E. Refre served as the platform for the program. It had the following features: 1) a Bulletin Board, where announcements, reminders and other important information are posted; 2) Course Contents, where course materials consisting of handouts, lecture notes, templates and activity sheets for students can be downloaded by learners; 3) Posted Files, where learners upload their assignments and other required submissions; 4) Web References, where web sites to support the study of the course can be accessed; 5) Class Discussion, where interactions between the teacher and learners, and learners, among themselves take place asynchronously; 6) Class Members, where pictures of the members of the class and contact information are found; 7)

Grade Check, where learners can view their performance rating in specific class activities; 8) Online Users, where information on the entry and departure from the virtual classroom are documented. Support for learners were provided by the course professors in the virtual classroom and through other technologies that were available to both the students and the course facilitator such as yahoo messenger, google talk and skype. Students also received assistance from the center for distance education, via email and telephone at designated hours. They were also allowed to arrange individual face-to-face conferences with their course professor if they think they need it and if the faculty is available.

The first thing that the faculty were tasked to do to prepare for online teaching was to design their respective course syllabi to make it suitable for distance education. They identified important dates for submission and examination as well as activities that would best enable learners to demonstrate their learning. Students were required to take examinations in the campus for midterm and finals. More performance-based and authentic assessment tools were used to determine learning quality. The faculty were also given the freedom to use whatever strategies they think was best for their respective courses to promote better learning. The consultant for e-learning served as the systems administrator and helpdesk for any technical concerns of faculty and students. The course professors used materials already available to them that they were using in their regular classes, some of which needed to be converted to digital format. Course materials consisting of handouts, lecture notes and presentations, worksheets, templates and guides were uploaded in the course contents section of the learning management system one after another. Instructions, reminders and announcements were posted in the bulletin board as the course progressed. Students were required to respond to discussion topics and encouraged to comment on their classmates' answers. Assignments were regularly posted in the bulletin board and students submitted these in the posted files section. Course policies and norms were provided at the outset and deadlines were given in the course of the term.

From the preparation to the implementation and evaluation phases, experiences were documented and survey instruments were used to gather necessary information about the program, the students and the faculty.

RESULTS AND DISCUSSION

The summary of results were based on the documented experience of the university unit tasked to implement the program, the four survey instruments and students' data sheets. They are presented with respect to the focuses of the study.

Institutional Challenges

How prepared was the institution to implement the distance education program? Table 1 presents the status and implementation challenges met in the execution of the online education

program. The outcome reveals the need to improve the ICT infrastructure and availability of manpower resources. Top management, faculty and student support, organizational issues, course development and quality concerns, promotion of the program, research and evaluation systems likewise need to be carefully attended to. This finding reinforces Carague's (2005) contention that the infusion of technology in education requires reorganization, restructuring, and reengineering of the university. The 12 strategies for change in the organization which she identified, aptly captures what the institution needs to do. The key issues identified by Smith (2004) namely, the 1) institutional commitment to teaching and learning; 2) the teaching-learning focus; 3) centralized processes, compatible systems, efficient operations; 4) an integrated infrastructure for teaching and learning; 5) staff development, workload, intellectual property rights and reward system are reflected in the perceived needs of the institution. Slow adoption for e-learning according to Khanser (2003) could be due to the organization's lack of awareness of the potentials of technology to enhance learning, the high cost of internet access, high investment in IT infrastructure and lack of management support for e-learning initiatives. This further supports the findings of this study. Lever-Duffy, McDonald and Mizell (2003) focused on teacher and student readiness, preparation and classroom management time, technical and instructional support as major problems to address. Again, this is evident in the results of the study. Efficiency, learning process, accreditation and technology on the other hand, were among the institutional challenges Padolina (2005a) highlighted. Yang and Cornelious (2005) likewise see that administrative support, intellectual property rights, pedagogical rigor and methods, course management, instructional compensation and collaboration of stakeholders as key areas that should be considered.

Table 1. Implementation Challenges and Perceived Needs

DISTANCE EDUCATION COMPONENT	CHALLENGES	NEEDS
a. Technology Infrastructure	<ul style="list-style-type: none"> • outmoded, defective, inadequate ICT infrastructure and office equipment • slow, intermittent internet connection, lack of internet support for faculty • VLES is donated, has limited features but easy to use • no provision for back-up of files • internet connection shared by all university units – no dedicated line for distance education 	<ul style="list-style-type: none"> • improve technology infrastructure for distance education • acquire software needed for improvement of distance education • enhance features of VLES • better internet service provider • funding for ICT infrastructure
a. Administrative Support	<ul style="list-style-type: none"> • no e-learning framework and policies • no budget allocation for distance education • inefficient processes and systems • lack awareness of distance education requirements • inadequate leadership support • lack of recognition and incentives for instructional innovations 	<ul style="list-style-type: none"> • develop an e-learning framework to integrate and guide initiatives • improve systems and processes to be more efficient and effective • build awareness on distance education and management roles and responsibilities • allocate budget for distance education • develop a reward system for innovation in teaching

a. Faculty Readiness and Support	<ul style="list-style-type: none"> • resistance to change • lack cooperation and commitment • lack interest • inadequate ICT and ICT-integration skills • inadequate online pedagogical skills • inadequate access to computer and internet • course materials not digitized • workload and reward issues • lack encouragement and support 	<ul style="list-style-type: none"> • build awareness on the need for distance education • build capacity in ICT skills, ICT-integration and online teaching strategies • provide easy access to computer and internet • provide support in digital content development • provide incentive and recognition to innovators
a. Student Readiness and Support	<ul style="list-style-type: none"> • no access to computer and internet connection at home • poor time management • inappropriate mindset, attitudes and values • inability to cope with demands of online learning • inadequate access to academic advising • inadequate academic, resource and technical support • lack commitment to online coursework • unclear reason for taking online course, no sense of direction 	<ul style="list-style-type: none"> • screen students to ensure that those who will enrol in the program have access to a computer and internet connection, and have appropriate attitude and intentions • provide orientation-workshop to prepare learners for the demands of the program • provide academic and technical support
a. Content Development	<ul style="list-style-type: none"> • lack content experts who are equipped with online teaching skills • inadequate knowledge in module development • lack skills in web-based content development • inadequate knowledge of instructional design • inadequate knowledge of fair use and copyright law 	<ul style="list-style-type: none"> • build capacity in ICT, ICT-integration and online teaching strategies, web-based content development, instructional design • build awareness of fair use and copyright law
a. Technical Readiness and Support	<ul style="list-style-type: none"> • inadequate technical support • MIS lack expertise in developing LMS and systems administration of VLES • inadequate IT manpower 	<ul style="list-style-type: none"> • provide technical support • hire technical staff who can develop the LMS and serve as systems administrator
a. Quality Standards	<ul style="list-style-type: none"> • lack university quality assurance measures for distance education 	<ul style="list-style-type: none"> • ensure quality of distance education delivery through quality assurance measures or standards • coordinate with institutions involved in quality assurance for distance education
a. Marketing and Promotion	<ul style="list-style-type: none"> • slow processing of requests • no media specialist to assist in production of marketing materials • inadequate support for promotion of distance education • lack of resources for development of publicity materials 	<ul style="list-style-type: none"> • expedite processing of requests • strategize to market distance education • improve coordination among significant university units i.e., the center for distance education with the university press, management information system, center for linkages and extension
a. Research and Evaluation	<ul style="list-style-type: none"> • lack systematic research and evaluation to determine impact of distance education implementation • inadequate support from research unit 	<ul style="list-style-type: none"> • improve coordination between center for distance education and center for research and development in education • improve research support for distance education

Faculty Readiness

Of the 28 faculty who attended the series of seminar-workshops on ICT skills, e-learning, online pedagogy and instructional strategies, only four participated in the try-out. Outcomes of the survey on the course professors' teaching, characteristics and attitudes generally revealed that they were ready for online teaching. They were rated highly in terms of their teaching, getting a mean average rating of 4.64. This shows that they were perceived by the students as having mastery of the subject areas they taught and that they used appropriate teaching strategies. The personality characteristics of the faculty were also rated positively by the online students. The average rating on their qualities was 4.59, and their effectiveness 4.60. These indicate learners' high regard for the faculty's qualities and teaching. Tables 2-4 present the students' ratings of the faculty on their teaching and general teaching characteristics.

Table 2. Knowledge of the Subject Matter and Teaching Strategies:

ITEM	RATING
Knowledge of the topic	4.79 (SA)
Student encouragement	4.64 (SA)
Clarity and adequacy of guidance and the syllabus	4.68 (SA)
Timely provision of course materials	4.66 (SA)
Clarity in delineating course requirements	4.63 (SA)
Creation of opportunities for coaching and facilitation of knowledge construction	4.49 (MA)
OVERALL MEAN	4.64 (SA)

* 4.60 - 5 (Strongly Agree), 3.6-4.5 (Moderately Agree), 2.6- 3.5 (Neutral), 1.6-2.5 (Disagree) 1-1.5 (Strongly Disagree)

Table 3. Instructor

ITEM	RATING
Enthusiastic about online teaching and learning	4.60 (SA)
Prepared for the online class	4.60 (SA)
Available during office hours and online	4.51 (MA)
Willing to listen and help on-line or off-line.	4.63 (SA)
Clear and constructive responses to the questions	4.56 (MA)
Encouraged online participation and questions	4.59 (MA)
Interacted well with students online	4.64 (SA)
Generally was an effective instructor and facilitator	4.56 (MA)
OVERALL MEAN	4.59 (MA)

* 4.60 - 5 (Strongly Agree), 3.6-4.5 (Moderately Agree), 2.6- 3.5 (Neutral), 1.6-2.5 (Disagree) 1-1.5 (Strongly Disagree)

Table 4. Teachers' Attitudes and Manner of Handling the Courses:

ITEM	RATING
Well-organized	4.58 (MA)
Enthusiastic and encouraging	4.65 (SA)

Concern for students	4.65 (SA)
Clarity of explanations	4.40 (MA)
Student stimulation to learn	4.58 (MA)
Accessibility for consultation	4.74 (SA)
Realistic appreciation of students' time and effort to complete work	4.73 (SA)
Continuous feedback and support	4.55 (MA)
Overall effectiveness	4.54 (MA)
OVERALL MEAN	4.60 (SA)

* 4.60 - 5 (Strongly Agree), 3.6-4.5 (Moderately Agree), 2.6- 3.5 (Neutral), 1.6-2.5 (Disagree) 1-1.5 (Strongly Disagree)

Based on the qualitative responses of the students, 89.13% of them believed that the communications by the faculty were clear and understandable; 76.08% think that the instructors were accessible and able to respond to questions in a reasonable amount of time; 73.91% think that the instructors were cooperative and helpful; 80.43% think that they were well-organized and presented the course material accordingly; 76.08% of them were satisfied with the course and instructors, and would recommend them to other students.

Based on the results of the online faculty survey, the course professors showed positive attitude towards online teaching. Despite the challenges they encountered which were mostly technical and related to time constraint, it can be seen that they were equipped with strategies that were effective for online learning. Table 5 summarizes their experience.

Table 5. The Online Instructors' Experience

ITEM	SUMMARY OF RESPONSES
How online teaching was viewed	Online teaching was perceived as challenging, flexible, satisfying, convenient, and enjoyable but also demanding.
Challenges encountered	The online faculty identified access to the internet, mastery of the VLES, organizing, digitizing and planning instruction as challenging. They also recognized the importance of their accessibility to students through mobile phone, the time to check outputs and providing timely responses to students as essential. Intermittent internet connection, researching internet resources, determining deadlines and monitoring students' compliance with requirements also pose as challenges including staying current, reading and researching as essential to the success of the program.
Suggestions to improve online teaching	Supplementing the asynchronous interactions with chat; organizing the discussion threads; improving means to upload data; making helpdesk available 24/7; capacity-building of faculty in ICT and ICT-integration; and improving connection and collaboration with online communities.
Would online learning be recommended to students	All online faculty agreed that it is now the new way of learning and it has numerous benefits for learners. Hence, it is highly recommended to students.
Would online teaching be recommended to colleagues	All online faculty agreed that other colleagues should try it to upgrade their teaching to 21 st century requirements. Online teaching is viewed as beneficial, convenient, stimulating, liberating, engaging and fun.
Preparation needed by teachers	The online faculty identified ICT and technology integration skills as necessary. Training in e-learning, understanding the rationale behind online and distance education and having the right attitude and perspectives are important.

Online teaching strategies	The following strategies were applied by the online faculty: discussion, article review, film-viewing and analysis, reading and writing activities, data organization and presentation, research/ inquiry, case analysis, reaction paper, portfolio assessment, collaborative activities, e-notebook development, digital portfolio development, chat, web site exploration and development, blogging and critiquing one's work.
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Yang and Cornelious (2005) pointed that quality online instruction is ensured by the online tutors' positive attitudes about online teaching, their ability to design effective learning environments, development of interactive online teaching-learning community, and reliable and valid assessments of performance. It may be inferred that the online faculty were able to satisfy such criteria. Khanser (2003) stressed that cyber professors need to possess specific qualities among which are being innovative, creative, daring, supportive of learners' needs, sensitive to the limitations of technology, expert in the effective use of technology in education, facilitative and tolerant of different learning styles. They must also have a clear understanding of e-learning, highly motivated and enthusiastic, and possess a pioneering spirit. She added that they must be trained in online learning, be adept at navigating the world wide web and in using the internet. Based on the faculty's self-assessment of their ICT skills and the strategies they used for teaching, it was shown that the course professors possessed professional competencies that were appropriate for the new kind of education.

Online Students' Readiness

Flexibility, convenience, opportunity to do multi-tasks and control of personal time were among the reasons identified by majority of the online students for enrolling in the online education program. Career advancement, curiosity and course availability were the rest of the reasons cited. Based on the faculty's observation, online students were generally mature, responsible, reflective, independent, flexible and open-minded. Majority of them were technologically proficient and needed less supervision. Table 6 presents a summary of the learners' technical background.

Table 6. Summary of Learners' Technical Background

ITEM	RESULTS
Internet-based courses taken	89.13% of learners had no experience in internet-based courses.
Level of ease in using computer for course assistance	86.96% of learners were highly proficient in using the computer for learning; the rest have average computer proficiency level.
Level of experience in accessing the internet	95.66% of the learners have facility in accessing the internet.
How internet-based courses are accessed	47.22% of the learners accessed their internet-based courses at home, office or school and 34.78% at the internet café.
Hours per week spent connected directly to online courses	78.26% of the learners spent approximately 2 hours or more everyday connected directly to their online courses.
Hours per week spent preparing materials for online courses	78.26% of learners spent approximately 2 hours or more everyday preparing for online courses.

Based on the learners' assessment of their technical background, majority of them were familiar with the internet and almost half of them had easy access to it. Most of them had no prior experience in online education, but their technical proficiency expectedly, had a positive effect on the quality of their online learning experience. They spent an average of two hours daily, connected to the internet doing their course requirements. The amount of time learners spend doing their online coursework determined the quality of their learning. The more time they committed to their assignments and tasks as learners, the better learning they acquired.

It can be said that the online learners viewed their learning positively because their learning styles and personal characteristics matched the requirements of the program. Table 7 provides the summary of learners' evaluation of the course results which reveals their perception of the quality of their learning:

Table 7. Course Results

ITEM	RATING
Objectives of the course were accomplished	4.20 (MA)
Learnings in the course were useful	4.39 (MA)
Would recommend the program to others	4.62 (SA)
Would recommend the instructor to others	4.57 (MA)
Would recommend the online course to others	4.66 (SA)
Overall satisfaction with the course	4.59 (MA)
OVERALL MEAN	4.50 (MA)

* 4.60 - 5 (Strongly Agree), 3.6-4.5 (Moderately Agree), 2.6- 3.5 (Neutral), 1.6-2.5 (Disagree) 1-1.5 (Strongly Disagree)

Table 8 reveals that the online students were aware of the advantages of the program. It also exhibits their positive learning experience and the important role of the teacher in providing the necessary support.

Table 8. Reasons, Advise to Students and Comments on the Online Courses

COMPONENT	RESULTS
Reasons for taking the online course	convenience, advantages, and flexibility.
Advise to those who will take the online course	Have easy access to a computer, good internet connection and computer and research skills; must be disciplined, committed, strategic, adaptive, focused, prepared, read a lot, able to manage time and efforts, have initiative, independent, responsible, and dedicated.
Other comments	The online courses were considered good, insightful, interesting, helpful, convenient, flexible, rich with resources, encouraging because of the instructor support, highly recommended, manageable, a wonderful experience.

The Online Education Program

Despite the institutional challenges and the brief period to prepare digitized course materials, and to acquire new teaching strategies, the online education program was successfully carried out and was rated by students positively. Table 9 presents the students' evaluation of the course design:

Table 9. Course Design

ITEM	RATING
Clarity of objectives, contents, procedures	4.49 (MA)
Clarity and organization of course materials	4.55 (MA)
Stimulating course activities	4.56 (MA)
Interactive communication between instructor and students	4.44 (MA)
Interaction among students	4.28 (MA)
Sufficient practice and feedback	4.16 (MA)
Appropriate match of tests and assignments with course	4.65 (SA)
Appropriate difficulty level	3.99 (MA)
Appropriateness of course with students' learning style/s	3.93 (MA)
Textbook supported the goals of the class	4.33 (MA)
OVERALL MEAN	4.34 (MA)

* 4.60 - 5 (Strongly Agree), 3.6 - 4.5 (Moderately Agree), 2.6- 3.5 (Neutral), 1.6 - 2.5 (Disagree) 1-1.5 (Strongly Disagree)

The first thing that the faculty did in their respective courses was to welcome the learners in the bulletin board and refer them to the syllabus and the class policies. Introductions were made in the discussion section, with the course professor taking the lead. Initial course materials and web references were uploaded in the virtual classroom. As the course progressed, instructions, assignments, and deadlines were announced one after another. Course materials and additional references and resources were provided one after another. Learners' performance rating in specific activities were also uploaded progressively. The course professors were given the freedom to use strategies they were familiar with and which they think would be most beneficial for their learners. The AERVLES platform on the other hand was found to be very friendly. Both the faculty and students learned to operate it easily. Table 10 shows the learners' evaluation of the learning environment:

Table 10. Learning Environment

ITEM	RATING
Sufficient access to online class	4.33 (MA)
Sufficient technical support from the instructor	4.38 (MA)
Sufficient accessibility to online material/s	4.23 (MA)
Effective computer server for online course	4.28 (MA)
Online a good way to learn given content	4.44 (MA)

Effective communication tools for online course	4.53 (MA)
OVERALL MEAN	4.34 (MA)

* 4.60 - 5 (Strongly Agree), 3.6-4.5 (Moderately Agree), 2.6- 3.5 (Neutral), 1.6-2.5 (Disagree) 1-1.5 (Strongly Disagree)

Although the learning environment was viewed as adequate, certain technical aspects such as accessing course materials, server effectiveness, access to the online class and getting technical support from the course professor could still be improved. The need for a regular helpdesk for technical matters and the problems in accessing the online class and course materials were raised by the learners. This may be due to the fact that it was their first time to experience a learning mode that required minimal teacher supervision and were still in the process of adjustment. Moreover, the technical problems were inevitable especially if their own internet service provider is not as efficient. And since interactions in the virtual classroom was primarily asynchronous, immediate feedback cannot be expected. While it is necessary for the faculty to be technologically literate, specific technical matters such as those that relate to server operations was no longer within their area of expertise. Hence, they might not be able to address concerns related to this. Difficulty in downloading or uploading course materials, furthermore, may be due to internet connection problems or mismatch between the operating system being used by the course professor and students. Hence, an understanding of the problems encountered by the students in the actual teaching and learning process should be carefully analyzed.

Factors that Facilitated the Success of the Program

At the course level, the key factors that enabled the program to succeed during the summer term were the online faculty and students who were equipped with the appropriate qualities essential for the program. It could also be noted that a simple and easy to use learning management system made it manageable for neophyte online faculty and students to be initiated into the new kind of education. Proper selection of the online faculty proved to be critical to the success of online learning. Having essential personal and professional competencies, a clear understanding of roles and tasks, knowledge of the philosophy and nature behind online teaching enabled the effective delivery of instruction. Kearsley and Bromeyer emphasized that not anyone can just teach online. They enumerate preconditions such as access to the computer and the internet, proficiency in using the tools and the system to be used, having prior experience in online learning, technological competencies and training. These requisites were carefully considered in the preparation phase.

The four faculty who participated in the pilot-try-out were viewed positively by the online students based on their teaching and qualities. Their characteristics were deemed suitable for the online delivery mode. Besides being innovative, creative, daring, supportive of learners' needs, sensitive to the limitations of technology in education, facilitative and tolerant of different learning styles, Khanser (2003) identified important characteristics of faculty that are unique to online contexts. Lever-Duffy, McDonald and Mizzel (2003) describe online tutors as guides and architects of a complex learning environment. The online faculty had most of the aforementioned

qualities which were observed by the students. Yang and Cornelious (2005), Queiroz and Mustaro (2003), Caplan and Graham (2008) described various tasks of teachers that require skills in three basic areas: pedagogical, administrative and technical. Gibbons and Wentworth (2001), Kearsley and Blomeyer (2004), Yang and Cornelious (2003) highlighted the need to prepare teachers to teach online. Five teacher training areas, namely, course module development, online course management, using multimedia resources, and psychological readiness for e-learning were identified by Khanser (2003). Most of these were given attention by the implementing unit.

Majority of the learners who participated in the pilot implementation of the online program demonstrated a high degree of maturity, positive attitude, interest, sense of responsibility and adequate technical background. Commitment, determination, independence, proficiency in communicating and using technology, thinking skills, being ethical, reflective, self-motivated were among the important qualities identified as important by Khanser (2003), Lever-Duffy, McDonald and Mizell (2003), Padolina (2005a), Yang and Cornelious (2005). The course professors observed these among the majority of the online learners. Those likely to fail or would have difficulty are those who are unable to take responsibility for their new roles and duties, are not proficient in using the computer and have no easy access to the internet. According to Hansen (2008), the need for learners to engage in self-assessment of their educational and career goals to determine their suitability for the program is a must. It is necessary for online students to understand how online learning works (Yang and Cornelious, 2005; Las Positas College, 2008; the University of Illinois, 2008 and Hansen, 2008). Lever-Duffy, McDonald and Mizell (2003) state that proper orientation and preparation of learners in relation to the new ways of learning and training in new technologies, are most useful. Part of the process of preparing learners according to Yang and Cornelious (2003) is analyzing learners and orienting them on the program, course, courseware, basics of internet use, how and where to get help, technology requirements, course policies among others to promote an effective educational environments. A proper match among the instructor, student and the internet course should be established. These were ensured in the preparation and implementation phases.

Factors That Could Impede the Program Success

At the university level implementation, specific issues related to technology, administrative support, faculty readiness and support, content development, technical support, quality of the delivery system, marketing and promotion, research and evaluation were revealed. According to Smith (2004) an institutional commitment for e-learning must be concretized through top-down driven directives, clear plans of action, well-defined and measurable changes in the university including high levels of engagement by all. The IT requirements, faculty development, intellectual property rights and copyright laws, promotion and reward must be carefully considered in the planning process. Davis, Little and Stewart (2008) hold the same view. They add that structural and organizational matters, concerns related to human resources, decision-making, training and governance, as well as change issues must be examined. Churchill (2008) also elaborated on various issues in e-learning implementation. He identified access to the computer, internet and other technologies, pedagogical design, learning management system,

students as users of software tools, e-learning content and transformational management as important concerns to be addressed by higher education institutions. Crafting an e-learning plan will provide a framework to enable structures, processes, selection, deployment and ongoing performance of the online learning system to be effective. Khanser (2003) suggested three phases in the development of an e-learning plan: 1) analysis of strengths and weaknesses of the e-learning environment; 2) consideration of the opportunities provided by the customers, government, e-learning suppliers, investors and etc.; 3) examination of the threats such as the insufficient IT infrastructure, resistant organizational structure, lack of technical capabilities, logistics, management support and funding. At the university level, such concerns have yet to be fully attended to.

Although preparatory activities were conducted prior to the implementation of the program, results show that certain elements of distance education as a whole needed more significant consideration and action by the university stakeholders. Top administrative support and organizational systems and processes could be enhanced. Support for the needs of the unit tasked to implement the distance education was not sufficient. Only 45.6% of the students observed that the College had adequate support for the said unit. Around 30.43% of the students detected the lack of administrative, academic and technical support for the program. Access to technology and internet connection in the university was not also sufficient as experienced by the faculty. Majority of the faculty were resistant to change. They were unmotivated, in need of capacity-building in ICT and ICT-integration skills, and online teaching strategies. Students in general did not have easy access to computers and internet connection. Proper screening and preparation of learners for the online program was basic. There was no quality team for content development. The course professors just used course materials that were already available to them and augmented these with current materials that they could gather whenever they had the time. Some of these materials still had to be converted to digital format. They also chose activities carefully so that they would be suitable for the online mode. Technical manpower was not adequate during the pilot implementation. They were not also equipped to serve as systems administrator for the program. Technical assistance for the faculty and students was not immediately available. And so the e-learning consultant provided assistance for the technical needs of the faculty and students and he functioned as the systems administrator in the absence of appropriate support from the management information system.

To evaluate the distance education program's quality, it is necessary to have an instrument to assess needs and improve the system of delivery. Coordination with institutions involved in e-learning quality assurance was recommended by Teehankee (2003). Support for marketing and promotion was also insufficient. Wider and more appropriate information dissemination on the program can be established with academic and administrative stakeholders providing the critical assistance for the needs of the implementing unit. Finally, the program implementation could be improved tremendously if its course of actions are supported by research and evaluation. Appropriate documentation and evaluation of the program can be done by the research unit and policy recommendations can be crafted to improve the distance education program. The

institutions' awareness of such issues will enable them to ensure the appropriate and sustained implementation of the program.

CONCLUSION

It takes more than just an isolated university unit to run a complex distance education program. While online learning was successfully ensured by the faculty, sustaining the distance education program on the other hand, requires looking into specific components of e-learning. The pilot implementation of the online distance education program uncovered issues and challenges that must be addressed. Infrastructure, access to the computer and internet connection, web-based course development, capability-building in online teaching, strong management support, funding, staffing, systematic evaluation, quality assurance, a dedicated technical support, ethical standards, student support, marketing and promotion, workload, reward and recognition, efficient systems and processes and organizational culture are among the many factors to be considered to maintain it. The key elements believed to have enabled the online courses to be implemented successfully were: 1) the faculty who possessed appropriate personal and professional competencies including competencies that are unique to online learning environments; 2) the learning management system that was simple and easy to learn, and 3) the learners who were equipped with appropriate qualities, attitudes and technical background that were suitable for the program. A strong match among the three components facilitated the success of online teaching and learning. The delivery of the online learning was deemed effective as far as the online students were concerned because it addressed their needs. Factors that could prevent the university thrust from sustaining the program however, were inadequate support systems, lack of funding, outmoded and insufficient technology, lack of manpower, inadequate training in technology, pedagogy, content development and ethics, poor management, inefficient institutional systems and processes, lack of quality assurance mechanisms, lack of research and evaluation and poor marketing and promotion of the program.

RECOMMENDATIONS

Institutionalizing an online distance education program is comprehensive process requiring careful planning, a clear understanding of the components comprising it, and the satisfaction of such elements. Maintaining this new education delivery system depends much on available support structures, acceptance and the accomplishment of the roles and responsibilities of its stakeholders. Institutions intending to embark on this program must have well-defined and realistic vision, mission, goals and objectives that are owned by the members of the learning community. Building awareness of the program, enhancing the capacity of faculty in the new literacies, providing the necessary manpower, updating the ICT infrastructure, having a good internet connection for distance education and proper coordination among relevant university units to support the program should be addressed. Concrete and regular support for faculty and students' needs, funding, instructional materials development, marketing and promotion strategies, research and evaluation are elements that must be given attention by the institution if

the distance education program is to succeed. Issues related to change, administration and management are equally important and must be given foremost consideration. Adequate and appropriate preparation is therefore very critical.

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