Student Perception: Phase One to Building a Center for Media Training and Research

William P. Messier, Ed.D.
Assistant Professor, English Communication
FSH Department, Macau University
Taipa, Macau, China
Office: 853 3978195
wpmm@cox.net

Abstract: This paper is a report on the findings of a study (phase one) conducted at Zayed University in the United Arab Emirates about making some important decisions regarding its instructional technology and the effects it will have on its students. The study was conducted to determine student perceptions about using more than one type of computer. A questionnaire was designed to find out about student attitudes toward using multiple operating systems. The survey was developed to obtain baseline data as to the present use of technology as well as suggestions for and the obstacles to the creation of a Center for Media Training and Research at Zayed University. The data collected provided positive information towards the implementation of the Center for Media Training and Research. Findings indicate that new technology usage among students is not a problem with proper administrative implementation. Some discussion about the use of student data and its impact on the future use of instructional technology at Zayed University conclude the paper.

Introduction

Technology has a crucial foot in the door of every dedicated educational institution, and the schools will never be the same (Harris, 2000; Fisher, 1997; Lowther, Bassoppo-Moyo, & Morrison, 1998; Lumley & Bailey, 1996; Mehlinger, 1996). Still, most students and faculty are provided little time for training in how to use new technologies. The result is no surprise, that many of them continue doing what they were doing rather than deplete their own time learning how to use new innovations that are being provided for them (Bailey, Ross, & Griffin, 1996; Carnevale, 2000; Furst-Bowe, 1996; Hill & Somers, 1996; Hunt, 1995; Ley, 1997; Stanley, Linauer, & Petrie, 1998). The information age has created increasing demands on students at all levels of education to develop, use, and master skills. More importantly, these mastered skills include students using technology as the driving force behind integrated, cross-disciplinary learning experiences that prepare them for life in the "real" world (Bailey, Ross, & Griffin, 1996; Petrakis, 1996; Stanley, Linauer, & Petrie, 1998; Weiner, 2000).

Another impact of new technology on students is the elimination of information technology from the processes of planning, integrating, managing, and implementing curriculum innovations. Very often this elimination keeps new technology in education moving slowly and serves to maintain stagnant, sometimes mediocre instruction (Carlson, 2000; Morton, 1996). There is a continuing and increasing need for systematic efforts to infuse new technology in appropriate ways in all professional education programs preparing students, faculty, administrators, and counselors (Carnevale, 2002; Hill & Somers, 1996; Kitagaki, 1995; Northrup & Little, 1996).

Mirrored on a four-year baccalaureate western style university, Zayed University (ZU) is located in the United Arab Emirates (UAE). Established in 1998, with two campuses, one in Abu Dhabi and another in Dubai, ZU is the first university in the UAE dedicated solely to the education of UAE national women using laptops. Between the two campuses there are about 1,500 students. Every student is expected to own a laptop computer (using only the Windows NT technology) as well as spend nine hours a day on campus. ZU students are also expected to be proficient in Arabic and English as well as integrating technology within their fields of study. Networking, homework, assignments, quizzes and projects are all done on their computers. All ZU instructors are required to work with the same hardware and software, emphasizing instructional and information technology. With many nationalities represented by faculty (over 21), ZU provides students a broad range of instructional methodologies and strategies.

In the fall, 1999, ZU started to offer students major fields of study with courses in Communication and Media Science, Education, Arts and Science, Business, Information Systems and Family Science. As these

major colleges reevaluate technological needs, the requirement for certain students to know and use new computer hardware and software (i.e., Communication majors need industry standard hardware and software) has become apparent. Further, in the fall of 2000, a new operating system, Macintosh, would be incorporated in the College of Communication and Media Science computer labs.

The United Arab Emirates is emerging as a global hub for the development, production and distribution of both conventional and converging digital/electronic media. The Dubai Media City already has begun to attract some of the largest media enterprises in the world (http://www.dubaimediacity.com/html.html, 2001), such as Reuters and Microsoft, and scores of entrepreneurial and startup media and communication businesses will follow. Availability of a qualified professional workforce to staff these enterprises is essential to their success. Zayed University's College of Communication and Media Sciences already is preparing baccalaureate graduates for this new genre of media and communication firms. The college now proposes to offer, through the Center for Media Training and Research, mid-career training to upgrade the skills and abilities of the existing media and communication workforce.

The Center for Media Training and Research will be launched in the fall, 2002. The new college of Communication and Media Sciences Macintosh computer labs would be used for training sessions with Zayed University's Communication and Media Sciences graduates as the trainers. Since it's inception three years ago (1998), Zayed University students have only used one computer operating system on its campuses (Windows NT). Communication and Media Science students would have to be introduced and trained on this new Macintosh operating system. In the early stages of planning (phase one) for the creation of the Center for Media training and Research and since students will be a big part of its success, a student survey was developed to obtain baseline data as to our present use of information technology. Will the students at Zayed University be able to master technology and provide effective professional mid-career training to the existing media and communication workforce within the UAE?

The Study

Phase one is to find specific information about student attitudes and competencies using new technology and to obtain baseline data as to the present use as well as suggestions for and the obstacles to the creation of a Center for Media Training and Research at Zayed University. The survey was developed to meet the needs of the Communications department researcher. The survey instrument was modified and refined with input from the researcher. The survey instrument was comprised of questions concerning operating system skills and competencies. A final open-ended question invited respondent input. This study was not limited to students who were enrolled in a particular division or department at Zayed University. Most students coming to Zayed University had little experience using the keyboard, mouse and other information technologies. Since 1998, all students in all academic programs were equally exposed (two hours per day, five days a week) to the use of their laptops, keyboards, networking and the Microsoft Office Suite.

Notification of the survey was e-mailed twice to ZU students with the embedded survey form. Both notifications had a brief introduction and informed individuals about directions. Students were requested to mail the survey if they needed confidentiality. After a week the second follow-up e-mailing was sent out with clear instructions to delete the survey if individuals responded to the previous e-mail. A GroupWise ID number program was employed to filter out duplicate student ID numbers. This also operated as a check against respondents filling out the survey more than once. Response times varied from several hours to several weeks, with most respondents replying within one to three days of receipt. The survey garnered 985 completed questionnaires out of a non-redundant sample of 1,490 students. This corresponds to a 66.1% response rate.

The following are the questions within the survey instrument:

1. Can I use another operating system like Macintosh or Windows 98?
2. Is question one important to me for my future as a student and graduate?
3. If I use more than one operating system can this help me after I graduate?
4. Would I learn a new operating system if Zayed University helped me learn?
5. Knowing more than one OS could improve my technology skills?
6. If I could work with more than one operating system I could get a better job?
7. I only want to use one computer operating system?
8. I would learn a new computer operating system at home?
9. Any Comments:

Although the study was not representative of a large sample, its real value is that other educators can model from it. Simple quantitative analysis was done to determine student response rates and frequency counts on each question. Tables were created to not only show the response rate and frequency count for each question but to compare the findings as well.

Findings

Understanding the format and culture at Zayed University is an important issue. Since 1998, at Zayed University, most students have only used their laptops and only one computer operating system (NT technology) to do their schoolwork. Most students feel comfortable working with these tools and are adapt at networking as well as working with the Microsoft Office suite. In the fall 2001, the newly formed Department of Information Systems offered new courses in DOS and NT operating systems but not Linux or Macintosh.

Working with a new operating system (like Macintosh) and new applications that work on that operating system can mean for many students adding long hours of training to their busy schedule. Most respondents agree the long nine hours on campus is exhausting. Also, students' feel the pressure of learning extra curriculum; when many students live forty-five minutes or an hour from campus and family duties and responsibilities may mean students working late hours before study time is permitted.

The findings presented here not only include the statistical analyses of the data but also present student comments as well.

Question	Yes %	NO %
Q1 - Can I use another operating system like Macintosh or Windows 98?	79	21
Q2 - Is question one important to me for my future as a student and graduate?	95	5
Q3 - If I use more than one operating system can this help me after I graduate?	98	2
Q4 - Would I learn a new operating system if Zayed University helped me learn?	98	2
Q5 - Knowing more than one OS could improve my technology skills.	100	0
Q6 - If I could work with more than one operating system I could get a better job?	93	7
Q7 - I only want to use one computer operating system.	8	92
Q8 - I would learn a new computer operating system at home	41	59

Table 1: Student Response: Use of Operating Systems.

Respondents were asked if they could use another computer operating system: A majority (79%) said that they could, while 21% said that they could not. Many respondents who knew more than one OS felt it was important that other students learn them as well, one responded, "We need to teach all ZU students various operating systems," another one said, "The university should make an effort to help students in acquiring better computer skills." Another said, "The will to learn is there, the instructions to learn a new operating system are needed."

A majority of respondents (95%) felt that question one was important to them for their future as a student and graduate, while 5% did not. In general, respondents felt it was important for their country that they keep up to date on technology issues (especially OS's). Students' responded, "We need to learn more about these operating systems, because it is not only going to help us, but overtime, it is going to help our country," and "Learning how to use different types of operating systems enables us to keep up with technological changes and advances for the benefit of our country." Many respondents also felt it was important to learn new technology to improve their skills for the work place. One student said, "The only

thing which makes us different from other UAE universities is the information technology skills we know," "Definitely, we need to know how to use other operating system programs. It would be really helpful for everyone, the students and the company we are going to work for." another said, "I think that knowing more operating systems is important in today's world, especially when I want to find a good job." A further respondent said, "All the world works with different information technologies and it will be wasteful if we study only one operating system."

Most respondents (98%) reported strongly that being able to use more than one operating system could help them after they graduate. 2% felt that it was not important for graduates to be able to use more than one operating system. One respondent reported, "The more operating system skills we learn the more we'll be wanted in the information technology workforce and the brighter the United Arab's Emirates future will be." A second respondent said, "of course learning a different type of operating system could help me in future." Another respondent said, "I agree that in the future learning a new operating system would be helpful."

Of those respondents who would be willing to learn a new operating system if Zayed University helped, most students (98%) said they would. Only 2% felt that it was not important. Most respondents expressed the need for ZU to teach them different operating systems. One respondent replied, "I think learning a new (OS) is very important in our studies at Zayed University because it allows us to deal with the latest technology and applications available." Another respondent said, "I hope Zayed University will help us try and use different kinds of operating system because it will able us to have proper skills in the future." One more respondent replied, "Zayed University should make an effort to help us in acquiring stronger computer skills. This includes learning how to work with different types of operating systems."

All students who responded (100%) believe that knowing more than one OS could improve their technology skills. Most respondents also felt that learning multiple operating systems can assist them in finding better jobs as well as working with new technology on the job. One respondent stated, "Learning about different operating systems helps us to improve our IT skills and may also help us to find better jobs in the future." Another responded, "I think that learning about new operating systems furthers my technical knowledge. Moreover, it makes dealing with different types of computers easier."

Most respondents (93%) agreed, when asked if working with multiple operating systems could find them a better job. Still, 7% of the respondents said no, it would not. Nearly all of the respondents commented that graduates would be limiting their opportunities knowing only one operating system. One respondent replied, "I am sure that when I graduate god willing, I will get a good job. If I learn about more than one operating system, the opportunities will be greater." Another respondent said, "We really need to learn about this new computer operating system which can help us in our daily life as well as make our future bright. However, I'm sad because I will not be able to learn this new operating system next semester because my major is Education not Communication." One more respondent replied, "Using different operating systems will improve our knowledge and it will allow us to work with new types of computers, so we can get better jobs."

For the question "I only want to use one operating system," most of the students (92%) who responded, said they would not. While 8% of the respondents replied yes, they would prefer to use only one operating system. Most respondents generally commented about the importance of using multiple operating systems. One student responded, "If we could use other operating systems, it would be a great chance for us to improve our skills." Another student replied, "You have to learn many operating systems in today's world." One more student responded, "Learning how to use more than one operating system is better for our future and because learning new things is a privilege."

Given a choice, less students (41%) prefer to learn a new computer operating system at home. Notably, 59% of the respondents would rather not learn a new computer operating system at home. While some students feel the pressure of the long nine-hour day they spend learning on campus, most commented that they wanted to learn a new OS at Zayed University. One student said, "I think if we use and learn different kinds of technology it will be better for us and our future. I am concerned about our long days at the university and the increased pressure to do more work." Another respondent commented, "I will be happy if ZU will teach us another operating system for our future." One more student responded, "I hope I could learn a new computer operation system one day."

Question	Yes	No
1	926	59
2	970	15
3	965	20
4	965	20
5	985	0
6	966	19
7	22	963
8	404	581

Table 2: Frequency Counts: Student use of new technology.

Conclusions

One of the main concerns ZU students have is the rapid change happening to instructional technologies at Zayed University. Although, the majority of the respondents want to learn more than one operating system, it is interesting to note the genuine concern for fellow students to also learn new technology. More importantly though are the comments from students indicating the need to learn new operating systems and technology so that they can help their growing country. Also interesting, in the fall 2001, many students did not sign up for or dropped out of the newly offered operating system class (DOS and NT). There are plans by the Information Systems department to offer the Macintosh operating system as an added topic to that IT class. Overall comments contend that it is imperative for students to learn multiple operating systems, but more importantly that their new knowledge can be put to use to improve their country's future.

In the fall of 2000, only the Communication and Media Science students studied the new Macintosh operating system (the class of 98). Curriculum schedules and lab facilities were limited to only this group. Many of the respondents who were not communication majors wanted to also learn this new technology. As a result of this survey, a new Macintosh lab was ordered to be operational by spring 2001 for all Zayed University students. The class of 98 (Communication and Media Sciences students) studied the new Macintosh operating system and three major software packages (QuarkXpress, Photoshop, and Illustrator). Most students who studied the new operating system were at first overwhelmed by the differences between NT and Macintosh but by mid-semester they were mastering it as well as the aforementioned software packages. For example, how data is trashed on the Macintosh verses how data is trashed on NT was one major concern.

The survey results were discussed with and disseminated to the Deans Committee and the Technology Committee. The committee members decided that the data collected could provide useful information to improving information technology campus wide. For example, a campus wide Macintosh lab will be implemented in the spring semester, 2001. Also, for the fall, 2002, a curriculum change would be initiated to include Linux and Macintosh in the operating system class. It was also decided that phase-one (student perceptions) could be used to help initiate the development and implementation of the Center for Media Training and Research.

Should more administrators, faculty and staff use student input to plan for future technology? If new technology continues to outpace budgets then student empowerment makes sense. For example, student input is important if you wanted to create a new type of lab, which incorporates wire or wireless, that support college workstations or private student laptops. Empowering students could mean making effecting decisions that can save valuable time and money.

After four more semesters of using the Macintosh OS and its software, will the Communication and Media Science students be able to provide mid-career training to upgrade the skills and abilities of the existing media and communication workforce. This question will need further study. The anecdotal evidence states that ZU students are highly motivated to learn new technology. How ZU students apply their newly acquired skills may be the focus of another article.

Around certain campuses within the United States, trends show students have increased: computer ownership, knowledge of multiple operating systems, internet usage and their training for web site development (University of Wisconsin–Madison, 1999). Many ZU students' see developing technical skills now as an investment in the future. Other trends around U.S. campuses show most students want administrative

investment in providing student assistance within computer labs as well as increased access to student services via the web (University of Saskatchewan, 1999). Generally, most of these trends are similar for students at Zayed University. Overall, most Zayed students want to learn multiple operating systems but insist the university should provide the training for these and other IT technologies. ZU students comment with great pride that newly acquired technical skills can help them with their future employers. Many ZU students have chosen majors that will focus on them using Windows NT technology (Business, Education, Information Systems, Family Science, and Arts and Science). These students will have to continue learning new technologies at home, as many said they would (41%) or another option for them would be to wait for spring, 2001 when the new Macintosh lab is implemented. It is apparent that most students (98%) want training on new technology at Zayed University and expressed a strong need to learn new ways to use computer technology. Feedback from respondents in general indicates that competence in new technologies is important, but all too often leads to pressure to succeed.

In response to the needs of the Center for Media Training and Research, as of fall 2000, the Communication majors have started training to work with the new Macintosh computer operating system and other related technologies. Further, phase one (this study) was completed. The data collected provided positive information to begin the planning (phase two) for the Center for Media Training and Research. This planning phase will include strategies on how students will offer a combination of one-off workshops and a series of programs that can be aggregated into a certificate programs for mid-career training.

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