

The Evaluation of Students' Opinion Towards E-learning Quality: The Case of Virtual Programs in Shiraz University

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ABSTRACT

The main purpose of this study was to evaluate the quality e-learning from students' point of view about Shiraz University Virtual programs. This evaluation was based on a scale that was created by TTF (Technology Task Force) to assess the overall quality of e-learning programs in student support, course structure and teaching learning. Even though the validity and reliability of scale was verified by Scalan (2003) researchers tested and verified its validity and reliability. Total 36 students filled out the scale. The collected data was analyzed via descriptive statistics.

The final results revealed that students' attitude toward e-learning programs, except 1 or 2 items, were not positive. Based on findings recommendations were made.

Keywords

e-learning program quality, program evaluation, student opinion, virtual education.

1.0 INTRODUCTION

The development of the open university in the United Kingdom provided a model for the integrated multimedia systems approach to the delivery of higher education. The model has been emulated in more than a score of other countries. Today, many open universities have developed into "mega-universities" with more than 100,000 students (Unesco,2002).

The creation of technologically-based virtual education has been portrayed as a means of increasing access to learning higher education opportunities for those currently excluded from participation in lifelong education and training. (Gorard & Selwyn, 1999).

E-learning or electronic modes of learning which means using a computer to aid the learning process, has emerged as one of the fastest moving trends in

education today (Palmer, 1991). Extraordinary growth in internet-based education in higher education and the use of online e-learning by interested students of higher education is increasing. Many guidelines, principles or benchmarks are being developed (In this area for example, Quality Assurance Agency for Higher Education, 1999, American Distance Education Consortium, 2003, American Council on Education, 2003, Council of Regional Accrediting Commissions, 2000).

The Institute of Higher Education Policy (IHEP) has created a benchmark to insure the quality of e-learning programs in higher education (Table 1). This benchmark is a quality process that compares actual program and institutional performance to exemplary or best practices (MC Gregor & Attinasi, 1998).

The IHEP standards provides 7 objective criteria and a framework which allows comparisons of various aspects of an e-learning program over time according to IHEP benchmarks in 7 categories. Thus for, this benchmark has been used to study faculty perceptions of distance education. (Belcheir & Cucek, 2002) and also student perceptions of online learning programs. Scanlan (2003) used this benchmark to create a TTF (Technology Task Force) benchmark model for an overall assessment of the schools distance learning programs. This benchmark has combined together 3 categories of student support, course structure and teacher-learning process.

This article reports an evaluation study of students' opinion about internet-based education quality in Shiraz University virtual programs using the TTF benchmark.

Table 1 : IHEP Distance Learning Benchmark Categories
(Quality on the Line , 2000)

Category	Description
Institutional	Activities by the institution that help to ensure an environment conducive to maintaining quality distance education ,as well as policies the encourage the development of internet-based teaching and learning including technological infrastructure issues ,a technology plan and professional incentives for faculty.
Course Development	The development of courseware ,which is produced largely either by individual faculty (or groups of faculty members)on campus ,subject experts in organizations, and/or commercial enterprises
Teaching Learning Process	Activities related to pedagogy including interactivity ,collaboration ,and modular learning .
Course Structure	Policies and procedures that support and relate to the teaching /learning process, including course objectives ,availability of library resources, types of materials provided to students , response time to students and students exceptions.
Student Support	Student services normally found on a college campus including student training and assistance while using the internet .
Faculty Support	Activities that assist faculty in teaching online ,including policies for faculty transition help as well as continuing assistance throughout the teaching period.
Evaluation& Assesment	Policies and procedures that address how, or if the institution evaluates internet-based distance learning outcomes assesment and data collection.

2.0 E-LEARNING AT SHIRAZ UNIVERSITY IN IRAN

2.1 The Research Background

Iran with 8.2 million pre-school children, 18.7 million students in elementary and secondary schools and 4.8 million high school graduates waiting to enter the university, has one of the highest rates of youth population in the world in 2005.

About 500,000 teachers are responsible for educating elementary and secondary students (Faramarzian, 2003). Because of insufficient investment in education sector ,the higher education system is not able to accept more than 10% of high school graduates each academic year .In order to increase accessibility of higher education for more high school graduates , one of the best and more appropriate way is developing internet-based technology. E-learning has begun in Iran since 2001 , therefore , there is only 2-3 years of national experience in this area . In Iran elearning in higher education serves many educational programs. In the year 2005 totally 7000 students are studying via internet-based education. These programs are being offered by five Iranian universities. Shiraz University is the first

university in Iran which offered virtual program in 3 undergraduate programs in 2003:

- 1-Electronic Engineering
- 2-Law
- 3- Industrial Control and Accurate Tools.

Shiraz University started a graduate degree program in E-Commerce in 2005 .The e-learning tutoring is a part of faculty members duty in Shiraz University departments which offer the 3 virtual programs. This research evaluated the students' view- points about the quality of these programs .

3.0 LITERATURE REVIEW

Successful learning will occur where there is high quality and extensive individual support for learners. This has always been the case and e- learning provides no exception (Mayers,2001). Considering this fact Hagan (2002) suggests that an e-learning administrator should give students a lot of upfront information and advisement. Rekkedal (2004) found that the students consider the supplied support services as important or very important .

Another issue in internet-based programs and assessment of its quality is the extend and quality of interaction. The degree of interaction in elearning

surveys has been discussed by Fulford & Zhang (1993) who support this debate in their studies. Some students reported that other learner were essential to their success in a course while others suggested that fellow learners actually detracted them from their success (Biner& welsh, 1997). According to Moore (1990) Theory three different types of interaction are essential to distance education learner : instruction interaction , learner-content interaction , and learner –learner interaction. Kelsey & Souzan (2004) used Moore theoretical framework of multiple interaction to support the efficiency of distance programs.

4.0 METHODOLOGY

This evaluation research used a descriptive methodology. An opinion survey was conducted, using the TTF five point likert scale to assess the overall quality of e-learning programs at Shiraz University

The statistical procedures used were mainly descriptive statistics such as : mean and percentile. A random sample procedure was applied and a sample of 36 respondant was selected for the study.

4.1 Reliability and Validity of scale

The reliability of TTF benchmark scale was determined by computation of Chronbach’s alpha for 14 items and alpha standardized was 0.94 (Scanlan,2003) . The content validity, construct validity and criterion-refereced validity was refined by TTF . In order to assess the fitness of scale for application in Iran , researchers tested and verified its validity through expert consensus, also Chronbach alpha for scale was re-examined and at 0.82 was verified.

The scale contained 14 items (Table5) on the support elements such as enough information of on-line programs and accessibility of technical assistance ,

teaching learning process such as interaction , feedback and course structure such as course objectives , learning outcomes and electronical library resources.

The scale was distributed among 59 students who had passed at least 4 or 6 courses in e-learning bachelore degree program. A total of, 36 filled out Scales were received from 5 female and 31 male students. The scoring for the Scale was established as follows: strongly agree 5 points , agree 4 points , uncertain 3 points , disagree 2 points , strongly disagree 1 point . the age (table 2) , occupation (table 3) and gender (table 4) also considered.

Table 2 : Age Distribution of Respondent

AGE	N	%
19-23	14	%39
24-28	15	%42
29-33	2	%5
34-38	4	%11
39-more	1	%3
SUM	36	%100

Table 3: Job Characteristics of Respondent

Occupation	N	%
student	7	%20
teacher	2	%5
technisian	5	%14
employee	17	%47
Unemployed	4	%13
other	1	%1
SUM	36	%100

Table 4 : Gender Distribution of Respondent

Gender	N	%
Male	31	%86
Female	5	%14
SUM	36	%100

Table 5: Student opinion on each item based on scale items

SCALE ITEMS		Strongly agree	Agree	Uncertain	Disagree	Strongly Disagree	MEAN
1- I found it easy to get the information I needed about my online course(s) and complete the enrollment & registration process	N P	10 %28	18 %50	5 %14	3 %8	— —	3.9
2- I was always able to gain access to my online course(s) and the applicable SUVV(Shiraz University Virtual Program) network resources (library, e-mail, etc) when needed.	N P	5 %14	5 %14	3 %8	12 %33	11 %31	2.6
3- I was given multiple ways to interact with the teacher and other students (e.g., e-mail, discussion) in all online course(s)	N P	5 %14	11 %30	3 %8	12 %33	5 %14	2.9
4- In my online course(s), I always received constructive and timely feedback on my assignments and questions	N P	5 %14	11 %30	3 %8	12 %33	5 %14	2.9
5- Before starting my online course(s), I was well advised about the self-motivation and commitment needed to succeed at distance learning	N P	3 %8	10 %28	1 %3	18 %50	4 %11	2.7
6- Before starting my online course(s), I was well advised about the technology and skills I would need to fulfill my course requirements	N P	2 %6	15 %42	1 %3	14 %38	4 %11	2.9
7- My online instructor(s) always provided a clearly written, straightforward statement of course objectives and learning outcomes or expectations	N P	2 %6	5 %14	3 %8	11 %31	15 %42	2.1
8- I had sufficient access to the online library resources I needed to fulfill my course objectives and complete all my assignments	N P	— —	5 %14	1 %3	15 %42	15 %42	1.9
9- Before starting my online course(s), I received sufficient information about admission requirements or prerequisites, tuition and fees, books and materials, test proctoring or phone conferencing requirements, and student support services	N P	1 %3	9 %25	2 %6	14 %38	10 %28	2.3
10- My course(s) provided me with the skills I needed to secure outside course materials through electronic databases, interlibrary loans, government archives, news services, and other sources	N P	2 %6	5 %14	2 %6	14 %38	13 %36	2.1
11- Prior to the beginning my online course(s), I was orientated to WebCT and had the opportunity to practice using it	N P	1 %3	4 %11	— —	12 %34	19 %52	1.8
12- I had convenient access to technical assistance/support whenever needed	N P	4 %11	5 %14	2 %6	15 %41	10 %28	2.3
13- My technical support questions or problems were answered accurately or solved quickly	N P	2 %6	7 %19	2 %6	9 %25	16 %44	2.1
14- There is a structured system in place to address student complaints about online learning.	N P	— —	11 %31	1 %3	4 %11	20 %55	2

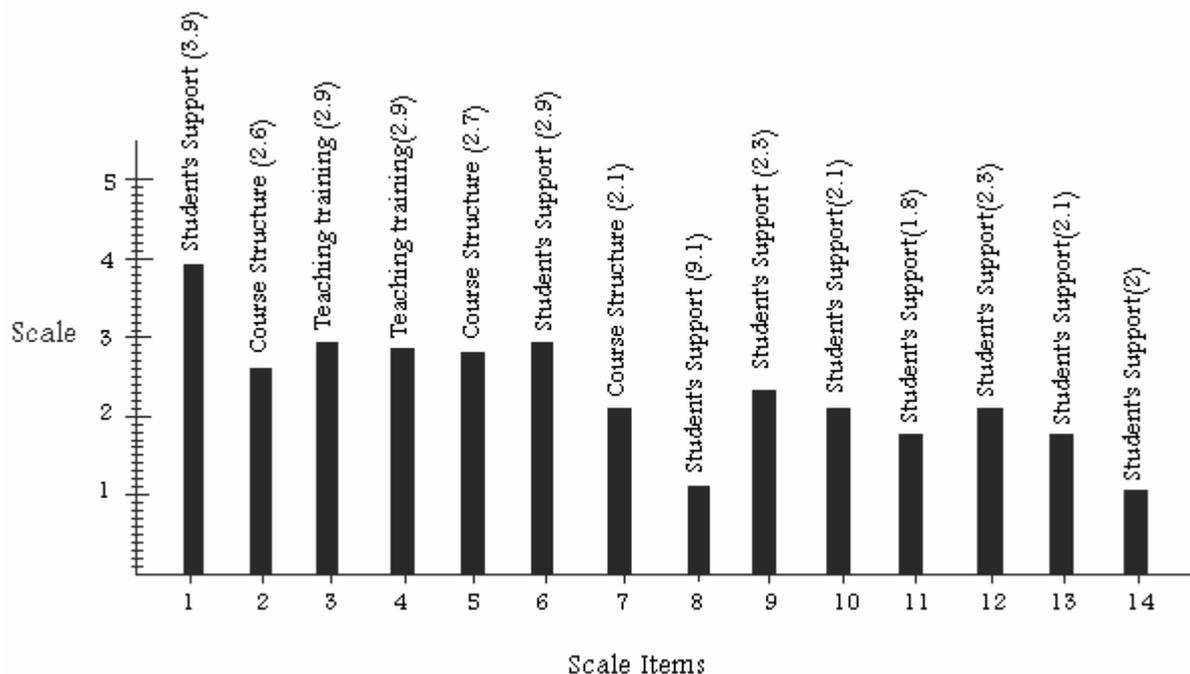


Figure 1 : Student opinion histogram on each item based on TTF scale items

5.0 CONCLUSION

The student job characteristics (table2) shows that highest rate of students are employed. Due to high costs of e-learning education in Iran , it seems that individuals who participate in these programs must be able to offored the costs, . It can be seen from scale items and their means (Figure 1) , students opinion toward the overall quality of e- learning is lower than scale mean (3). First question reveals a positive attitude about enrollment and registration processes. A large majority of students demonstrated unfavorable satisfaction with student support services , teaching / learning process or course structure . For instance , the scale items 8 and 11 with lowest means (1.9 & 1.8) shows that students don't have accessibility to virtual libraries and electronic resources. With regard to the means of items respectively 2 (2.6) , 10 (2.1) ,12 (2.3) , 13 (2.1) and 14 (2) , it can be concluded that student support is very important from the student's point of view . Also interaction item 3 (2.9) and timely feedback item 4 (2.9) show that teacher-training process is lower than mean scale.

In spite of moderate evaluation of the program by students in this research, Shiraz University is determined to up grade the virtual programs and develop new programs. The reason of moderate evaluation of the programs are : (a) lack of student support , (b) lack of proper feedback, (c) lack of previous necessary information for students , (d) distance between

teachers and students and (e) lack of enough electronic recourses .

6.0 RECOMMENDATION

In this research attention has been given to virtual Iranian students in Shiraz University and the evaluation of their attitude toward e-learning programs. Since development of on-line education in Iran is less than 3 years, therefore , it is too early to judge about its quality and other aspect of on-line programs in higher education at the present time. The experiences of developed countries provides guidelines for the development of e-learning mode of higher education in Iran.

The following recommendations are made to establish a successful e- learning program in Iran :

1-The proper planning is an essential issue in this programs. Levey (2003) points out these factors.: (a)clear vision and a plan to get there, (b)curriculum, (c)staff training, (d)student services, (e)student training and (g) student support .

2- Faculty members should get training in relation to new technologies. Murry (2001) points out, " before the faculty can be effective and serve as a support structure to student, they must understand on-line pedagogy and tools associated with on-line education" .

3-Program administrators should give students a lot of upfront information and advising .

4-Investment in on- line education should be increased. The internet speedy lines , appropriate and affordable software and hardware facilities , advertising and awarness adult about e-learning programs .

5-Virtual library ,electronical databases, should be made available and easily accessible to the student and faculty members .

6- High cost of e- learning is a barrier in developing e- learning in Iran ,to reduce these costs Iranian government should subsidies these programs .

REFERENCES

- American Council on Education (2003). *Guiding Principles for Distance Learning in a Learning Society*. Retrieved May12, 2003, from http://www.acenet.edu/calec/dist_learning/dl_principlesIntro.cfm .
- American Distance Education Consortium. (No Date). *ADEC Guiding Principles for Distance Teaching and Learning*. Retrieved May12, 2000 from http://www.adec.edu/admin/papers/distance-teaching_principles.html.
- Belcheir ,M.J. & Cucek,M. (2002). *Faculty Perception of Teaching Distance Education Course*. Research Report 2002 .
- Biner,P. M., Welsh, K.D., Barone, N.M., Summers, M.,& Dean, R. S. (1997).The Impact of Remote Site Group Size on Student Satisfaction and Relative Performance in Internet Telecourses. *The American Journal of Distance Education*, 11(1), 23-33.
- Council of Regional Accrediting Commissions(2000). *Best Practices for Electronically Offered Degree and Certificate Programs*. Washington, DC: Council of Regional Accrediting Commissions. Retrieved May12, 2003, from http://www.ncahigherlearningcommission.org/resources/electronic_degree/Best_Pract_DEd.pdf
- Faramarzian, A. A. (2003). Chalanges of Traditional and Internet Education in Iran and World. *Takfa Journal*, 5(6).
- Fulford, C. & Zhang, S.(1993). Perceptions of Interaction: The Critical Prediction in Distance Education.*American Journal of Distance Education*, 7(3), 8-21.
- Gorard,s, & Selwy,N.(1999). Switching on the Learning Society? Questioning the Role of Technology in Widening Participation in Lifelong Learning. *Journal of Education Policy*, 14(5), 523-534.
- Hugan,H.(2002). Student Perception in an Online Meditate Environment. *International Journal of Instructional Media*, 29(4), 405-422.
- Kelsey,D,R., & D'souzan,S.(2004). Student Motivation for Learning at a Distance : Does Interaction Matter? *Online Journal of Distance Learning Administration*, 11.
- Levy, S. (2003). Six Factors to Consider When Planning Online Distance Learning Programs in Higher Education. *Online Journal of Distance Learning Administration*, 6(1).
- Mayers ,T.(2001) .Quality an E-university Assessment and Evaluation in Higher Education , 26(5).
- McGregor, E. N. & Attinasi, L.C. (1998). The Craft of Benchmarking: Finding and Utilizing District-Level, Campus-Level, and Program-Level Standards. Paper Presented at the Rocky Mountain Association for Institutional Research Annual Meeting, Oct. 1998, Bozeman.
- Moore, M.G.(1990) Recent Contribution to the Theory of Distance Education . *Open Learning* 5(3), 10-15.
- Murray, B. (2001). *What Makes Students Stay?* Special to E-learning Magazine.
- Palmer, S. L.(1991). Computer Attitudes and Computer knowledge of Adult Students . *Journal of Educational Computing Research*, 7(3), 269-291.
- Quality on the Line. (2000). *Benchmarks for Success in Internet-Based Distance Education* .The Institute for Higher Education Policy.
- Rekkedal, T,& Avist Erikson , S.(2004). Support Services in E-learning –an Evaluation Study of Student's Needs and Satisfaction . *European Journal of Open-Distance and E-Learning*.
- Scanlan, G, L. (2003). Reliability and Validity of a Student Scale for Assessing the Quality of Internet –Based Distance Learning. *Online Journal of Distance Learning Administration*, 1(3).
- Unesco (2002). *Open and Distance Learning , Trends, Policy and Strategy Considerations*, Paris. Unesco.