AN EXPLORATORY STUDY OF STUDENT'S ATTITUDES TOWARDS ONLINE ASSESSMENT

Sidra Kiran
Assistant Teacher
Beaconhouse School System Rawalpindi
Pakistan.

Almas Kiani
Assistant Professor
Division of Continuing Education
University of Arid Agriculture Rawalpindi
Pakistan.

Sumaira Kayani
Lecturer of Education
Division of Continuing Education
University of Arid Agriculture Rawalpindi
Pakistan.

Erum Shahzadi
Senior Teacher
Siddeeq Public School Rawalpindi
Pakistan.

Asma Sehar
Senior Teacher
Siddeeq Public School Rawalpindi, Pakistan.

Saima Kayani
Senior School Teacher
Asif Public School Rawalpindi, Pakistan.

Kiran Akhtar
M.Phil Student
Division of Continuing Education
University of Arid Agriculture Rawalpindi
Pakistan.

Alia Sohail
MSc. Student
Foundation University
Rawalpindi, Pakistan.

Abstract

This exploratory study was set out to examine the perceptions about online assessment of graduating students of Pir Mehr Ali Shah Arid Agriculture University Rawalpindi.The intent was to find out students' perceptions as a primary group. The data was collected from the three groups of graduating students of the Departments of Information Technology and Management Sciences. A semi-standardized instrument measuring the attitudes on a five point Likert scale was adopted. In addition to statistical tools, in-depth analysis of collaborative research in local and global context was done. Analysis of the data yielded that student community was highly favorable to use this technology along with associated e-learning tools. For institutionalizing the technology, policy-decision, faculty development and overseas linkage system would be necessary. Further studies in the area of need assessment and logistic and operational framework constituted the future areas of research.

Key words: exploratory study, online assessment, students' attitude

1. INTRODUCTION

Online assessment is a current currency in student assessment terminology. It is rapidly gaining substantial ground both in theory and practice. The developed systems in education have done considerable research in this area and evolved it as a scientific system of student learning and assessment. The empirical evidence has equally influenced the developing systems to utilize this technology. Online assessment constitutes an essential part of the result oriented one.It is also known as e-assessment or a screen testing. The concept covers a wide range of student learning. Online assessment or e-assessment has emerged as a technology of testing as a result of e-learning. It is used as a generic term to describe the use of computers and the assessment factors. Computerized adaptive testing and computerized classification testing also form the specific forms of e-assessment or online assessment. Intensive research in this area has increased its domains and assesses cognitive and psychomotor abilities. Cognitive abilities are assessed using e-testing software; practical abilities are assessed using e-portfolios or simulation software.

Online assessment plays a key role in shifting to a learner-centered approach. Online assessment is the process of gathering and discussing information from multiple sources in order to develop a deep understanding of what students know, understand and can apply their knowledge and skill as a result of online interaction. Online assessment has the ability to evaluate one's work accurately and contructively.The more intellectually immature students, the greater the chances of their personal investment. This will reduce the bias what they see when they look at their own work. The interaction in online assessment is between the assessor, the persons to be assessed and the managers. In online assessment communication and interaction are quick processes. In enhancing learning the use of computer based technology is vital. The interactive process is quite logical and forms a key process in the refinement of systems and assessment decisions. There is no doubt that online education is the need of the hour. Pakistan is suffering from many serious crises especially the security issues of educational institutions and also suffering with the lack of basic facilities. Economically many people are living below poverty line. The income of an average citizen doesn't allow him to get education according to the demands of the 21st century. Currently several educational institutions are offering different online degrees in a very flexible and convenient manner.

According to Meyer *et al* (2009) all the fruit of online assessment depends on the strategies of assessment the instructor use to assess the student learning online. The first question that clicks in the mind of students is to know the ways in which their learning would be assessed. So ultimately it is necessary to shed light on the key role of online assessment. Moves to wards the assessment of student learning in online education has gained the significant importance. Assessment plays vital role in student learning by diagnosing the learning deficiencies.

To assure the effective and the successful use of technology in education demands planned infrastructure from beginning to the end that is to lay a strong foundation, development and maintenance. These steps should be implemented step by step by keeping in view the requirements that will direct a successful online program.

STATUS OF ONLINE ASSESSMENT IN PAKISTAN PERSPECTIVE

According to Pakistan census organization (2006) Pakistan is a population of 160 million dwellers (PCO, 2006) and the adult literacy rate is only 53 %(Economic Survey, 2006). Access to basic and higher education is still a problem to move towards the direction of meaning full knowledge-based economy. The education budget is hardly 2.1%. The major concerns are within the Telecom and IT sectors of the country. With this limited budget the conventional means of imparting education with would certainly not be enough. The shortage of high quality faculty, expensive education especially IT education would create problems even further. It would therefore be imperative that digital media could be used to shape the methodology of education to facilitate the teaching, learning process a din order to improve the quality of education. With suitable adoptions of instructional strategies, it was focused that digital technology could lead to cognitive development (Wang, 2005) by means of e-learning environment that provides students with dynamic, interactive non linear access to a rich information presented in the shape of the text, graphics, animation, audio and video called content. (Kramarski and Gutman, 2006).

Pakistan is a country amongst the lowest in the world due to 2.9% enrollment in higher education. Aware of this statement the Government of Pakistan decide to plan double enrollment in next five years from existing 3.7% to 10% by 2015 and 15% by 2020 with the help of some new planed strategies.

Masood and Malik (2007a) reveals in their study that GOP has taken major steps to promote e-learning by focusing on increasing the consumption of Bandwidth from 800 MB (at present) to about 12,000 MB in the next 4-5 years. Keeping in view the growing need the Minister of Information Technology (MoIT) is actively busy in providing the penetration of Broadband/ICT services all over the country under the light of Broadband policy. With the collaborative efforts of MoIT, Pakistan Telecommunication Authority (PTA) and other industry stakeholders, a framework of Broadband services providers have also been drafted and put in place (Masood &Malik, 2007). Now a day Broadband DSL is more convenient than ever before including both rural and urban areas.

Center for Research in Urdu Language in Pakistan (CRULP) Government of Pakistan is engaged in the process of developing a machine, which converts English content into Urdu. In order to assure e-learning for every student online Urdu dictionary, Urdu email and web reader and text converter would also be available for the sake of promoting e-learning in Pakistan. Masood and Malik.S (2007) stated that the specific initiatives taken by HEC in order to promote e-learning includes 'Online Lecturing and Net-Meeting using IP Based Video Conferencing System; aims at enhancing interaction between the student and teacher of the university In order to ensure the fruits of digital technology, GoP has decided to make possible the basic access to telecommunications under the reach of poor and underprivileged Communities all over the country. To make the objective on ground the GOP has finalized a universal service policy under which a Universal Service Fund (USF) has been established keeping in view the following aims, goals and targets (Masood and Malik, 2007).

Masood, J. (2006) stated that The Virtual University (VU), established in 2002 a project started by the Government of Pakistan in collaboration with the private sector, was established on the basis of modern platform called Hybrid model of knowledge delivery to provide quality distance education with the help of the digital media and Internet within the country. In the vision 2030 it is considered essential to take advantage from the innovative technology in educational institutions in order to compete with the 21st century. In order to translate this vision the information technology would be given more importance. By the use of this innovative technology our new generation would be very beneficial in the prosperity of the country.Allama Iqbal Open University (AIOU) is another institution which has equally taken some initiatives as a distance University, the steps for reaching far flung areas and covering a large client are significant.

In the National Educational Policy of 2009, Higher Education Commission (HEC) has taken some major steps such as:

- Faculty training in pedagogical, information and computerization technology
- Establishment of universities of technologies
- Adaptation of modern project and computerized financial management systems

Thus review of literature indicates that initiatives both global and local level has been undertaken to develop online programs including assessment.

2. RESEARCH QUESTIONS

Following research questions were formulated to conduct this study

i- What are the global concepts of online assessment?

ii- What were the attitudes (perceptions) of the students about online assessment.

iii- What framework be suggested to Pir Mehr Ali Shah Arid Agriculture University Rawalpindi for the introduction of online assessment.

3. OBJECTIVES

The above questions were translated into following objectives of the study

i. To understand the concepts of online assessment in global context.
ii. To find out the students perceptions about online assessment.
iii. To suggest some guidelines or framework for the introduction of online assessment system in Pir Mehr Ali Shah Arid Agriculture University Rawalpindi.

4. METHODOLOGY

- **Population & Sampling**

In this study the population comprised graduate students of Master of Business Administration (MBA), Bachelor of Business Administration (BBA) and Information Technology (IT) of Pir Mehr Ali Shah Arid Agriculture University Rawalpindi.

In research terminology, population is defined as all members of any well defined class of people, events or objects. It is a large group about which the generalizations are made. It constitutes the largest group from where the sample would be drawn for the study. The method of accessible population was regarded feasible in this study. All available graduating students of three disciplines of MBA, IT and BBA were selected as samples of the study.

5. DATA COLLECTION TOOLS

A questionnaire was designed to investigate the attitude of students towards online assessment. It contained thirty items of Likert-type scale. The items focused the three domains of learning: Cognitive, Affective and Psychomotor. A dry run was done on a small sample of MBA students, a typical department of the sampled ones. Some modifications were effected.Judgemental validity of an expert group was followed to establish its suitability. Institutional approach was adopted to collect the empirical data. The management of the three sampled Departments appreciably cooperated and made their graduating students available. The researcher explained purpose of the study, design of the instrument, time limit and method of their valuable responses .The questionnaire was administered to the three groups of the three departments separately. Where considered necessary individual explanation was provided. The completed questionnaire was collected by personal administration. Thus the field based data of 102 respondents of the sampled groups was collected in June 2010.

6. DATA ANALYSIS

The percentages of responses were collected and well presented in the form of a cumulative table. Both quantitative and qualitative analysis of the responses was focused together. An innovative approach was generated to describe briefly the personal characteristics of the respondents; before analyzing the empirical data. This was regarded necessary to see the background, the gender participation and associated characteristics.

The sampled population was based on three disciplines .42(41.2 percent) are from MBA group.36 (35.3 percent) were from department of Information Technology.24 (23.5 percent) respondents were from BBA group. The characteristics of respondents, observed from the questionnaire designed to investigate the attitude of graduate students towards online assessment at PMAS-UAAR. There were three note worthy features in the characteristics of respondents .There is high proportion of young age students 97(95 percent: ranging between 20-25 age group), second highest being middle 3(2.94 percent: ranging between 25-30), third age group was senior 2(1.96 percent: 30 up).There was proportion of male and female students in the sampled population which was 66(64.7 percent) were male respondents and 36(35.3 percent) were female students. There was also proportion of background of respondents 55(53.9 percent) belong to rural and 47(46.1 percent) belong to urban. Another proportion was related to on job and without job students 9(8.8 percent) students have jobs and 93(91.2 percent) were with out job. One more key characteristic related to know whether the respondents possessed personal computer. The response was that all 102(100 percent) students owned their personal computer.

7. Findings

Table 1 presented a detailed review of all four crucial components of online assessment.

Table 1 Percentage of responses of students of different academic programs

	Programs			
Components	**MBA**	**IT**	**BBA**	**Total**
Knowledge	41.17	32.29	23.52	99.98
Interest	41.17	32.29	23.52	99.98
Skills	41.17	32.29	23.52	99.98
Students' Affordability	41.17	32.29	23.52	99.98

The questionnaire was consisted of 30 items which were distributed among four major components. The ***Knowledge,*** the first component covered different areas of online assessment like learning through print media, pace of learning and switch over to online assessment, knowledge of types and purposes of test, knowledge of various tests, e-learning for teaching, e-teaching for learning, awareness of the length of diagnostic test, ready to take risks, Cost effective and powerful tests. Against all these items, 41.17 % cases of MBA, 32.29% cases were reported by IT while 23.52% students of BBA reported their responses against each item.

The second component, ***Interest*** covered shifting to e-learning and online assessment, Interested in online assessment, teacher feedback and tools and types of online assessment, take the graded course, tutoring by peer or cross age group, mastery or competency learning, agreeable to norm-referenced test, ready to take risks, opt for diagnostic testing, avoiding high stake risks. The third component comprised of very crucial component that was ***Skills,*** included manages the time and energy for interaction, tutoring, managing, simulation, enrichment, creating websites, and logo, reduce the short comings. Finally the fourth components reported same percentage of cases in all three disciplines, it consisted of students' affordability of time and cost concerning directly to online assessment. Overall percentages against these four components was 99.98, which showed that students all three discipline possessed required knowledge, great desire and motivation, strong skills in different online faculties and lastly, economic and time affordability of online assessment. They favored the online system of assessment and expressed the manageability.

8. DISCOURSE ANALYSIS, CONCLUSIONS AND RECOMMENDATIONS

Education is an innovative and challenging endeavor. It is human undertaking. The systems are built on intensive research and awareness of high risks involved in the process of change. With all these challenges, innovations are undertaken for providing the way of change. The change is always demanding, calculated and progressive. The developed systems which can afford high technology, high skill and built-in remedial systems can currently undertake such offerings. In the society of developing character such as Pakistan and others will have to take a calculated decision. Start has to be made from somewhere.

Pir Mehr Ali Shah Arid Agriculture University Rawalpindi has already undertaken substantial steps and initiatives in compiling student scores electronically. The teachers have some knowledge to report student performance and their assessments through centralized system to the examination department. Thus the institution has the potentialities to undertake such innovations .With these positives, the system has to be constructed very cautiously and skillfully. It would require developing the faculty programs in e-learning, e-teaching and online assessment. On management side physical facilities and equipments will have to be explored and provided. Student attitudes provide the supportive perceptions. The faculty perspectives and the training would equally be graded trainings was offered.

Although there were gaps in the communication of student's responses, yet they were cognizant of this technology.

The system has to be carefully designed so that the program should not be regarded as a distant learning and leaves the gaps of interactive education associated with formal learning or face-to-face learning process. This would be important in constructing the program. The system is very challenging in other perspectives. The teachers would require a high level training program in test construction of high order level. Most of the teachers would lack this ability .Strong institutional support would be essential.Concruently graded training programs to the student population in testing technology would also be necessary. Institutional change from concept building to the process of change along with training and education would be another domain for system change.

The following major conclusions were drawn up:

1. Students of all the three disciplines wanted to shift to electronic media for promoting education at their own pace of learning.
2. The high proportion of the students favored to familiarize with various kinds of testing systems from entry to exit in terms of their purposes, values and benefits for demonstrating their progressive attainment instead of the conventional system of testing with limited opportunities of in-built progressive benchmarks.
3. For continuous interaction with institution, most of the students were willing to manage time for interactive process of online assessment as a component of e-learning and e-testing. In this context they were fully supportive of undertaking bridging courses to accelerate their abilities.

Perceived in the context of findings, conclusions drawn and critical analysis made, following recommendations were formulated:

- Students are intrinsically interested in online assessment. Their momentum may be recognized in the age of technology.

- The global research yields that the technological innovations may be started with adequately equipped and resourceful department of the university. In this perspective, the institution of Information Technology Pir Mehr Ali Shah Arid Agriculture University Rawalpindi would be an appropriate department in providing the technical services and the compilation of the results. The professional support in e-learning and online assessment in test construction, process of test standardization, graded training programs for students and faculty development may be executed by the Division of Continuing Education Home Economics and Women Development.
- A leading institution in international context in online assessment system may be identified for the development of institutional linkage with the University.
- A frame work suggesting Logistic and Operational aspects has been generated. For introduction of online assessment system in the University, further studies in testing of the framework and need assessment may be undertaken.

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