

STUDENT'S PERCEPTION OF DIGITAL ASSESSMENT SYSTEM OF COMMERCE PROGRAM

Jyoti Harchekar,
*Assistant Professor, Management Department, Tilak Maharashtra Vidyapeeth,
Mukundnagar ,Gultekdi pune -37*

Mrs. Mugdha Dani
*Assistant Professor, Management Department, Tilak Maharashtra Vidyapeeth,
Mukundnagar , Gultekdi pune -37*

Abstract

The use of computer-assisted assessment (CAA) is growing for many purposes. Although computer-based assessments are growing in use, there is a lack of research on the expectations of students of online evaluation in general and classified areas in online assessment systems. The research sought to explore the expectations in graduates about the use of CAA and to examine the ability to use student input invalidating the test. Participants were students of TMV, commerce. Participants reported on the electronic assessment system's efficacy. Descriptive analysis of the questionnaire showed that a randomized question order, item analysis of the questions were the most prominent features of the online evaluation system. Computer friendly youngsters embrace these schemes.

Keywords: *Computer-assisted assessment (CAA), Online Examination, Assessment, digital assessment system, and ICT*

Hypothesis:-

- 1) Online Examination is better than a pen and pencil system of examination.
- 2) Online Examination is more systematic.

Objectives:-

- To understand the Online Examination System.
- To note the viewpoints of Students regarding the online examination system.
- To understand the ease of operating online examinations.

Introduction:

An E-Exam (e-exam) is a timed, supervised, summative evaluation carried out using a standardized operating system running each candidate's own computer. Such tests have advantages over paper-based tests and may include new multimedia, simulation, and software test items that give greater validity to professional work practices. E-Exams fall into the e-Assessment category, where students demonstrate their academic achievement using computers. Within this wide spectrum, e-Exams form a distinct use of technology where a computer called 'bring your own device' (BYOD) is started (booted) from a USB flash drive.

Electronic examinations offer advantages such as ease of marking, reduced need to read illegible handwriting, time and raw material savings, and reduced overhead logistics costs.

Digital Examination Program is a technology-driven way to simplify examination practices such as identifying test habits with query banks, determining inquiry timer, objective / subjective questions lines, the paperless output of examinations via machine or mobile devices.

The system's aim is to establish an Online Assessment System, which is used to assess the students' domain knowledge, and employees with regard to the specific technology. Time-consuming process and error-prone due to human limitations is the manual procedure used for conducting the examination.

It is named electronic assessment performing tests and checking on the Web. The best part of online testing is that the examiner may start the check from anywhere using a tablet or a Computer.

As it is easy to access at any time, the internet-based review method is becoming popular. The digital assessment tool used for student identification, document management, and evaluation, as well as for exam performance.

Digital Test requires e-examination. Already a day of internet testing, taken in various ways, such as web-based, mobile-based, even takes as a LAN / center-based test. The teacher will build their question bank in online analysis and use the question bank query to produce test as appropriate — study video as well in several online test apps providing an alternative to share study material.

We also get the following future by electronic exam software:

- The teacher can do detailed analysis such as subject matter wise, lesson wise, examination wise, problem wise, etc.
- A teacher can take the mock test when they need online testing to take time-bound testing or timer-bound testing as well as when questioning the need for wise timer bound.

Background:-

In recent years, developments in ICT have led to an increase in the range of Internet tools that can be used for learning and research. Some have achieved widespread adoption (e.g., the simplicity with which e-mail was adopted); some either seem to prefer limited uses or are less common than one might have expected at first (e.g., video conferencing). Machine-assisted assessment is one technology that is becoming more popular. The word machine-assisted evaluation may include some form of computer use in the assessment of person expertise, skills, and abilities. Computer Assisted Assessment (CAA) includes a variety of tasks, including the collection, labeling, and review of all or part of the student evaluation process utilizing stand-alone or networked devices and related technologies. Earlier research has shown a number of reasons for incorporating CAA in a course, sometimes culminating in the use of CAA as a combination of factors (Bull & McKenna, 2001).

Some of the main reasons cited are

- Expanding the range of knowledge assessed;
- Increasing feedback to students and lecturers;
- Extending the range of assessment methods;
- Increasing objectivity and consistency;
- Reducing marking loads; and

- Supporting administrative efficiency;

Purpose of the Study:-

The use of computer-based measurement has increased significantly over the last decade (Stephens & Mascia, 1997). Still today, little has been written on the opinions of students on computer-based assessment, In particular, the TRIAD system based on more complex interactions (Mackenzie, 1997). Since some of the published works deal with the prevalence of computer anxiety among students, the use of computers for evaluation was open to question

Given the history of CAA, we were interested in examining the impact on the learning process of incorporating CAA and further exploring students ' interpretation. The aim of the research was to obtain an understanding of students ' views of the use of CAA and to examine the opportunities for student input while validating the evaluation.

Significance of the Study:-

There are many reasons why the use of computer-based assessment is increasing. Examples include education entrance exams, military training exams, and professional group certification exams. Although the use of computer-based examinations is increasing, there is not enough research on the perceptions of students about online evaluation in general and on categorized fields of online evaluation systems. Such research would provide detailed information on which parts of the online assessment systems are important, or which parts of the systems should be developed or revised for better results.

Research Methodology:

- Questionnaire Method for collecting data from the sample selected

Measures:-

All the constructs were measured by adapting previously published scales. The questionnaire was in two segments. Segment A captured information about the respondents, such as information regarding - Gender, Age, and nature of using the internet.

Segment B captured information on independent variable: – Overall framework and operation levels of the system are clear and smooth, Overall configuration color and background is normal harmonious for the system, Overall screen layout and window design of the system is appropriate, Log-in interface is clear and easy to operate, Register interface is clear and easy to operate, It is easy to take an online exam, Ease of use and comfortable, Seeing left time makes me progress better, Assessment of Online Exam is fair, Cheating is difficult, It helps me to better understand my growth and improvements in the course by using the system, It helps me to learn this course by using this system, Better than paper-and-pencil form, Is Online Exam more systematic?

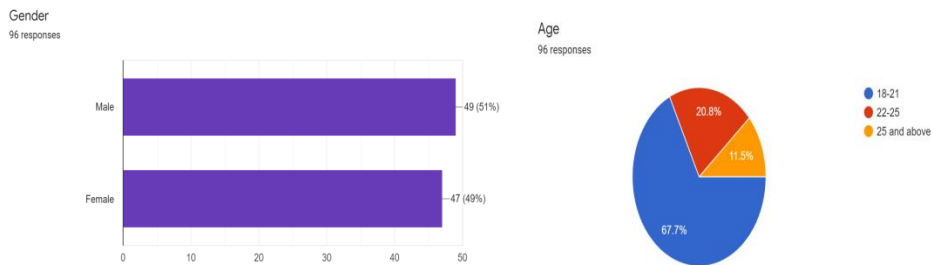
Data Analysis:-

Data were analyzed through descriptive statistical methods with mean and standard deviation; thus, it can be concluded that the instrument used in this study was consistent and reliable.

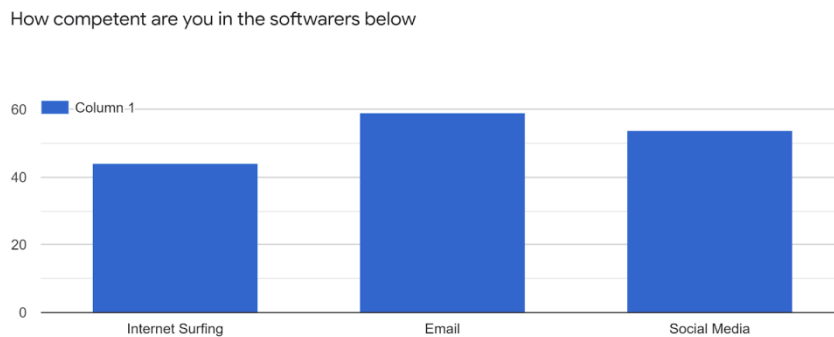
Table 1 Demographic Characteristic of Participants

| Gender | N | % |
|--------|----|-----|
| Male | 49 | 51% |
| Female | 47 | 49% |

| Age | N | % |
|--------------|----|-----|
| 18-21 | 65 | 68% |
| 22-25 | 20 | 21% |
| 25 and Above | 11 | 11% |



The third general question was asked to the student to know the usages of students regarding various software.



Participants were commerce students in the Department of Management, Tilak Maharashtra Vidyapeeth, Pune, who have enrolled in the course Commerce. Ninety-six students filled the questionnaire their demographic characteristics are shown in Table 1.

A questionnaire has been given to students to investigate the students' perceptions of the online assessment. Every instrument used in this analysis is listed below.

This questionnaire was structured to obtain information about the students' application awareness and previous online assessment experience and their review of specific components such as user interface, learning method results, and use of the website's online evaluation system.

The questions were; Likert five-point scale items from strongly agree, agree, neutral, disagree, to strongly disagree. Reliability refers to the time permanence of the responses. To assess the reliability of this questionnaire, a pilot study with five students randomly selected from the population was undertaken.

Interpretation:

After the Online Examination, the evaluation survey was conducted. From the 96 Commerce students who took the online exam were distributed the paper-based questionnaire. Collated responses, percentages and mean values are calculated.

Main Findings, Observations, and Conclusion:

Table 2:- Evaluation of User Perception towards Online Assessment

| Evaluation of User Perception towards Online Assessment | Agreement of Students | | | | | Mean | SD |
|---|-----------------------|----|----|----|----|------|------|
| | 5 | 4 | 3 | 2 | 1 | | |
| 1) Overall framework and operation levels of the system are clear and smooth | 20 | 41 | 24 | 09 | 02 | 2.29 | 0.97 |
| 2) Overall configuration color and background is normal harmonious for the system | 18 | 50 | 25 | 02 | 01 | 2.09 | 0.73 |
| 3) Overall screen layout and window design of the system is appropriate | 15 | 52 | 25 | 04 | 00 | 2.19 | 0.74 |
| 4) Log-in interface is clear and easy to operate | 11 | 42 | 21 | 18 | 04 | 2.60 | 1.05 |
| 5) Register interface is clear and easy to operate | 18 | 57 | 16 | 02 | 03 | 2.11 | 0.84 |
| 6) It is easy to take an online exam | 39 | 37 | 17 | 02 | 01 | 1.84 | 0.86 |
| 7) Ease of use and comfortable | 22 | 54 | 17 | 03 | 00 | 2.01 | 0.73 |
| 8) Seeing left time makes me progress better | 08 | 40 | 28 | 06 | 14 | 2.77 | 1.17 |
| 9) Assessment of Online Exam is fair | 09 | 48 | 20 | 10 | 09 | 2.55 | 1.08 |
| 10) Cheating is difficult | 26 | 36 | 18 | 14 | 02 | 2.27 | 1.08 |
| 11) It helps me to better understand my growth and improvements in the course by using the system | 19 | 56 | 18 | 02 | 01 | 2.06 | 0.75 |
| 12) It helps me to learn this course by | 15 | 60 | 19 | 02 | 00 | 2.08 | 0.66 |

| | | | | | | | |
|---------------------------------------|----|----|----|----|----|------|------|
| using this system | | | | | | | |
| 13) Better than paper-and-pencil form | 38 | 47 | 09 | 02 | 00 | 1.74 | 0.71 |
| 14) Is Online Exam more systematic? | 15 | 46 | 13 | 06 | 16 | 2.60 | 1.30 |

The objective of this study was to explore the experiences of students on the use of online assessment. Descriptive questionnaire analysis showed that the system's most prominent features were eased to take an online examination, better than paper-pencil exams, and it helps in better learning of the course. Overall, the participants agreed on the online examination system's effectiveness.

Findings:-

This section shows the results of the study. Table 2 reports the means, standard deviations, and the application degree of variables. The result of descriptive statistics indicates general agreement of the students on the ease of computer examination system and better than paper pencils the traditional mode of examination.

In conclusion, the two developed hypotheses in this study are supported, as the findings of the statistical analysis indicated significant relationship ease of computer examination system and better than a paper-pencil mode of examination.

Hypothesis Testing:-

As per the table No. 2 the results shows that the hypothesis which are drawn are tested with the help of means, standard deviations, and the application degree of variables which shows that the hypothesis are tested and both are accepted.

Thus the hypothesis stands proved.

Conclusion:-

Based on our review and study results, we anticipate that the familiarity of computers and evaluation tools are the most fundamental factors in the perception of online evaluation; in general, higher-level students will adapt most quickly to any new evaluation approach (Watson, 2001) and will quickly develop test-taking strategies benefiting from the new approach. Because students are from the Department of Commerce Education, therefore, in the current investigation, the higher-attaining students probably accommodated faster and thus benefitted more from computer-based assessment. Once the computers are fully familiar to all students, familiarity should become less important. Although students had been trained on how to use the online assessment system before the exam, some felt anxious at the exam. To avoid such problems, students must be comfortable with the online assessment system, and a warm atmosphere should be in the context in which they are taking the exam. The use of electronic assessment requires close collaboration between academic and technological units. Next, it takes extra effort to prepare queries for online environments. Questions will measure the level of information which is expected. Teachers should be instructed on how to administer an online course and ask questions over the Internet.

Administrative units will embrace such an ecosystem of teaching-learning and plan the framework needed for the program. Ultimately, this type of system of appraisal operates by way of technological devices: machines, network devices, etc. Computers must be sufficiently powerful to run the Web pages, and the server should be stable.

References:-

- [1] Beaton, A., & Zwick, R. (1990). The effect of changes in the National Assessment: Disentangling the NA EP 1985-86 reading anomaly. Princeton, NJ: Educational Testing Service.
- [2] Brown, S., & Knight, P. (1995). Assessment in higher education. London: Kogan Page.
- [3] Bugbee, A.C. (1996). The equivalence of paper-and-pencil and computer-based testing. *Journal of Research on Computing in Education*, 28, 282-299.
- [4] Bull, J., & McKenna, C. (2001). Blueprint for computer-assisted assessment.
- [5] Clariana, R.B. (1997). Considering learning style in computer-assisted learning. *British Journal of Educational Technology*, 28, 66-68.
- [6] Haas, C., & Hayes, R. (1986). What did I just say? Reading problems in writing with the machine. *Research in the Teaching of English*, 20, 22-35. Karakaya, Z. (2001).
- [7] Development and implementation of an on-line exam for a programming language course.
- [8] Ankara: Metu. Watson, B. (2001). Key factors affecting conceptual gains from CAL. *British Journal of Educational Technology*, 32(5), 587-593.
- [9] Lesh, S., Guffey, J., & Rampp, L. (2000). Changes in student attitudes regarding a web-based health profession course (Reports – Research HE032863). U.S.; Arkansas: Higher Education.
- [10] Lewis, B., MacEntee, V., DeLaCruz, S., Englander, C., Jeffrey, T., Takach, E., Wilson, S., & Woodall, J. (2005). Learning management systems comparison. Proceedings of the 2005 Informing Science and IT Education Joint Conference.
- [11] Kandies, J., & Stern, M. B. (1999). Weaving the Web into the classroom: An evolution of Web enhanced instruction. Paper presented at the Teacher Education International Conference, San Antonio, TX. (ERIC Document Reproduction Service No. ED 432270).
- [12] Sindre, Guttorm (November 2015). "E-exams versus paper exams: A comparative analysis of cheating-related security threats and countermeasures". Researchgate. Norsk Informasjonssikkerhetskonferanse (NISK). Retrieved September 13, 2016.
- [13] ["Welcome to Electronic Examinations"](http://www.eexams.org). www.eexams.org. Retrieved 2016-08-10.
- [14] Lane, Bernard (18 November 2009). "Laptops pass the big exam". The Australian. Retrieved 10 August 2016.
- [15] Geeves, Phil (19 April 2011). "ITS315108 exam arrangements in 2011". Office of Tasmanian Assessment, Standards & Certification. Tasmanian Government. Archived from the original on 11 January 2017. Retrieved 10 August 2016.
- [16] ["Transforming Exams - A scalable examination platform for BYOD invigilated assessment"](http://www.transformingexams.com). www.transformingexams.com. Retrieved 2016-08-10.
- [17] Jump up to: a b c Wibowo, Santoso; Grandhi, Srimannarayana; Chugh, Ritesh; Sawir, Erlenawati (September 2016). "A Pilot Study of an Electronic Exam System at an

- Australian University". *Journal of Educational Technology Systems*. 45 (1): 5–33. doi:10.1177/0047239516646746. ISSN 0047-2395.
- [18] "Digabi – timetable" (in Finnish). Archived from the original on 2017-03-12. Retrieved 2016-08-10.
- [19] "digabi/digabi-os". GitHub. Retrieved 2016-08-10.
- [20] Alfredsson, Frey (2014). "Bring-Your-Own-Device Exam system for campuses". Nordunet 2014. Retrieved 10 August 2016.
- [21] Frankl, Gabriele; Schartner, Peter; Zebedin, Gerald (2011-10-19). "The "Secure Exam Environment" for Online Testing at the Alpen-Adria-Universität Klagenfurt / Austria Why Online-Testing?".