

PERCEPTION OF STUDENTS AT HIGHER EDUCATION INSTITUTIONS TOWARDS ONLINE ASSESSMENT: AN EXPLORATORY STUDY

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ABSTRACT

Assessment is an essential piece of the teaching-learning puzzle. Since decades, there has been a tussle between which modes of assessment, traditional or online would best meet the goal of learner's evaluation. By the 21st century, blended mode of assessment had already made its foot in the door for many educational institutions. However, it was the pandemic which tilted the scale globally towards the online methods of evaluation and assessment. This paper attempts to explore how students perceive the online assessment, they have been subjected to. The data was collected through an online survey conducted in the month of October. 120 students between the age group of 18-23 years studying in higher education institutes in Delhi (Undergraduates and Post Graduates) participated in this study. The sample was purposive as the responses from only those who had been asked to undergo online assessment during the pandemic were selected. The simple percentage distribution was used to analyze the information provided by the participants. The results highlighted apprehensions of students while they are being assessed online. It also shares insight about the traditional modes of assessment as well as the opinion of students regarding the digitalization of education. These results would help us in recognizing the hurdles and discovering the positives of online assessment.

Keywords: Assessment, Traditional, Online assessment, Technology.

1. INTRODUCTION

Assessment is a reflective process that comprise systematic gathering of data, organising it in an orderly manner, thus making it easier and open for interpretation. Learning and teaching activity are incomplete without assessment. It helps in shaping the instructional decisions to be carried on everyday basis and also manages to point out the gaps in classroom instruction along with areas of potential. Students obtain precise feedback to maintain and excel learning. Assessment tools are even needed by teachers to shape their teaching pedagogies to accord the learning styles the students (Pierce, 2020).

Being an invariable part of all curriculums, assessment methods have evolved along time. Traditional methods of assessments were linear, teacher centric, paper pencil based. Over the last few decades, blended and purely online methods of teaching and assessment have rapidly taken over the educational scenario. India along with its global counterparts has taken multiple initiatives to welcome the e-revolution into the field of education. According to a report by KPMG and Google, the factors that have accelerated the growth of e-learning in India are growth in Internet and smart phones penetration, low cost of online education, traditional model failing to fulfil demands and the digital friendly government policies (Bansal, 2017). Recently the pandemic shift along with the National Education Policy 2020 has also tilted the bars towards online and digitalization of education in our country. The new policy recognises the advantages of technology and address the issue of digital divide by extending its outreach. According to the policy, 'assessment frameworks encompassing design of competencies, portfolio, rubrics, standardized assessments, and assessment analytics will be created for online assessment and examinations. Studies will be undertaken to pilot new ways of assessment using education technologies focusing on 21st century skills', (NEP, 2020).

One of the merits of online assessment methods is that they provide the facilitator an extensive array of techniques to gauge the performance of the students. Virtual discussion boards, concept mapping, individual projects, group activities, e-portfolio assessment, peer assessment, student feedback and self evaluation are multiple ways of harnessing the benefits of online methods (Benson, 2003; Reeves, 2000). However with plethora of positives, there are certain challenges of this digital pathway. In an article by Sunil Kumar in 2015, adaptability struggle, technical issues, computer literacy, time management and self motivation were cited as the five basic challenges a learner faces while being assessed online. Also during this technology driven assessment the instructors too need a sound technical knowhow and resources as well as time to plan the instructions. There are several classifications for assessment based on different parameters (Table 1.1).

The table 1.1 highlights the major difference observed between traditional, online and blended means of assessment.

Characteristic	Traditional Assessment	Online Assessment	Blended Assessment
Mode	Face to Face	Online	Combination of face to face along with ICT driven methods
Infrastructural Aid	Paper Pencil	Digital Equipments – Computers and smart phones	Amalgamation of traditional and digital aids
Tools and Techniques	Less options are available	Variety of online applications can be gauged	Variety of offline and online methods can be explored
Academic Honesty	Can be assured	Difficult to judge	Can be assured
Time	Time taking as it is done manually	Saves time as it can be mechanically achieved	Time can be managed well
Discussion/Feedback	Delayed but direct	Immediate but indirect	Sufficient feedback can be provided

Therefore, there is no magic route towards attaining digitalization and incorporation of ICT in education and assessment. There are pros and cons to both types of assessment methods. A balanced approach between traditional and online assessment is the key. While deciding what assessment techniques to be employed, the instructors need to understand the content and context of the audience. Hence, a blend of both assessment techniques might be useful (Dikli, 2003).

2. This Study

To gauge the success of any learning instruction, robust assessment measures are the key component. Assessment not only provides information about what the students have learned (Summative Function) but also explains how well they have aced it (Formative Function) or what are the gaps that demand attention (Diagnostic Function). For an optimal teaching-learning environment, it is imperative to design and keep the assessment methods in consonance with the teaching-learning processes. With alterations induced in the educational scenario by the Covid-19 pandemic and the onset of lock down, it was imperative to assess the perspective of students regarding the online assessment. Certain research questions addressed in this study were:

- What kind of online methods and assessment techniques was being used by the education institutes?
- Do ICT skills help a student with their online assessment?
- Are online assessment methods a fair measure of an individual's ability?
- How do students feel about the traditional methods of assessment?
- Is health affected due to online assessment?

3. Methodology

3.1 Method

The descriptive survey design was utilized to describe various aspects of the online assessment. The researchers chose this design to understand the phenomenon from the perspective of students who had undergone the online assessment mode in recent times. The main objective was to gain a standpoint regarding the issues related with online assessment, its accessibility, and feasibility among the learners.

3.2 Participants

The criteria of inclusion for this study were based on two factors, firstly the participant should be a student enrolled in an ongoing higher education program that is they should be pursuing their graduate, post-graduate or some professional degree program. Secondly, the participant must have participated in the online mode of assessment to be considered as the sample for this study. Therefore a sample of 120 learners was chosen using a purposive sampling technique.

Table 1.2 Demographic profile of the participants (n=120)

Stream	Number	Percentage	Course	Number	Percentage
Social Science	27	22.5 %	Graduates	65	54.2%
Science	67	55.8%	Post Graduates	46	38.3%
Commerce	14	11.7%	Other Courses	9	7.5%
Professional Courses	12	10%			

3.3 Measure

The survey was designed and constructed after a thorough examination of the literature available on the topic. This questionnaire included seventeen closed-ended questions. The initial questions were framed to understand the demographic profile of the participant and to ensure if the participant is acquainted with the online methods of assessment. The remaining questions were based on the issues and challenges they may have experienced with the online mode of assessment.

3.4 Data Collection and Analysis

Due to the pandemic, the most efficient approach to administer this survey was through email using a Google form. The survey was conducted in the month of September, assuming that most of the participants must have been through their assessment for the previous semester. The form was sent to more than 200 participants and 140 responses were received. As the sampling was purposive, forms with redundant information were discarded, thus reducing the number of participants to 120.

The raw data in form of filled questionnaires were collected from the participants. The responses were electronically transferred from the questionnaires into an excel spreadsheet. Each question number was put under a column heading and one row was used for each participant's responses. Once all the data from the questionnaires were entered into the spreadsheet, it was checked for accuracy and the errors were rectified. The researchers then with the help of Microsoft excel 2009 calculated how many people selected each response and displayed the final data using tables and graphical representations.

4. Result and Discussion

4.1 Online Assessment Techniques

Table 4.1 Common Online Assessment Methods

Assessment Method	Number of Participants	Percentage
OBE – Open Book Examination	61	50.8%
Viva Voice through video Conferencing	75	62.5%
Google Forms/Multiple Choice Questions	94	78.34%
Quizzes	63	52.5%
Online Assignments/Essay type Questions	100	100%
Practical work	04	3.33%

All 120 participants had attempted one or the other form of online assessment either as assignments or as exams during the recent pandemic induced lockdown. Online assignments in form of PowerPoint presentations, video making, or drafting word documents were taken up by all the respondents. A large number had experienced filling up the Google forms in form of quizzes and multiple-choice questions. More than half of the respondents had attempted the open book and three-fourth of the sample had attempted the viva voice examinations online. The least attempted or assigned item was practical work (3.4%). Thus, we can clearly point out that taking upon practical work would still be a challenge in these times of virtual teaching. Also, the quality and result of assigned work would largely depend on the manner and the context in which the instructor has framed it. Some studies support that online tests with multiple-choice questions stimulate surface learning while online assessment in a form of an essay stimulates deep learning (Zlatović et al., 2015). Assessment based on problem-based learning, valid learning tasks, and real-life studies is marked powerful as they evaluate students' ability to merge learning across different domains of knowledge and capabilities that are required in a "volatile and rapidly transforming world" (Scott, 2016).

Only one-fourth of the participants (n=30) were acquainted with online tasks before the pandemic. While 35% (n=42) were never asked to submit any of their work through the online mode before the imposed lockdown. 40%

of participants (n=48) were following a blended mode of assessment, wherein they were asked to submit their work offline as well as online. Hence, we can conclude that the pandemic has shifted both learning and assessment towards the online mode.

The data clearly showed that 60% of participants (n=73) did not receive any kind of training or assistance from their institutions/colleges before they were asked to adapt to the online mode of assessment while 47 participants confirmed that they did receive training towards the online mode of assessment and submissions from their alma mater. Training and hand holding is definitely required at this time when the online medium has been pushed hard into the lives of the students. Guiding them towards the changed system will reap better results as compared to lack of training which could significantly reduce the expectations students could have towards the online learning (Kim & Bonk, 2006).

4.2 ICT Competency

Table 4.2 Impact of Computer Literacy/Skills

ICT skills help in scoring better	Number of Participants	Percentage
Yes	48	40%
No	17	14.2%
Output remains same	55	45.8%

More than half of the participants said that the output over an assignment would remain the same for a student even if she/he has excellent ICT skills. However, a large number of participants (n=48) differ and confirmed that an individual's ICT skills would positively affect their performance output. Students with different knowledge, skill set, and confidence levels while using digital platforms may affect their educational outcomes and assessment, therefore students need to be given some preparation so that they are not at loss due to the technology or procedures employed (Stödberg, 2012).

When asked if they feel their computer literacy was sufficient for their attempts toward online submissions, 60.8% (n=72) confirmed positively by choosing they were proficient. However, 31.7% of participants said they have somehow managed the task while 8 participants held that they were still struggling with the process. It is, therefore, important that the learners are well prepared towards the medium of their assessment as this would directly impact their performance and grades (Gewertz 2013).

Table 4.3 Fairness in online assessments

Judging capabilities through Online Assessment	Number of Participants	Percentage
Fair	31	25.8%
Unfair	38	31.7%
Can't decide	51	42.5%

Thirty-one participants agreed with the online mode of assessment being fair and justified. On the other hand, more than one-fourth of the participants felt it was unfair to judge one's capabilities based on their performance online. There were about 42.5% of participants who were unsure about assessing an individual's potential based on their submissions made online. There are multiple factors involved when an individual is assessed over his/her online submissions. Comprehensibility of content, poor connectivity, lack of technical support, proper guidance, and support materials for their online learning can digress the performance output in many cases (Hasan & Khan, 2020). Also, using unfair means during an online test is not a new phenomenon. Researchers point out several ways that students use while attempting online tests do often come under cheating. This could include participants taking these tests as an open book exercise or using many computers at one time for looking for fast answers (Harmon, Lambrinos, & Buffolino, 2010; Fontaine, 2012).

4.3 Traditional Methods

Table 4.4 Preferred mode of assessment

Mode of Assessment	Number of Participants	Percentage
Online	6	5%
Traditional	18	15%
Blended	96	80%

The majority of the participants felt that they will be most comfortable with the blended model comprising both, the traditional and the online methods of assessments. However, few participants confirmed that their comfort zone lies within the traditional paradigm of assessment and even a smaller sample (5%) sample shared that they found the online methods, convenient and student-friendly. All the methods have their pros and cons and effective

assessment demands a balanced approach. On one hand, it is proven that the technology-based assessment provides an enriching and interactive environment to the learner than the paper-pencil based methods (McKenna and Bull, 2000; Daziel and Gazzard, 1999). Such spaces of learning are imperative for harnessing the higher-order knowledge and skills among the students. While on the other hand, we cannot let machines overtake the humane aspect associated with learning. Studies have confirmed that when auto-generated feedbacks without personal inputs are provided, they may affect the learners negatively (Craven et al. 1991). A study conducted by Khan and Khan (2019) corroborates that participants felt a disconnect between them and the instructors. The reasons cited were the absence of face to face interaction with the instructor, lack of qualitative feedback, and also at times common feedback to all (Khan and Khan, 2019). It is evident from this study that a large number of participants viewed the blended mode of assessment as the best medium.

4.4 Digitalization of Assessment Practices

Table 4.5 Digitalization of Assessment Practices

Is Digitalization, the future?	Number of Participants	Percentage
Agree	71	
Disagree	20	16.7%
Unsure	29	24.2%

A large number of participants (n=71) believed that the digitalization of education and online mode of assessment will be the future of the Indian education system yet 16.7 % of participants (n= 20) disagreed. A considerable portion of about 24.2% of the participants was unsure about these changes altering the framework of our education system. Additional data regarding their perspective and willingness to continue with the changed mode of assessment substantiates the above finding. When contemplated, if the participants would like to continue with online assessment methods even after the pandemic, 20.8% (n=25) agreed while 24.2% (n=29) disagreed. More than half of the participants (n=66, 55%) agreed with a blended model approach. The participants prefer an amalgamation of technology and the face to face conventional style of assessment than complete dependency on either of the two modes. These unprecedented times may have fastened the wheel when it comes to the online methods, but it has also provided the much-needed momentum towards the goal of digitalizing education. There is no second opinion that to be able to successfully achieve it, we must combine the online (virtual) and offline (F2F) modes of education. The blended or flipped approach towards education will be able to balance between e-education and traditional systems (Palvia et al., 2018).

4.5 Effect on Health

Table 4.6 Dominant feeling while being assessed online

Feelings	Number of Participants	Percentage
Comfortable	45	37.5%
Anxious	31	25.8%
Motivated	3	2.5%
Unsure/confused	31	25.8%
Positive	10	8.3

When enquired about their feeling towards getting assessed online, 37.5% of participants said they were comfortable with this process whereas a large number of participants corroborated that they felt anxious (n=31) and unsure (n=31) about this mode of assessment. Few participants were positive (n=10) and motivated (n=3).

When enquired, a large number of respondents (65.8%) did look at the online methods of assessment as an opportunity to learn something new. However, there were considerable responses that have marked these methods as challenging (40.8%) and burdensome (36.7%). An almost equal number of participants had found this mode of assessment as time-consuming (26.7%) as well as time-saving (28.3%). New methods of assessment would bring a lot of challenges and how an individual looks at them would depend on the external and internal factors towards learning. Therefore, it is essential to provide technical training along with easy accessibility to the infrastructural demands like the device and internet connection the online mode would demand an error-free experience for the learner.

Table 4.7 Impact of Online Assessment on Health

Do Online assessments affect health?	Number of Participants	Percentage
Yes	60	50%
No	12	10%
To a certain extent	48	40%

Only 10% of respondents felt that online work and submissions had no ill effects when it comes to the mental and physical aspects of health. However strikingly half of the respondents 50% (n=60) believed that this mode of assessment may hamper their health and another 40% agreed with them to a certain extent. When enquired about the reasons behind the health issues associated with online assessments, participants had multiple explanations. Almost 90% of participants held the increased screen time a potential factor related to deterioration in health. While 70% of the sample believed, less social interaction and sitting in one place for longer durations is another viable reason to be responsible for ill-health factors. Anxiety, Internet being distractions itself, delayed feedbacks associated with online assessment were few other factors pointed out. The findings of this study were similar to a study conducted with 240 Romanian students regarding their acceptance of online assessment. It was observed that online summative assessments were associated with anxiety regarding several factors such as if the test had been submitted in the correct manner, or if responses got distorted due to technical errors (Kuriakose and Luwes 2016)

5. Suggestions

The samples for the present study were drawn from an urban metropolitan city, rather than the wider population. The impact of this could have been biased in terms of not collecting a representative view of the population, especially students from rural areas. Based on the findings of this study, researchers and policy makers can take apt steps by formulating policies, programs and campaigns for reducing the digital divide and making it assessable for the masses.

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