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Students Assessment in Online and Distant Learning Mode: Challenges & Recommendations

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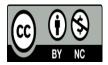
Abstract

The present paper investigates the challenges faced by the teachers in distant and online learning mode. Furthermore, it will provide solutions to the problems faced by the faculty. Methods of student assessment is different in online and distant learning environment than traditional leaning mode. This paper explores the assessment techniques used by the faculty of distant and online universities. The study is exploratory and qualitative in nature. Sample of the study were 20 teachers, 10 from online university and 10 from distant university. Data was gathered using semi-structured interview technique. Each interview was approx. of 30 minutes. Interviews were recorded with the consent of participants. Findings of the study showed that assignments and written tests are the most effective way of assessment. It further revealed that plagiarized assignments, less student involvement, low student-teacher interaction are the main challenges faced by the faculty of these modes. Due to the selected research plan, the results may lack generalizability. As a result of this, the researchers are advised to conduct additional testing on the proposed hypothesis. The paper provides the need for an improved assessment system in distant and online learning modes. It meets the identified need to investigate challenges and problems faced by the teachers regarding student assessment.

Keywords: Online Learning, Distant Learning, Student Assessment, Assignments, Quizzes, Exams, Interview's, Plagiarism, Demotivation, Workshops

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Introduction

Assessment is very important because it has a strong effect on learning. The way teachers use assessment procedures influences the way students perceive the work, class, resources and materials (Brookhart, 1997). Assessment procedures direct the student's attention to the course and content and ways of processing information (Doyle, 1983). Students gave attention and effort to whatever content or skill they thought would be tested. (Black and William, 1998). Therefore, assessment also influences the type of learning occurring. There are many types of assessment procedures. The two main types are formative assessment and summative. Bull and Mckenna (2004) states that summative assessment is used at the end of the course to evaluate the learning of the students and formative assessment is used during the instruction to improve learning of students and to give feedback.

Distant and online learning modes are getting popular day by day because the students of 21st century are growing up with computers, internets, and mobiles. With the advancement of technology, there are many universities who give online education, these are virtual universities, where teachers put material in the internet and assess students' performance through internet using different techniques while the distant mode of institute's basis on activities having little assistance by teachers but material is provided by the institution. Keeping in view these modernism and advancement in technology, Pakistan introduced online education with the establishment of Virtual University of Pakistan and distant education with the establishment of Allama Iqbal Open University. Now there are many institutes who are promoting education in Pakistan through these modes. Many institutes follow the dual mode of model education in which they are introduced distant education courses along with traditional courses and the reason is that there are many who want to educate themselves while doing their job or at home. Admission rate is growing in these modes of learning day by day.

Assessment in online and distant education is different than interactive environment. In online education, the learners are given different assignments or quizzes at different stages of course through the internet. Course assignments, presentations, quizzes and exams are major components of a student's assessment. Online institutes use software for interacting with the students. While in distant education, the learners are given assignments and projects by mail. Chaudhary and Dey (2013), states that assessment in open and distant learning mode ODL is not only meant for students to earn a grade or to certify them, but also equally helpful for monitoring the effectiveness of academic programs and selecting strategies to complete objectives of the institute.

With the popularity of these two modes, there are many challenges faced by the teachers regarding student assessment, implementing IT skills, and about the working conditions as there is no face-to-face interaction with students in these modes. However, these modes are beneficial for poor societies and the working class who want to improve their educational status and skills without leaving their homes, jobs and families. (Akhtar and Akbar, 2015).

As cited in Wanes, Cowey and Jones, littleerature has said that e-learning has many benefits over interactive teaching, it increases the quality of teaching and learning (Lao and Gonzales, 2005; Henderson, 2003) but there is very less research on the challenges faced by the teachers especially regarding student assessment. However, when instructors teach through e-learning they face many challenges regarding technology, media (Brzycki and Dudt, 2005) and time. It is assumed that teachers also face some challenges regarding assessment of students. Therefore, this study is designed to identify the assessment practices and problems regarding student assessment by online and distant learning modes.

All over the world, Distant and Online learning have taken place of traditional learning because of the advancement of technology. E-learning has gained so much popularity that now it's open in 50 developing countries with 1000 institutions (Sharma & Kitchens, 2004). Watson & Kalmon, (2006) states that there are 24 virtual schools in United States. Same is the case

with colleges and universities in United States and with other countries (Hussain, 2012). Americans first virtual university is the Regents College of New York. And The University of London was the first university to offer distance learning degrees in 1828.

Previous studies regarding assessment process

In an online and distant learning environment, there is a lack of face-to-face interaction and physical space for student and a teacher, so it leads to different ways of student assessment. (Arend, 2006). Therefore, students were awarded grades based on assignments, quizzes, projects, papers and discussion contributions (Jarmon, 1999). As cited in Ali, Ramay & Shahzed (2011), in online education, instructors are the ones who create assignments, quizzes and handouts for students. Students interact with the instructors throughout the course. So, teachers must understand how students learn, and how they process and perceive information. Students have individual differences, different learning styles. Instructor must understand and identify the learning styles of the students. Because it will help them to plan teaching strategies according to the student's level (Zapalska and Brozik, 2006). Furthermore, it is difficult to assess the students' performance individually through online and distant mode. For this, instructors must identify different levels of students to develop the marking criteria of assignments and projects (Banerjee and Brinckerhoff, 2002). To achieve this purpose, the instructor must monitor all the activities of the students on daily basis, provide them effective feedback, persuade group learning and encourage them to participate in online discussions (Conaway, Easton and Schmidt, 2005). Conrad (2004) brings out four areas of expertise needed to be an effective online instructor: pedagogical, social, managerial, and technical.

Akhtar and Ali (2016) conducted a study on "Analysis of Assignments' Assessment for Distance Learners and their finding shows that majority of the students do not follow the rules of assignment. They have an assumption that assignment isn't necessary to appear in the examination, so they don't take it seriously. Ozudogru (2021), have highlighted issues related to teaching in online learning mode in his study such as limited time availability for live courses, difficulties in establishing communication with peers, internet unavailability, technical issues like sound problems, and a lack of communication with instructors. Gurung (2019), presented a challenges faced by the teachers in online teaching learning during COVID-19. They found out that the major problem that teachers faced in online learning mode is the teaching of numerical subject and reaching the students in remote area.

Das (2022) conducted a study on online learning challenges and found out that online instruction, particularly in fields like finance and accounting, faces the challenge of sustaining student motivation and participation during extended lectures. Distractions may arise from the complexity of numerical applications and a dearth of engaging activities, leading to reduced focus in live sessions. To tackle this issue, educators should acknowledge the importance of integrating diverse tools such as podcasts, videos, discussions, articles, and blogs. Furthermore, incorporating a range of assessment methods like tests, quizzes, and project-based learning activities is essential for addressing these obstacles and improving the overall quality of online learning.

Studies on challenges of online and distant learning

Kearns (2012) found in their study that the main challenges for the instructors in elearning is the distance between student and teacher, workload, time management and the use of technology for communicating with students. He further states that to do a fair and good assessment, students should be available to the teacher so they can collect evidence of their performance and instructor must provide valuable feedback to students. Akbar and Akhtar, (2015) states that in distant learning mode, assignments are the major component for formative assessment and exams are the major component for summative assessment. They concluded in their study that assignments are of good quality, covering complete course and assignments of questions motivate or forced students to go through the whole content before writing it. Their

study also highlights the validity of questions because the exams questions were not evaluated by the experts before finalizing them.

Hussain (2015) conducted research on states of instructional paradigm at virtual university of Pakistan. He concluded that in Virtual University, learners are actively involved in the learning process through assignments and projects, and it boosts confidence and enhances intellectual ability of learners through case studies, assignments and projects. However, they do face some problems regarding electricity, time management and isolation.

Alam (2007) conducted research on "Contribution of Virtual University in the field of Higher Education in Pakistan and recommendations to gain Maximum advantages of this medium of Education". In his study, he identifies some problems regarding distant and online education, and these are time management, security risks of getting the mail id hacks, reading problems etc. Amoaka (2018) found out in his study "Formative assessment practices among distance education tutors in Ghana" that the use of oral questioning 'student self-assessment' and 'tutor made test' are the current formative assessment practices of course tutors as far as Distance Education, in Ghana is concerned.

Wanes, Cowey and Jones identified in their study that some instructors, almost 35% to 52%, examined new ways of assessment as a pedagogical challenge they faced in online learning. Instructors said that assessment procedure in online education is different than face to face instruction and they had difficulties in typing all the formulae or symbols in online assignments or papers. They are also afraid that their students will be having same problems. The role of instructor is very important and central in online mode. Because they are responsible for teaching learners and helping the organization to achieve their goals. Tutors/instructors are the backbone of instruction in online or distant learning mode. Study conducted by Akhtar, 2015, 9.15% of students pointed out that their tutors did not send or update their information about tutorship, experience, academic career. Tutors are responsible for the assessment of students. They need to be professional, honest, fair, and competent.

Significance of the study

This study highlights the procedures used by the teachers in assessing students in distant learning and online learning. Furthermore, it also highlights the problems faced by the teachers in the assessment of students. This research revealed the strengths and weaknesses of the assessment processes well. The organizations that are planning to start distant and online education can benefit from this study while planning their assessment process. The study is useful for organizers and coordinators of distant learning institutes in the change of strategies about student assessment. **Statement of the problem**

The purpose of this study is to find out the challenges encountered by the teachers in student assessment and to examine the approaches followed by teachers when evaluating teachers in online and distant learning mode.

Objectives of the study

The objective of my study is to:

- 1. Examine the methods employed by teacher's student assessment.
- 2. Investigate the challenges faced by the faculty in student assessment.
- 3. Explore the strategies used by teachers to address issues in student assessment.

Research questions

Following research questions will address in the present study:

- 1. What approaches do teachers followed for assessing students?
- 2. What challenges do teachers encountered while assessing students?
- 3. How to teachers utilize strategies to overcome the challenges in student assessment?

Materials and Methods

The current study is qualitative in nature. The study identified the challenges and problems faced by the teachers in assessing students.

Population

All the faculty of online and distant mode universities in Punjab Sample of the study

Twenty participants were selected as a sample of the study from four universities using purposive sampling technique. Five teachers were selected from each of four universities (two online-mode universities and two distant-mode universities), making a total of 20 teachers, 10 representing online learning and 10 representing distant learning.

Sampling Technique

Purposive sampling technique was used to gather data from participants. Selection criteria were based on the researcher's judgement on who can provide the valid data.

Instrument

Semi-structured interview was the tool of the study. There were total of five major questions and some sub questions against each main question.

Data collection

Data were collected by conducting interviews. The researcher starts the interview by asking general or basic questions from the participants. After that, the interview questions began. Each interview took approx. 30 minutes. Interviews were recorded and transcribed by the researcher with the permission of the participants. Some interviews were face to face and some were telephonic. Participants age is between 30 to 45 and have at least 2 years of experience of working in online and distant learning mode.

Data analysis and interpretation

NVivo software is used for data analysis, the researcher imported all the transcribed interviews and coded them in the related Nodes (Categories). Subsequently, the researcher interpreted nodes that received the most coding from the participants, generating themes based on these nodes. Furthermore, nodes coded only once or twice by participants were also interpreted.

The researcher used Miles and Hubermen (1994) qualitative data analysis method. It is done by doing content analysis. Miles and Hubbermen (1994) have three procedures for data analysis.



Coding is done in data reduction. Coding is organizing the data into meaningful categories. The researcher done coding using NVivo 11. The research imports all the transcribed interviews in Nvivo and read the participant responses thoroughly and derives categories/ Nodes. Then researcher coded participant responses under the categories or nodes they made by looking in the transcribed interviews.

The researchers then generate themes from these categories which are mentioned below.

Table 1Summary of Themes Identified from Data

Category	Theme
No face-to-face interaction	Inactive Students
Large number of students	High Workload
Less teacher support	Isolation / Demotivation
Plagiarized content	Copy-Pasting
Time constraints	Difficulty in Marking

To ensure the rigor of the qualitative analysis, several strategies were employed during the NVivo coding process:

• Triangulation of sources

The study included teachers from four different universities, increasing diversity in responses and enhancing the credibility of emerging themes.

Peer debriefing

Coding decisions, node structures, and theme generation were discussed with an experienced qualitative researcher to reduce individual bias during interpretation.

Member checking

A summary of coded themes was shared with selected participants to confirm that the interpretations accurately reflected their experiences and viewpoints.

The generated themes are interpreted in the findings.

Findings of the study

Research question 1: What practices are followed by the teachers regarding student assessment?

Assessment Practices

In the online and distant learning mode, there are two main types of assessment method used. One is assignment and the other is exams. However, for overseas and virtual students, there are quizzes and discussion forums used as well. Assignments and quizzes are used as a formative assessment and exams used as a summative assessment. In online learning mode, the students must complete at least 2 assignments in one semester and 3 quizzes and must attempt a final exam. While in distant mode, the researcher must complete 3 assignments and final exam. The exam criteria are different in different institutes; however, in distant mode, the weightage of assignments is 20 to 30 percent and final exams are 70%. And in online learning mode the Quizzes weightage is 5%, assignment is of 15% and Exams are of 70%. There is no weightage for discussion forum in online learning environment.

For the Overseas and Virtual Students, the software is used for teacher-student interaction. Every student registered on that software and had a unique id. Students have to log in to their accounts to check every activity. Mostly institutes are using the Moodle software for this. Students upload their assignments there and can download them after checking them. Discussion forum is also available through which student teacher interact, student post their queries there and the concerned tutor or teacher reply and give proper feedback.

Research question 2: What problems are teachers facing regarding student assessment? The main nodes/categories which are coded by most of the participant are given below and table of most coded nodes are given in Appendix C.

Inactive Students

The major challenge faced by the teachers in online and distant learning mode is that the students are not active, and it is very difficult for them to assess each one of them and solve their learning problems if any. Though there are online discussion forums and email id's available, students are inactive and didn't ask questions related to content or assignments. Students have differences and different learning styles and if students don't interact with the teacher, it is impossible for them to tackle either the students are learning or not.

One of the participant/teachers said, "Students are not so active, they are quite passive, they mostly copy paste content and deliver them". Other participant said, "We don't have any direct contact with the students; it's the only hindrance I face". The teachers believed that having no face to face interaction with the student caused them many problems. Large number of Students

The other problem faced by the teachers is that there is a large number of students being allocated to them. And it is very difficult for them to tackle them per their needs. It's not possible for them to make separate assignment questions for them so that they don't cheat. And there is large number of students allocated to them so it's not possible for them to check each assignment on plagiarism software.

One participant said "Students mostly copy and paste, sometimes I wish to give them separate assignments but there are so many students that I can't give them separate project or assignments" One of the participants said "When I mark assignments, there are 300-400 students, I download them, if I have to check on software if they are plagiarized I have to separately check them. In other institutions assignments are already synchronized and you can know before opening the file if they are 100 percent unique or plagiarized."

Marking Assignments

As there are so many students, marking the assignment got difficult, because some of the participants said that there is not sufficient time available to them for the marking. One of the participants said "I was late in checking all those assignments. Because I have to read each word and give comments and identify their mistakes which I very time taking. One more participant said, "we give comments against every question we tell the students their feedback properly so sometimes I got late in the marking." One major problem is that the lecturer made the assignments, and the concerned tutor checked them. And sometimes the students are not satisfied with the marking.

Plagiarism

The major challenge is that the students do copy/pasting in assignments. Students don't use original sources. Their assignments are plagiarized. Though we have turnitin software but due to the large number of students it is not possible to check it one by one on it. And for those who send by mail, it's not possible to check them on plagiarism software. One of the participants said "The issue of copy & paste. Students mostly copy paste the answers and they don't use the original source. This is the main problem". The tutors deduct marks if the assignments are plagiarized and instruct them not to do copy/pasting.

Demotivated Teachers

In the distant and online learning mode, the teachers got demotivated because they are not actually teaching. One of the teacher said that "In a face-to-face situation you can use your body language, voice tone, and scream and yell at your students. But in online mode you have to write only which is demotivating".

One more participant said "Students don't interact, we are unable to tackle their progress, and this mode is boring to some extent."

Technical issues

Having technical issues is a big problem in online learning mode but it happened from the student side. Teachers reported that while conducting a Skype session, the voice clarity is not clear and in video conferencing sometimes we have to cut short to audio only. The nodes coded two or one time are given below.

Internship programs

Internship programs/Teaching practices are used in online and distant mode. The participant said that we have asked students to provide a complete internship certificate from the organization in which they did their internship. We have a specific process of checking that document provided to us. But the problem is we don't have any access to students on that organization. Or we don't evaluate it by going on that institute or organization.

Workshops

At the end of each semester, the workshops are conducted where instructors assign topics to the learners for presentations. Designated person also delivers lectures on assigned topics. Workshop activities are part of the teaching learning process and a part of assessment of distance learners. Participants of the study reported that it is necessary for the students to attend the workshops for some days at the end of semester, but the students complain about them because most of them are working persons and living far away.so there should be a proper online system for the workshops like they use for overseas and virtual students.

Research question 3: What strategies used by the teachers to overcome the problems? The strategies used or followed by the teachers to overcome the problems are:

Assignments Questions

All the participants said that they can develop assignment questions very creatively, which answers cannot be found directly so that students must consult books and libraries to solve the assignment questions. One of the participant said "I usually like students involving in practical work, I give them assignments like preparing creative thing in general science I like to give application level assignments in this way we can minimize the plagiarized work" One of the participant said that "We develop questions creatively, could not be found directly, students have to study the books thoroughly, this way we are trying to minimize the copy pasting"

Marking Assignments

There should be at least 2 weeks for the marking of assignments so that they can properly check the assignments and give feedback properly so learners can identify their mistakes and learn to do it correctly.

Weightage on Discussion Forum.

The participants said that there should be some weightage on discussion forum so that students get active and ask queries related to content. This way there will be more studentteacher interaction and both student and teacher don't get demotivated.

Workload

The workload should be less. One teacher should be assigned 200 students. So that they can identify the weak learners and tackle the progress of other students. One of the participants suggested "the software should be designed in such a way that every student activities and work are shown in a table or a graph, so that teachers can easily access the students who are not learning"

Discussion

The purpose of the current study is to assess the challenges regarding student assessment in online and distant learning mode. As per research questions there are two major assessment practices used, assignments and exams. Others are quizzes, internship programs, presentations. The participants said that they cannot interact with students directly, so they think assignments is the most effective way of assessing students in an online and distant learning mode. Because

we can develop questions of higher order thinking skills, which cannot be directly found in any sources and students have to consult and read properly for the answers. And only through this way we can minimize plagiarism. It can be shown though the findings that the major challenge they face is that the students are passive, they are not active or don't interact with their concerned tutors or instructors. They don't respond to the mails of the tutor. So, there should be a weightage on discussion forum of the software so that students get active and ask questions related to content or assignments. Plus, there are a large number of students and assessing and tackling one of them is very difficult and quite impossible. There should be a proper portfolio of every student generated by the software regarding his/her activities so when a concerned tutor or teacher wants to check their performance, they can check it though that portfolio.

It is also found that a large number of students is allocated to them, and it is very difficult to them to read them completely and get it checked in time which is a week only. That is the reason that the students aren't satisfied with the marking of the students and they complain about it. Proper feedback should be given to them. Participant said that they got late in the assignment marking because of the large number of students allocated to them. There is also a problem that assignment is made by the lecturers and checked by the tutors, however one who made the assignment should be checked by him/her.

It is found that in online and distant learning mode, the teachers find them isolated and demotivated because students are not physically present, there is no other activity rather than to sit and write things to students, students are passive they don't get active and come to Skype sessions and adobe sessions. So, teachers got demotivated. Internship program and teaching practice is evaluated in the online and distant learning mode through the certificate provided to them by the student from the organization/ institutes. There is no way of assessing them by going on the organizations in which they are doing internship or teaching practice. Tutors should be appointed for the proper evaluation of internship programs.

The researchers also try to identify some of the problems teachers face in these modes of learning. These are Isolation: Physical separation from the students is a big problem of teachers working in these modes. Long Working hours: The participants said that there working hours should be reduced and they said their workloads are too much. It also reported that at the time of admission they also have to handle some extra responsibilities of administration.

The findings strongly align with previous literature, showing that online and distant learning environments pose multiple challenges related to student engagement, plagiarism, workload, and assessment reliability. For example, the issue of plagiarism identified in this study mirrors Akhtar & Ali (2016), who similarly found widespread copy-pasting among distant learners. Likewise, the problem of inactive students aligns with Swan (2001) and Gaytan & McEwen (2007), who argue that low interaction reduces learning quality and complicates assessment.

The findings regarding teacher isolation also reinforce earlier research by Brzycki & Dudt (2005), who noted emotional and motivational strain among online instructors due to lack of face-to-face communication. Similarly, the difficulty of assessing large student cohorts aligns with Kearns (2012), who found that workload and time constraints hinder effective evaluation in online environments.

This study adds to existing literature by showing how the combination of plagiarism, inactivity, and workload interact to undermine fair assessment in the Pakistani context an area previously understudied.

Conclusion

In the online setting, the absence of physical space and direct face-to-face interactions between instructors and students necessitates distinct approaches to assessing learning in a class. The instructor cannot tell also whether the student is in attendance unless he or she is actively contributing something to the virtual class. It's investigated through data analysis that

assignments are the most effective way of assessing students because the major challenge which is plagiarism, can be minimized through assignments by giving questions that cannot be found directly in books. Furthermore, there should be weightage given to the students who are interacting with the teachers and asking questions about the content, so that the students got active.

Recommendations

The recommendations are made in the light of findings:

- 1. There should be weightage for the discussion forum so that students got active and ask questions related to content.
- 2. As a large number of students allocated to instructors/tutors, proper time should be given to them for the marking of assignment so that proper feedback should be given to students.
- 3. Assignments should be marked seriously by the instructors who made assignment so marking complaints should be minimized.
- 4. Authorities or experts should observe the validity of the assignment questions and marking of assignments.
- 5. The question of assignments should be of higher order thinking skills so the copy pasting minimize.
- 6. Further study may be conducted on students' perspective of assessment in online and distant learning mode.
- 7. A further study may be conducted satisfaction level of faculty in distant and online learning mode.

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