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# What They Actually Feel: A Different Perspective of Assessment through E-Learning

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### **ABSTRACT**

Teaching through e-learning platforms is a common activity deliberately performed by Open University. Later, this process escalated and transformed into a trend due to the advanced development of technology and unforeseen phenomena like the COVID-19 pandemic. However, teaching and learning within the platform are not equally similar in terms of sense and practice. Particularly, assessing student progress and reflecting on the learning process that has been done might not be as easy as what conventional or offline classes can offer. This research provides one particular way to assess it. Through the eyes of students as well as tutors, we could also gain valuable information regarding how learning within e-learning environments has been performed. This research applied qualitative analysis with the help of questionnaire, as well as NVivo as the tool for natural language processing analysis. A total of 66 tutors and approximately 471 students were involved. Based on the findings and analysis, it is shown that tutors tend to mention 7 frequent words, while students mention 8 words. Each word was analysed by the researcher, leading to two conclusions for tutors. They perceived that the teaching process was hindered by students' constraints and technical issues. Meanwhile, students faced problems related to slow feedback, lack of communication, and clarity, especially toward students' answers.

Key words: e-learning, assessment, constraint, problem

## INTRODUCTION

The teaching-learning activity is a complex process, involving layer upon layer of actions stretching from planning, execution to assessment of learning. These activities intertwine with one another in a vibrant yet dynamic interaction. Among many components, assessment is a crucial part, yet it often seems to be underdeveloped. For instance, when evaluating the effectiveness of the learning process, it tends to be centralized and focused solely on students' achievement, either through summative or normative assessment, as highlighted by Macina, et al (2023). He believes that effective teaching directly influences student learning outcomes, and his paper emphasizes the role of student feedback in evaluating teaching effectiveness. The question continues to arise in our minds: is teaching solely about students, considering their varying competencies? This study does not suggest denying that students are at the core of assessment in effective teaching. Rather, it aims to provoke the fact that we tend to overlook the integrated and continual nature of the teaching and learning process. One side of the coin covers

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students as the area of investigation, while the other side is a mysterious jungle waiting to be discovered. Ultimately, relying solely on students' ability to digest material and produce output to inform seems biased, as students are just one part of the wide spectrum called the teaching process.

To understand the learning process solely through tests of students' abilities is a failure. Not only does it miss capturing the process, but it also ontologically misfits the definition of assessing the learning process. If we bring teaching as a process to the table, it means that we need to agree on an effective way to measure it through assessment rather than testing. Both are common within teaching and learning, but they are different in nature. According to Brown (2004), testing is a method of measuring a person's ability, know/edge, or performance in each domain, while assessment is an ongoing process that encompasses a much wider domain. If testing relies mostly on students' performance, assessment goes further than that. Therefore, a study that claims effective teaching can be measured by checking the results of students' tests might lead us to a false conclusion.

Since teaching is a complex process, assessment must be equally similar. For instance, a study by Gallo et al. (2013) which focused on assessing physical education students, found it difficult to conduct assessments. They noted that teaching large numbers of students, time restrictions, complex assessment procedures, and associated record-keeping are the main barriers to effective assessment in physical education. An alternative approach to extracting data is primarily needed. While student learning outcomes are necessary, other sources of data need to be considered. Teachers' perspectives as well as students' judgments might be valuable sources of data to demonstrate the effectiveness of the teaching-learning process. The demand for this angle on assessment is instrumental, especially when conventional assessment is no longer possible.

Teaching and learning have continuously evolved over time, driven not only by technological advancements and rapid socio-economic changes but also by compelling conditions like the COVID-19 pandemic. Educational institutions have been compelled to adapt to meet the demands of humanity. Students are no longer required to physically attend school, and offline learning is no longer a necessity. Open universities serve as empirical evidence of this shift, with institutions like Universitas Terbuka (UT) in Indonesia being prime examples. Although the conventional methods of learning have undergone significant changes, assessment remains a crucial aspect. However, relying solely on conventional assessment methods is something we need to move beyond.

Assessment, as defined by Brown (2004), is a continuous process involving day-to-day observations that convey the success of the learning process. However, this definition often frames assessment as rigid, time-consuming, and less practical. Efforts have been made to change this paradigm. Studies by Barnett et al. (2002), Buzzetto-More and Alalade (2006), Byers (2001), and Vendlinski and Stevens (2002) demonstrate that the assessment process can be greatly improved by

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replacing laborious and traditional textual assessment methods with feedback-giving ones. These methods alleviate the burden on teachers and educational institutions in achieving quality education. However, the times are rapidly changing, and teaching is undergoing a transformation. Technology has disrupted every aspect of human life, including the educational sector.

The emergence of teaching apps such as Teacher's Room, Quiper, Duolingo, Massive Open Online Courses (MOOCs), and more recently Artificial Intelligence (AI), including Google's practical applications in our daily lives, has not only endorsed the learning ecosystem but also disrupted it. While these advancements come with possible negative consequences, educational disruption should be approached with anticipation and cautious optimism, as proposed by Jarvis (2009, p.210). He suggests that education is one of the institutions most deserving of disruption, with the greatest opportunities to benefit from it. Historical adjustments have been made, as reported by Vendlinski and Stevens (2002), Bennett (2002), and Buzzetto-More (2006), where they discuss the use of information technologies and e-learning strategies to assess teaching and learning effectiveness by providing alternative assessment protocols. However, the question remains: can these advancements truly serve as a solution?

The nature of technology inherently prioritizes effectiveness and seeks shortcuts. However, assessment, as widely acknowledged, is a continuous and patient process that demands careful and prolonged observation. This contradictory reality poses a challenge for any university, especially digital or open universities. Moreover, the luxury of time or lengthy processes is a scarce commodity for universities managing thousands of students online. Universitas Terbuka (UT) lecturers have been grappling with this challenge by monitoring the effectiveness of teaching and learning through two distinct approaches. The first approach involves rigorous summative and formative assessments, which are conventional but costly and demand greater effort. The second approach, less commonly practiced by other universities, involves facilitating reflection from both frontline participants in the process—tutors and students. While this reflection process typically occurs after class sessions, UT has integrated it on a massive scale at the faculty level, ensuring inclusivity across all students.

This research seeks to publish the latter approach as a viable and practical method of assessing the effectiveness of the teaching process within an e-learning ecosystem. This approach is less time-consuming and requires fewer resources, allowing each head of department or lecturer to monitor the progress of teaching and learning activities under their supervision efficiently. It is assumed that through the observations of both tutors and students, a practical approach can be achieved without sacrificing the importance of continuous observation. To address this concern, the research proposes the following question: How has the e-learning teaching and learning process been perceived through the eyes of tutors and students, particularly within the Faculty of Teacher Training and Education at UT?

### LITERATURE REVIEW

# **Previous Related Study**

Several research studies have explored assessment methodologies, yet few have specifically targeted the two points addressed in this research. Firstly, there is a lack of concentration on assessing the e-learning process, and secondly, there is limited exploration of utilizing teacher and student observations after the conclusion of the learning process. For instance, Radmehr & Drake's (2018) work delves into key theories and frameworks influencing education, learning, and assessment, including a revised version of Bloom's Taxonomy (RBT). However, this research does not specifically allocate a portion to examine a specific e-learning environment. Similarly, C.V. Miguel, et al (2019) conducted a study demonstrating the results of a framework for assessing teaching effectiveness in higher education. Once again, these studies do not adequately address the two areas that this research aims to capture.

In research conducted by Franklin and Smith (2015), the focus was on demonstrating how iPads can effectively assess learning, particularly in the context of electronic ecosystems like distance learning processes. While the results of their study covered assessment in e-learning environments, it did not extend to Indonesia, where the student population is considerable. However, the distinctive feature of this research lies in its approach to assessment. Unlike relying solely on student perspectives, it also accommodates teacher viewpoints. A similar effort was made by Villiers et al. (2016), who established seven principal strategies for e-learning assessment. However, their research primarily focused on business class students, raising doubts about its relevance to students originally enrolled in e-learning or distance learning programs, as intended in our research.

# E-learning

E-learning has become a widely researched area, representing an environment where tutors and students interact within an educational institution to produce fruitful knowledge outcomes. As described by Laurillard (2004), e-learning entails interactions where students utilize various types of ICTs in their learning processes. In Indonesia, Universitas Terbuka (UT) stands as a pioneer of this learning approach. To sustain this ecosystem, assessment becomes essential to facilitate evaluation and necessary adjustments. Pearson, Vyas, Sensale, and Kim (2001) trace the historical process of assessment back to 1840 when Horace Mann, an early pioneer of learning measurement, introduced standardized written examinations as one of the earliest forms of assessment. This marked the first instance of formal exams being used to evaluate the learning process.

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### Assessment

At the university, an assessment used to be held for the purpose of accreditation, as exemplified by Urciuoli (2005) presenting an example at the University of Wisconsin. There, formal and continuous assessment of student outcomes and performance has been conducted since 1900, making it the institution with the oldest undergraduate evaluation. He added that this assessment was conducted in response to requests for accreditation systems that gauge the effectiveness of higher education institutions. This condition seems to appear as policy within the Department of Education in the United States (Ewell and Steen, 2006). From there, we see that assessment does not purely assess how effective teaching and learning is; it has also been put under much pressure on students as the main object who can demonstrate how effective teaching is. Furthermore, the development of technology has made teaching less conventional than before. E-learning has emerged as an alternative to traditional teaching, which encourages alternative forms of assessment. However, it reduces the possibility of assessing the learning process since there are no live observations that can be made. Nonetheless, this is not always true since observations can also come from students and tutors who are assigned to administer the teaching process.

In this research, the researcher aims to explore how students and tutors perceive the learning process itself and utilize their perceptions as an assessment of how the learning and teaching have been conducted. From this perspective, the assessment will not solely rely on students' summative exam results, which tend to be more quantitatively oriented. After all, good teaching cannot simply be measured by quantitative measurement alone. According to Griffith Institute for Higher Education (1994, p. 67), "Good teaching is teaching that helps students to learn, promotes active engagement with the subject matter, motivation to learn, desire to understand, independence, confidence and sustained effort." From this statement, we understand that assessing good teaching is a complex process. Therefore, various perspectives can be utilized, as this research seeks to promote.

## **METHOD**

## **Design and Samples**

Qualitative research has been adopted as the research methodology. It serves as a tool for investigating and comprehending the meaning that individuals or groups attribute to a social or human situation (Creswell, 2014). Given that this approach is intended to thoroughly examine a specific problem that affects either a person or a group, it suits the purpose of this research in investigating a group of people involved in teaching and learning activities. This study focuses on a specific issue affecting a group or organization, in this case, the phenomenon of assessment within the e-learning process within the English Education Department. Due to the rarity of qualitative approaches being utilized in assessment, while most of it depends on summative and quantitative tests, this perspective seems fair enough to bring into

discussion. In addition, a specific population has been targeted in this study with the expectation that it will lead to meaningful data mining. The population includes all students in the English Education Department, as well as the tutors who administer the teaching process. There are 66 tutors with over 471 participating students. Conducting a long and complex assessment is exhaustively difficult; however, with this simple assessment relying on questionnaires, qualitative analysis can be conducted to at least understand how the teaching has been perceived.

### **Instrument and Procedure**

Data collection techniques relied on two questionnaires: one deployed toward teachers and another for students. The use of these techniques is in line with the objectives, which include providing answers on how the electronic teaching learning process has been perceived by tutors and students, particularly in the English Education Department.

The data in this research undergoes at least three procedures before it emerges as findings. First, the data was gathered from students and tutors using a questionnaire. Next, the data was processed using KH Coder to visualize it into a more paternalized form, making it useful to comprehend qualitative data and easier to interpret the meaning.

## **Data Analysis**

The data is analyzed through two processes: frequency analysis and qualitative analysis. Most of these processes are carried out with the aid of KH coder, an application capable of handling natural language processing, particularly in the form of qualitative data. The analysis is described in the chart below:

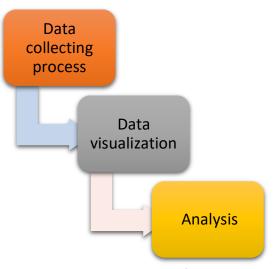


Figure 1: Data analysis

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### RESULT AND DISCUSSION

There are at least 66 tutors who filled out the questionnaire. They were asked about their opinions toward the learning process they have been involved in. Since the questionnaire is open-ended, they are free to express their opinions toward the learning process based on their own sincere observations. Meanwhile, approximately 471 questionnaires were returned to the research containing students' opinions on the e-learning process they have experienced. All the participants are anonymous, which makes this a spontaneous response. The result of the data visualization can be seen below:



Figure 2: Word Cloud on Tutor Opinion

Among many words, there are at least 7 words that are frequently significant compared to others. Those words somehow represent what tutors feel and how they perceive the learning process. To make the words relevant to this research, they have been adjusted in accordance with the context. Words like 'students', 'tutor', 'assignment', 'Tuton', and 'discussion' are the words that tutors utter most, which somehow automatically refer to certain discourse highly considered.

mahasiswa	tugas	kuliah	jawaban	aktif	materi	speakir	minggu	structu	mohon	adalah	mend	meng	menja	namu	notifik	pertar
				kelas	proses	tuweb	pendidik	waktu	mungk	aiberik	salah	terima	altutor	ial <mark>l</mark> apli	kibaiki	rdimu
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Figure 3: Tree Map of on Tutor Opinion

On the other hand, students also perceive the teaching and learning process within the e-learning ecosystem with some differences in perspective. At the word level, students mention different words with varying frequencies. For instance, students are concerned with words such as 'material', 'good', 'students', 'tutor', 'sir', 'answer', 'active', and 'comment'. This can be observed in both the word cloud and tree map below:

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menggunakan kepada indonesianya memperbanyak kesalahan comen assalamu dipahami terimakasih semangat artikel kembali diperbaiki alaikum kritik inggris tidak diberikan bahasa dapat ibu serta bisa tutor baik aktif diskusi dinilai menjadi mengerjakan balik memberikan materi bapak mana bahan mater berdiskusi kuliah pak mahasiswa saran semoga berharap pada ade komentar atau mudah buku mengagapi setiap banyak bagian beberapa akhir cepat bagus feedback mengcopy bermanfaat structure 01000016 mengenai membalas komunikasi membimbing

Figure 4: Word Cloud Student Opinion

meningkatkan

materi	bapak	membe	ada	beberap	juga	memah	semoga	terim	akat	idak	#03	0100	akhial	aikartik
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baik	jawaban	pak						bagi	cukı	gamb	good	haru	shida	yibu
			atau	dapat	kurang	nilai	sesi	bagu	dinil	ailmu	kemb	kepa	kesa	lkita
mahasiswa	aktif	saran	bagian	diberika	mana	pada								memb
	aktii		bahasa	diskusi	mata	pemula	structur	balik	dipe	ringgr	kritik	mem	menar	mengo
tutor	komentar	tugas	barrada	alonaoi	mata	pomaia		begit	dose	ingin	letak	mem		menge
	Komonia		banyak	google	mataku	semang	tepat	berdi	feed	karer	mala	mam		menja menje
													menni	menje

Figure 5: Tree Map Student Opinion

The prior data visualization provided us with a glimpse of thought, a quick peek into what tutors and students mostly perceive or feel toward teaching through elearning. However, it seems to be abstract and needs further elaboration in order to yield important insights. To do so, the first step is to adjust each word to its context. This means that not only frequently appearing words are worth discussing. If a word does not reflect anything relevant to the research, it has been omitted. Secondly, the analysis of the word will refer to the full context from which it arises. The role of researcher as the ultimate instrument for research is crucial in this part.

Regarding the opinions from either students or tutors, I will only choose the top comment among many that is provided by NVivo. As a result, we can understand the full proposition that the word is integrated into. Through the lens of tutors, most of the collective teaching-learning through e-learning is fairly good, yet some notes need to be taken into consideration. At the top of the list, 'mahasiswa' or 'students' comes first and becomes the highest concern for tutors. There are at least some points underlined. 'In active student' as what has been expressed in the snapshot below.

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Excerpt 1

T1	There are still some students who are inactive during the lecture
	period.
T2	Just need to motivate students to be more active in learning.
Т3	Students are encouraged to communicate more intensively.

Another issue pertains to technical matters such as signal strength, class enrollment, and incorrect task submission. Therefore, some tutors have requested technical training for the students. The second concern is about the course list that the tutor manages. Some wish to receive earlier notifications about the courses they will teach, as this can help them prepare better. In line with the lack of communication mentioned above, tutors want to have a list of students' contact information so they can reach them to establish good and intense communication. 'Assignment,' 'Tuton,' and 'discussion' are three other significant words that tutors tend to mention in the questionnaire. Regarding tasks, tutors perceive them quite well as they compare them with the previous period, yet they hope for improvements in the apps. However, these three frequently mentioned words are interrelated with one another. If we delve deeper into the context or full sentences where they are located, they show similar or integrated ideas. For instance, there is some kind of notification for anything that students submit, as captured in the comment below: I think overall it's already good and beneficial. However, if possible, there could be notifications on the e-learning platform regarding anything submitted by students, both discussion responses and tutorial assignments. This way, tutors can respond quickly. What often gets overlooked is students' answers or feedback that are buried among their peers' responses. As a result, during final assessments, there are usually some student responses missed in the discussion. Hopefully, this can be considered by UT. Thank you.

The word 'assignment' and 'discussion' are both mentioned in one statement. It shows that the tutor is actually concerned with one problem, which is the need for quick responses facilitated by the apps. In another instance, they address a technical problem. A similar idea of technical issues can also be seen in the tutor's opinion when they want students to contact them to make communication easier.

Words like 'assignment' and 'tutor' also occur. Both words refer to one particular problem, which is a technical problem in terms of communication between tutors and students. From that, we can conclude that although there are seven frequent words mentioned by the tutor, it leads to at least two main issues. First is students' constraints, which can be in the form of student attitudes toward learning or lack of motivation. Second, it relates to technical problems where the e-learning platform needs to accommodate features that can support quick responses or communication systems in which tutors do not have direct communication access to students.

On the other side, students, as the doers and the core of the learning itself, express the eight most frequent words. They stretch from 'material,' 'kind,' 'student,' 'tutor,'

'mister,' 'answer,' 'active,' and 'comment.' For the words 'course material,' 'kind tutor,' and 'mister,' all words are interrelated and signify appreciation. Students complement good material, or the course material has been prepared and delivered well, and the praise has been shown by students toward the tutor. However, for the words 'student,' 'answer,' and 'comment,' they mostly refer to complaints, yet notable appreciation is also given. The complaints mostly pertain to the tutor's slow feedback, lack of communication, and clarity, especially toward students' answers. Meanwhile, the word 'active' also shows a complaint, yet more appreciation is given to an active tutor. The snapshot of the students' opinions can be seen in the table below:

# Excerpt 2

S1	Thank you for the materials provided. In my opinion, tutors
	could give more feedback to the students.
S2	So that students can revise their answers if they are not quite
	correct.
S3	To expedite the assessment for discussions and assignments,
	provide comments and indicate the location of errors in
	each answer.
S4	To speed up the assessment for discussions and assignments,
1	To speed up the assessment for diseassions and assignments,
	provide comments and indicate the location of errors in
	' '
	provide comments and indicate the location of errors in
S5	provide comments and indicate the location of errors in each student's answer so that they can revise any incorrect
	provide comments and indicate the location of errors in each student's answer so that they can revise any incorrect responses

For students, although they show a considerable number of frequent words, we can conclude a certain pattern. First, students are fair enough to show some appreciation toward tutors who perform well. However, they are also unhesitant to criticize tutors who did not excel. Second, unlike tutors, they put the tutor as the central focus of the criticism and show that tutors need to pay more attention to communication, feedback, as well as clarity of their comments in the discussion.

### **CONCLUSION**

Teaching and learning through online platforms are an inevitable phenomenon worldwide, particularly for open universities like Universitas Terbuka, where teaching is mostly conducted through e-learning. However, teaching through e-learning demands assessment, much like conventional teaching, yet a similar approach is rarely applicable. In conventional teaching, assessment serves the purpose of monitoring students' progress as well as their perception of learning and direct assessment can be carried out. Physical observation is also easier to conduct. However, for teaching in e learning environment, making similar efforts is difficult. Not only does teaching in an e-learning environment fail to provide privilege for

students to directly witness the tutor and vice versa, but even classes equipped with face-to-face interaction still fall short compared to real-life or offline classes. Additionally, conducting wide standardized assessments for students is also difficult, considering practical aspects.

Despite all the nuisance, assessment needs to be done. Some assessments are conducted with the help of apps and tutors, yet the stakeholders can also check students; perspective through questionnaires and qualitatively analyze them. Based on the analysis in this study, it is found that overall, the teaching and learning in the Department of English Education of UT has been quite well executed. Some areas for improvement, as well as appreciation, are shown, yet there are some notes that need to be considered. Utilizing tutors as observers, it is found that there are two concerns. The first is students' constraints toward learning, and the second is technical problems. Meanwhile, students who also become observers of the learning process have some issues related to tutors in terms of communication, feedback, and clarity of responses that need improvement.

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