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EXPLORING INNOVATIVE ALTERNATIVE ASSESSMENT METHODS IN ELT: A STUDY ON THE INTEGRATION OF INFORMATION TECHNOLOGY

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Abstract: Innovative alternative assessment currently attracts an adequate attention since it alternates conventional assessment. The fast growth of technology provides chances to integrate this type of assessment into it. Through an examination of technology integration into the usage of innovative alternative assessment, this study seeks to advance our understanding of how to measure student learning outcomes accurately, which will improve teaching and learning. A questionnaire, observation, and interview were used to gather data from 65 teachers and 152 junior and senior high school students. The data was then combined with quantitative and qualitative methodologies using descriptive statistics and qualitative analysis. The finding indicated that the integration of information technology with its various platforms on innovative alternative assessment methods was perceived positively both by teachers and students. The data presented illustrates the perceived efficacy and acceptance of innovative alternative assessment methods facilitated by information technology, as well as the challenges and barriers encountered in integrating these assessments into existing learning environments. Some of the challenges and barriers that arose were mostly related to the exploitation of technology resources, access to them, and the absence of a suitable technological infrastructure for the purpose of discovering innovative alternative methods of assessment.
Keywords: *alternative assessment; conventional assessment; innovative; information technology, methods.*

INTRODUCTION

As awareness of the role of assessment for learning and learning processes rises, so does the need for efficient alternate methods of assessment. Information technology is used in this strategy to measure the learning outcomes of students. Conventional evaluation methods might not be able to capture the range of abilities and skills that students develop in the classroom. Thus, the anticipated outcomes fall short of expectations and are unrelated to the assessment's goal, which is to gather data on students' knowledge and abilities in order to provide the optimal outcomes (Fadilah et al., 2023). Fadilah et al., (2023) and Rudolph et al., (2023) suggested that many educators favor conventional assessment due to its ease of use and simplicity. Therefore, it is critical to alter this viewpoint and assist educators in applying both traditional and novel kinds of assessments in a balanced way, contingent upon the goals and competencies needed. Nonetheless, alternative assessment has its own stance for its existence in language learning assessment presently especially involving technology. Fox (2016) stated that the most significant advances in alternative assessment can be attributed to the widespread employment of increasingly sophisticated technologies. E-portfolios, for example, have arisen as an essential evaluation option because they provide a more flexible, less cumbersome, and longer-term record of a student's development or program performance. In addition to portfolios, conferences, observational checklists, learning logs, learning journals, poster presentations, and projects are examples of alternate assessment methods. Future alternative assessment methodologies will be further strengthened by technological progress, yet such digital records may raise issues.

Students' knowledge and abilities are treated as distinct, fixed entities in the bulk of contemporary assessment models and approaches, which can be assessed through the use of standardized and customized written exams. This is clearly at odds with the dynamic, collaborative, situational, and

multimodal competencies that students need to possess in order to fulfill the demands of the 21st-century workplace and lifestyle (Teo, 2019). Teachers should employ a variety of assessment techniques to gauge students' existing knowledge as it relates to 21st-century skills during the learning process. These days, technology is both a product of and a component of globalization, therefore being proficient in it can be used as a tool for evaluating learning. In this instance, teacher preparation should emphasize technology in addition to the skills that must be learned and the tools required to assess those skills, irrespective of the educational background or subject matter under consideration. These days, all professional teachers must possess the ability to develop technology and comprehend its potential for evaluating teaching and learning in general. The creation of visible learning performance evaluation tools, such as presentations or digital assets like webpages, videos, and animations, is increasingly mandatory for foreign language teachers (Rudolph et al., 2023). Further, Rudolph et al., (2023) conveyed that students' abilities and knowledge must be evaluated in stimulating, real-world scenarios. Thus, it is very important for teachers to have a full knowledge of these technologies in teaching language skills in particular how it deals with implementing assessment (Pourhosein Gilakjani, 2013). This current research aims to explore innovative alternative assessment methods that leverage information technology to address those challenges.

Alternative Assessment now seems to be a major demand and priority in learning where teachers are given freedom in developing assessments in their students. However, there is a tendency to apply assessment as learning and assessment for learning as a pressing point to know the progress of achieving the learning objectives that have been set with a focus on real situations. Assessment should measure students' skills and knowledge in situations that are realistic, motivating, and authentic (Rudolph et al., 2023). These two process assessments are the medium for knowing the accuracy of the ongoing learning process. The existence of alternative assessments with innovative methods becomes important given that learning today places more emphasis on technology-based learning with the pedagogical elements that accompany it. In modern classrooms, teachers act as technology facilitators and not as the primary source of knowledge, thus enabling students to participate actively in education and evaluate their own learning. Menaka & Sankar (2019) implied that integrating contemporary technologies is crucial to raising the bar for English instruction. Students' minds are relaxed by modern technologies, allowing them to fully engage with the subject matter.

Because of its different orientation towards various computer applications, students today are the computer generation. As a result, measurement of learning accessibility, both process and output, must accommodate the use of information technology by employing a variety of methodologies and platforms that are appropriate for the characteristics of students and the educational setting. Bahrani (2011) discovered that the novel approaches and procedures used in the technology-based evaluation measure the improvement in language proficiency. The development of technology has made it possible to employ a wide range of alternative assessment strategies that support learning and/or offer proof of accomplishment, competency, or ability. For instance, electronic portfolios, or e-portfolios—digital archives of texts, presentations, videos, and other materials—are being utilized more and more for preservice teacher preparation and in-service professional development in addition to supporting and documenting students' learning and accomplishments (Mansvelder-Longayroux et al., 2007). When language learners are given the opportunity to apply what they have learned, this type of assessment is beneficial. Conversely, conventional techniques of evaluation fall short of demonstrating the potential of learners' newly learned language.

There are a lot of technology-based measurement tools available with a variety of platforms available to realize Technological Pedagogical Content Knowledge (TPACK) -based learning and innovative learning as an assessment element in learning. Given students' interest in technology and digital tools that facilitate their motivation and drive to learn, integrating technology into the classroom became crucial to the success of teaching that enhanced learning, especially in the twenty-first century. Technology use will provide learning interactions that can be applied as learning output in real-world settings in the future (Asari, 2023). Since the introduction of technology and its applications to education, a lot of research has emerged that investigates the function of instructional technology in the learning process and how the technology improves the interactive learning environment (Fawzi, 2017). Numerous studies have demonstrated the significant contribution that technology makes to

the enhancement of teaching, learning, and assessment methodologies that positively impact students' knowledge and skills (Elmahdi et al., 2018). Simplifying the evaluation process, automating tasks to save teachers and students time and resources, promoting communication and understanding of evaluation requirements, identifying suitable evaluation methods and responding more quickly to interpretation and evaluation, analyzing learning evidence, and implementing organizational strategies on when and how to perform evaluation are just a few of the things that must be done to improve learning evaluation (Elmahdi et al., 2018). Thus, in order to achieve innovative learning—which includes using technology for assessments—teachers must be able to master technological literacy in all of its intricacies. One way that technology can be very useful in the teaching and learning process is by offering a formative assessment of students' knowledge and skills during the teaching and learning process. Yulia et al., (2019) proposed that range of technological platforms can be used to give assessments, which can serve as an innovative pedagogical method by encouraging participation in critical learning processes, formative and immediate feedback, and equitable education. Teachers and students should receive prompt feedback in order to improve student performance during the formative evaluation process.

It is imperative to investigate alternate techniques of assessments that align with the distinctive attributes of the virtual learning environment. This study aims to improve teaching and learning overall by advancing our understanding of how to measure student learning outcomes accurately through an investigation of information technology integration into assessment procedures. The following observation question is based on the exposure mentioned above: 1) How do teachers and students perceive the effectiveness and acceptance of innovative alternative assessment methods facilitated by information technology? 2) What are the challenges and barriers to integrating alternative assessment methods supported by information technology into existing learning environments?

Prior studies have not thoroughly examined innovative alternative assessment methods that leverage information technology to involve and motivate students in the learning process, as well as the challenges and obstacles that arise when implementing and using these methods. The ultimate objective of this research is to enhance learning effectiveness and quality by providing evidence-based recommendations for substitute assessment methods. Citing some past research findings as a guideline, where the emphasis of past research remains on the use of various assessment platforms, the efficacy of the platforms employed (Rizada & Rey, 2023;Moqbel & Al-Kadi, 2023), or even on determining the appropriate use of technology in conducting assessments (Raposo-Rivas & Cebrián-De-La-Serna, 2019).

METHOD

The study looks into different learning assessment strategies using a mixed method approach to gain a deeper understanding of the perception, effectiveness, involvement, and motivation of students as well as the challenges and obstacles that respondents encounter in carrying out assessments relying not only on questionnaire results but also on triangulations through observations and interviews. Questionnaires was distributed to 65 English teachers from Gresik and Lamongan secondary and high schools and neighboring areas as well as to 152 students in those cities of east Java.

The questions asked about the perceived efficacy and acceptance of innovative alternative assessment methods enabled by information technology and the challenges and barriers encountered when integrating information technology-supported alternative assessments into current learning environments. The experts on the panel verified the questionnaire once it was created by the researchers. Internal reliability using Alpha Cronbach statistical analysis was used in addition to the surveys' quality. The outcome showed that the whole measurement scale's Alpha Cronbach's value is 0.731. It indicated a high level of reliability. Additionally using snowball technique, 10 teachers became the subjects of interviews and learning observations in the classroom. The questionnaire had been through a process of validity and reliability involving 2 validators and implementing Cronbach Alpha formula for its reliability which then reached 0.771. Simple statistical analysis of survey responses, and teacher-conducted learning observations were part of the data analysis process. Descriptive qualitative was also used to analyze the data. Three steps of data analysis process was employed namely compiling the data, presenting the data, and coming to conclusions or doing verification (Miles et al., 2018).

RESULT AND DISCUSSION

Teachers' and students' perception on the effectiveness and acceptance of innovative

alternative assessment methods facilitated by information technology

The data analysis revealed that innovative alternative assessment methods enabled by information technology were positively appraised by teachers and students in terms of their efficacy and acceptability. The study's subjects were primarily teachers, and they used a variety of technological platforms, which made the assessment procedures quite effective and were perceived positively by students. The following can be inferred from the outcome of the descriptive statistic as well as data obtained from the result of questionnaires, interview and observation pertaining to the perception of both teachers and students. Each item or element within each table is presented and described to determine evidences of data collected.

Table 1. *Teachers' perception*

	N	Sum	Mean	Std. Deviation
1. Alternative assessment using IT measures students' learning outcomes accurately.	65	274	4.22	.718
2. The use of IT as an alternative assessment is very helpful for teachers.	65	299	4.60	.494
3. Peer assessment as an innovative alternative assessment using an online platform can improve student learning outcomes.	65	275	4.23	.632
4. Online assessments as a form of innovative alternative assessment can improve student learning outcomes.	65	283	4.35	.598
5. Multimedia projects as a form of innovative alternative assessment can improve student learning outcomes.	65	293	4.51	.534
6. Collaborative online discussion forums as a form of innovative alternative assessment can improve student learning outcomes.	65	271	4.17	.698
7. The benefits of using IT in innovative alternative assessments can increase student involvement.	65	285	4.38	.578
8. The benefits of using IT in innovative alternative assessments can provide timely feedback to students.	65	278	4.28	.650
9. The benefits of using IT in the assessment of innovative alternatives allow for an individual assessment approach.	65	260	4.00	.729
10. The benefits of using IT in the innovative alternative assessment facilitates collaboration.	65	282	4.34	.644
11. The benefits of using IT in innovative alternative assessment support assessment tasks that are rich in the use of multimedia.	65	292	4.49	.534
12. The support and professional development provided helps integrate alternative assessment using IT into teaching practice.	65	285	4.38	.521
Total	65	3377	51.95	5.032
Valid N (listwise)	65			

Table 1 shows that the overall Mean is 51.95, or 4.32, indicating that the teacher's impression of the use of innovative alternative assessments is quite good. Each aspect had a high average score from 1 to 5. Item 1, for instance gives a high average score of up to 4.22, or 58.5% of respondents agreed, with 33.8% strongly agreeing that these alternative assessment methods might accurately measure student learning access. The result supports Huda's & Siddiq's, (2020) notions. They considered the digital alternative assessment to be more feasible for meeting learning objectives because the technology employed may aid in providing an effective assessment of student learning outcomes. The results for statement 2, "The use of IT as an alternative assessment is very helpful for teachers," provided another clue that the assessment technique was well-perceived by teachers. This statement's high mean score was backed by extremely high percentage statistics, with 40% of respondents saying they "agree" and 60% saying they "strongly agree." The interview's outcomes support the conclusions made in this statement.

> "Yes, it's obviously helpful. It's probably quicker than conventional one."

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> "Gloriously, it's very impressive because of its features that are very interesting and suitable for children of the day"

It is relevant to the finding revealed by Ali et al., (2021) stating that teachers like online or alternative assessment because it can be completed quickly, which enables them to monitor students' progress (Lisyowati et al., 2021) and it can minimize the stress of timed assessments by encouraging students to have a positive attitude (Jahara et al., 2022).

The statements about innovative alternative assessment formats found in Table 1 items 3, 4, 5, and 6 demonstrate how highly teachers have responded when using innovative technology-based alternative assessments, with the four items' mean scores rising to high levels in succession (4.23, 4.25, 4.51, and 4.17). The percentage data supported this conclusion: for item 3, 60% of respondents said they "agreed," and 32.3% said they "agreed strongly." For item 4, 52.3% said they "agreed," and 41.5% said they "agreed firmly." For item 5, 46.2% said they "agreed," and 52.3% said they "strongly agreed." For item 6, 58.5% of respondents said they "agreed," and the remaining 30.8% said they "strongly agreed." These findings correspond to the research carried out by Indayani et al., (2023) where teachers prefer online alternative assessment over paper ones and believe that taking it increases their technological proficiency, allowing them to correctly grade students using a variety of ways. Furthermore, teachers believe that employing online assessments allows them to effectively measure learning outcomes, successfully grade students, and employ online communication and personal activities as helpful problem-solving tools. It demonstrates how a range of online platforms for alternative assessments, including online discussions, portfolios, peer evaluations, and multimedia projects like video presentations, genuinely and favorably impact students' performance.

According to statements 7 through 11, each part of the five items or elements has a high average score, with a total average of 4.29. These statements illustrate the teachers' overwhelmingly positive impression of the value and efficacy of innovative alternative assessments based on technology. This conclusion is supported by the elevation percentage number, which shows that, with regard to item 7, which discusses the benefits of innovative alternatives assessments in raising students' engagement in learning, 52.3% of respondents "agree" and 43.1% "strongly agree." Aknouch, (2023) suggested that students' engagement and autonomy might boost their motivation to learn the language as peer assessment (one of alternative assessment methods) is incorporated. Moreover, 36.9% of respondents "strongly agreed" with item 8, which concerns the speed at which feedback is provided about the use of alternative assessments, while 55.4% of respondents "agreed." The mean score also adds this result that is 4.28. Meanwhile, the following interview result validated this outcome:

> "Feedback... I give right after the performance, but sometimes I give feedback through the IG."

Item 9's mean score of 4.00 indicates that 61.5% of respondents "agreed" and 21.5% "strongly agreed" that an individualized approach to the assessment should be utilized. In reference to item 10, 52.3% of participants indicated agreement, and 41.5% strongly agreed (i.e., the item's mean overall score was 4.34 points). These results highlight the benefits of this evaluation method for encouraging collaboration among students during the learning process. In the meantime, item 11 revealed that a significant proportion of respondents—47.7% "agreed" and 50.8% "highly agreed" or 4.49 for its mean score—saw the advantages of innovative alternative assessment procedures made possible by technology in relation to the variety of multimedia evaluations. The result of interview also supported it.

> "I use multimedia projects like through video calls, make blogs to be presented and recorded to be assessed... they like and are happy "

These findings are in line with research finding from Nufus, (2023) revealing that using technology to assess students' learning has an impact on students' language skills progress since they can directly check teacher feedback and use the digital tool. More to the points, Cirit (2015) implied that alternative assessments are more engaging, promote learning, offer ongoing assessments of students' progress, foster greater interaction, provide more thorough and useful feedback, and strengthen critical thinking abilities.

An analysis of how students see the usage of innovative alternative assessments reveals that they have a favorable opinion of the application of assessment methods and of their acceptability. A total of 10 statements each yield a good average of 3.88 of the intervals 1-5 as shown in table 2.

Table 2. *Students' perception*

	N	Sum	Mean	Std. Deviation
1. I felt interested and motivated when the teacher applied assessment using IT.	152	619	4.07	.720
2. I'm glad when teachers use IT-based assessment over the old methods.	152	592	3.89	.893
3. I felt satisfied when the teacher did the assessment in the classroom using IT.	152	596	3.92	.818
4. I'm able to complete tasks easily when teachers use IT in assessments.	152	587	3.86	.838
5. I can work with friends when teachers use IT in learning.	152	598	3.93	.851
6. I became more creative in learning as teachers applied assessment using IT.	152	596	3.92	.858
7. I get the right feedback when teachers apply IT-based assessment.	152	562	3.70	.806
8. I found more pleasure and benefit when teachers applied assessment using IT.	152	596	3.92	.826
9. I found control and freedom in learning as a teacher applied assessment using IT.	152	566	3.72	.855
10. I feel encouraged to create and explore material as teachers make assessments using IT.	152	595	3.91	.797
Total11	152	5907	38.86	6.013
Valid N (listwise)	152			

Table 2, further, shows a generally positive attitude toward technology in alternative assessment involving the use of technology. The results of interviews with students also support this finding.

> "I'm very happy when the teacher uses online evaluation because I can use HP."
>
> "I like the test using the app... not tired of the class."

This finding is in line with a study conducted by Jan Alokozaya (2022) showing that the learners have a good attitude toward implementing the alternative assessment. Furthermore, the outcomes of certain investigations revealed that alternative evaluation is preferable, whilst other studies indicated that alternative assessment is beneficial. In addition to the perception of the students' acceptance and effectiveness on this innovative alternative assessment methods, the percentage calculation resulted that any statement relating to the effectiveness and acceptance of innovative alternative assessments facilitated by technology received a positive response as seen in the two statements in tables 3 and 4 on items 1 and 5 as follows:

Table 3. *Students' interest and motivation*

		Freq	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	.7	.7	.7
	Neutral	31	20.4	20.4	21.1
	Agree	76	50.0	50.0	71.1
	Strongly Agree	44	28.9	28.9	100.0
	Total	152	100.0	100.0	

Table 4. *Good cooperation*

		Freq	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	6	3.9	3.9	3.9
	Neutral	42	27.6	27.6	31.6
	Agree	60	39.5	39.5	71.1
	Strongly Agree	44	28.9	28.9	100.0
	Total	152	100.0	100.0	

Tables 3 and 4 demonstrate how motivated and attracted students are, with 50% of students indicating that they "agreed" and 28.9% indicating that they "very agreed". The result of descriptive statistic also indicates high mean score (4.07) as shown in table 2, item 1. This is relevant to Nasab's findings (2015) conveying that alternative assessment provides a fresh way to motivate and inspire pupils to investigate themselves and the world around them. Furthermore, while using innovative alternative technology-based

assessments, students are also able to collaborate successfully with teachers and other students, as seen by the 39.5% of respondents who said they "agree" and the 28.9% who said they "strongly agree." The mean score is also fairly high that is 3.93 (table 2, item 5).

Statement no. 8, which describes how using the assessment method makes students happy and beneficial, supports this claim with a mean score reaches 3.92 or 42.8% of students "agreed" and 26.3% "strongly agreed". It is intended that students feel at ease and stress-free when examined utilizing technology-based alternative assessment. Similarly Dikli, (2003) stated that alternative assessments emphasize language learners' development over time, promote adaptation, and reduce fear. Students' preference for using technology in alternate assessments was also evident in statement 2, which also received positive feedback. It had a mean score of 3.89, with 40.1% of students indicating that they "agreed" and another 27.6% indicating that they "strongly agreed." Similar to item 2, statement 3 illustrates how using technology-enabled alternate assessment techniques results in satisfied students. With 26.3% of students selecting "strongly agree" and 42.1% selecting "agree," the average score is 3.92. These findings are relevant to the study carried out by Gill & Lucas (2013) discovering that open-ended questions and Likert Scale class assessments have been used to gauge students' responses throughout period of incorporating authentic alternative assessment. Overall, responses to these projects have been favorable.

Regarding items 6 and 10, which aim to investigate students' creativity in learning through the use of innovative alternative assessment methods, positive responses were obtained with averages of 3.92 and 3.91, or as high as 40.8% of respondents "agreed" and 27.6% of other respondents "strongly agreed" for item 6, and 41.4% of students agreed "and 25.7% of students "strongly agree" for item 10.

The results corroborated the previous research by Li et al., (2022), which showed that new technologies, especially those used in interactive learning settings, effectively foster students' creativity. Furthermore, in paragraphs 4 and 7 of the statement, it is described how easy the students are to complete the tasks and the feedback they obtain directly. Both elements obtained an average score of 3.86 and 3.70 respectively or collected 36.2% students 'agreed' and 26.3% students 'strongly agreed' for this statement 4. Meanwhile, item 7 received a response of 33.6% students 'agreed' and the other 19.1% were 'strongly agreed'. These results support the research findings of Vurdien & Puranen (2022) & Zuhri et al. (2021) revealing that teachers may swiftly follow students' progress and organize additional activities for them when they receive immediate feedback from online exams, which also promotes a positive attitude. In regard to the item 9 on freedom and autonomy in learning when implementing innovative alternative assessment methods found a mean value of 3.72. This value is reinforced by percentage data showing as much as 35.5% of students 'agreed' and the other 21.1%'strongly agreed'. In a similar vein, Butler & Lee, (2010) contend that using alternative assessment methods promotes student autonomy over their academic performance and active learning.

The observation indicated that teacher and students during classroom teaching implementing alternative assessment methods built conducive and lively interaction. There was collaborative discussion among students and teacher indeed functions as a facilitator and feedback provider. The innovative alternative assessment applied boosted students to actively involve in the process of assessment performing their performance task using particular forms of alternative assessment facilitated by technology information.

In a nutshell, teachers and students give a positive or favorable response to the application of innovative alternative assessment methods using information technology. It is in line with the statement proposed by Nufus (2023) revealing that technology use in the classroom has the potential to raise teachers' technological awareness and instructional preparation, both of which have an impact on students' willingness to learn. The effectiveness and acceptance of such assessment methods prove that the variation of assessments should be done not relying only on one type of assessment. The use of innovative alternative assessments provides a high satisfaction and motivation for students and in particular teachers to always develop as a form of ‘continues professional development’. Additionally, EFL teachers in East Java junior high schools have a typically positive attitude and view about the use of technology for either conventional or alternative assessment. Nonetheless, many believe that technology helps them assess students more successfully and prefer online assessments to traditional ones (Indayani et al., 2023). The finding was in line with a survey conducted by Alruwais, et al. (2018). They revealed that EFL teachers think online or alternative assessments with may be used

to measure learning outcomes precisely, evaluate students successfully, and use online discussions and personal activities as problem-solving strategies.

The challenges and barriers to integrating alternative assessment methods supported by information technology into existing learning environments

Considerable attention must be paid to the challenges and barriers associated with implementing alternative assessment made possible by technology. It revealed that challenges and barriers with some elements in them adequately contributed to the ideal implementation of innovative alternative assessment methods as indicated from the following 2 tables (Table 7 and 8).

Table 7. *Challenges on using innovative alternative assessment with IT*

	N	Sum	Mean	Std. Deviation
1. Validity and reliability of assessment	65	223	3.43	.918
2. Unattractiveness from students or colleagues	65	256	3.94	.846
3. Technical problems or limitations in IT	65	273	4.20	.712
4. Exclusion related to technological resources access	65	273	4.20	.617
5. Restricted access to software	65	235	3.62	.878
6. Align technology-based assessment with curriculum objectives and learning outcomes	65	204	3.14	1.184
7. The amount of time allocated to learning and mastering the device	65	221	3.40	.965
Total	65	1685	25.92	3.501
Valid N (listwise)	65			

Based on descriptive statistical analysis, the problem of exploitation related to access to technological resources (table 7, item 4) was the biggest challenge with 4.20 Mean score obtained or totally 95.4% respondents responded positively to this item where 67.7% respondents 'agree' and another 27.7% 'strongly agree'. This challenge is relevant to the barrier factor of equality and access for students with limited technological resources where it obtained 3.72 of its mean score or 55.4% respondents agree and 15.4% other respondents strongly agree.

Table 8. *Barrier on the use of innovative alternative assessment using IT*

	N	Sum	Mean	Std. Deviation
1. Lack of technology infrastructure	65	266	4.09	.631
2. Institutional policies or rules	65	202	3.11	1.091
3. Equality of access for students	65	242	3.72	.893
4. The rejection of my traditional judgmental interests	65	232	3.57	1.015
5. Time limits	65	233	3.58	.967
6. Lack of training or professional development opportunities of teachers	65	265	4.08	.797
7. Technical difficulty or disruption	65	258	3.97	.684
8. Lack of training or expertise	65	267	4.11	.850
9. Validity and reliability levels	65	235	3.62	.979
Total	65	2200	33.85	5.594
Valid N (listwise)	65			

This finding corresponds with Azizi, (2022) and Purwantoro et al., (2021) who stated that teacher makes the case that in order to guarantee justice, equity, and a link between the distribution and the requirements of the students, efficient evaluation techniques should be implemented. Some schools based on observation provide devices not as many as the number of students in class. Even the self-phone owned by students have limited capacity with limited feature. Consequently, it does not support the forms of assessment offered.

Other findings on challenges and barriers revealed that technical problems or limitations of information technology means a challenge in applying alternative assessment methods using information technology (item 3 of table 7) showed that the Mean score reached high point that is 4.20 or 55.4% respondents 'agree' and another 33.8% 'strongly agree'. These results are synchronized with the obstacle of a lack of adequate technological infrastructure that could hinder the implementation of information technology-based assessments. This means that the existence of infrastructure such as Internet networks and other technological equipment is a crucial factor that must be met or possessed in the implementation of

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innovative alternative assessments. The results of the interviews showed that this factor became the main obstacle in this assessment method.

> *"If the IT facilities are incomplete and incompatible, it is difficult not even possible to evaluate alternative methods using technology".*

Shi & Bichelmeyer (2007) noticed that some conditions prevented teachers from integrating computer technology. They include the importance of hardware/software and technical support, a lack of appropriate training, insufficient planning for computer technology integration, and a lack of material support. This barrier is most striking, reaching 4.02 for its Mean score (table 8 item 1) or a cumulative percentage up to 90.7% out of 69.2% and 21.5% that 'agree' and 'strongly agree'.

Another challenge that needs attention is the alignment of technology-based assessments with curriculum objectives and learning outcomes (table 7 item 6) where this factor indicates a mean score of 3.14 or contributing 46.1% of 32.3% respondents 'agree' and 13.8% strongly agree as seen in table 9. This display follows fundamental factors in the development of assessments namely the validity and reliability of the assessments in the application of information technology-enabled assessments where this statement (table 7 item 1) yields mean scores of 3.43 or 53.8% encompassing 44.6% respondents 'agreed' while the other 9.2% 'strongly agreed' as an aspect to be concerned in the implementation of alternative assessments based on technologies as seen in table 10.

Table 9. *The Alignment of IT based-assessments with curriculum & learning objectives*

		Freq.	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	2	3.1	3.1	3.1
	Disagree	26	40.0	40.0	43.1
	Neutral	7	10.8	10.8	53.8
	Agree	21	32.3	32.3	86.2
	Strongly Agree	9	13.8	13.8	100.0
	Total	65	100.0	100.0	

Table 10. *Validity & reliability of the assessment using IT*

		Freq.	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	13	20.0	20.0	20.0
	Neutral	17	26.2	26.2	46.2
	Agree	29	44.6	44.6	90.8
	Strongly Agree	6	9.2	9.2	100.0
	Total	65	100.0	100.0	

The results of both the challenge statements describe that developing alternative assessments is rather difficult for primary teachers in fulfilling the validity and reliability aspects of instruments in addition to aligning them with the learning objectives. Hewson & Charlton, (2019) claimed that ensuring the validity and reliability of technical assessments is another challenge because it might be challenging to oversee and manage the testing environment.

All things considered, the use of alternative assessment techniques presents a significant infrastructure-building issue with regard to soft challenges such instrument validity and reliability as well as alignment with learning outcomes and objectives. Moreover, it is extremely evident how unappealing students or coworkers are when using this assessment method (table 7, item 2). An average score of 3.94 indicates that 83% of respondents felt that this circumstance was true, with 61.5% of respondents agreeing and 21.5% strongly agreeing. It demonstrates that, despite the favorable impression they may give, the use of alternative technology-based assessment methods should be a mature choice with all of its benefits and drawbacks. This phenomenon is in contrast to what Gill & Lucas (2013) had discovered. They conveyed that students outperform on authentic alternative assessment, which allow them to use real language, compared to typical, traditional tests.

The last challenge has to do with how much time is allotted to get proficient with the gadget. It was discovered that it needed some time to get used to learning and mastering the application of technology, as indicated in table 7 item 7. The data indicate that 36.9% of respondents "agreed" and 12.3% "strongly agreed" with the task of introducing new alternative evaluation methods employing technology, as evidenced by the average scores of 3.40 or 49.2%. In addition to this result, the time allotment also becomes barrier as it shows in table 8 item 5 with mean score reaches 3.58 or 64.6% respondents positively perceived this statement comprising from 50.8% respondents 'agree' and 13.8% 'strongly agree'. This finding corresponds with a review study revealed by Abdillah & Musa, (2021) who indicated that students' readiness for digital learning is moderate. Such a state is influenced by the availability of existing amenities that impact the learning process. Students' and lecturers' readiness and dedication must also be enhanced to ensure effective teaching

and learning. it is meant that either students or teachers require some time to deal with technology for their readiness to complete.

Meanwhile, with regard to the other barriers other than some previously revealed along with the challenging factor in the application of alternative technology-based assessment methods lies in the policy or regulatory aspects of the use of technology for assessment (table 8, item 2) that reached an average score of 3.11 or 44.6% which comes from 36.9% of respondents agreed and 7.7% other strongly agreed. This means that neither the rules nor the institutional policies contribute a little to hindering the implementation of these assessments. These results are consistent with observations and interviews where schools and leadership policies have always supported the use of technology in both learning and assessment despite adequate infrastructure conditions.

> "I'm taking the initiative of applying judgment using technology like Kahoot and the others I can"

> "Institution supports very strongly with the policy made"

> "No, we're very supportive of technology-based learning in our schools. Even, we often do training like IHT (In House Training) and even external training."

However, in terms of convenience, the use of technology in the implementation of alternative assessment using technology will continue to be crucial. According to Tong & Trinidad, (2005) suggesting that teachers will find it disappointing to use ICT if there is no technical assistance available to them. Teachers find it difficult to incorporate computer technology into their lessons when they receive inadequate technical support. As displayed in table 8, item 8, a troubling barrier is a lack of experience or skill in using technology. With an average score of 4.11 and a conversion percentage of 84.6%, this aspect is considered a barrier. Of the respondents who responded favorably, 50.8% agreed and 33.8% agreed strongly (table 11). Furthermore, utilizing alternate assessment methods with information technology in teaching practice frequently results in technical issues or disruptions. With 67.7% of respondents agreeing and 16.9% strongly agreeing, it adds to the inhibitory component (table 13). Another conclusion, as shown in table 12, was that 55.4% of respondents agreed and 29.2% strongly agreed that the adoption of these alternative assessment methods was hampered by a lack of teacher training or professional development opportunities.

Table 11. *Lack of training or expertise in using technology*

		Freq	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	5	7.7	7.7	7.7
	Neutral	5	7.7	7.7	15.4
	Agree	33	50.8	50.8	66.2
	Strongly Agree	22	33.8	33.8	100.0
	Total	65	100.0	100.0	

Table 12. *Lack of training or professional development opportunities for teachers*

		Freq	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	4	6.2	6.2	6.2
	Neutral	6	9.2	9.2	15.4
	Agree	36	55.4	55.4	70.8
	Strongly Agree	19	29.2	29.2	100.0
	Total	65	100.0	100.0	

Table 13. *Difficulties or technical disruptions when using alternative assessment methods*

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	4.6	4.6	4.6
	Neutral	7	10.8	10.8	15.4
	Agree	44	67.7	67.7	83.1
	Strongly Agree	11	16.9	16.9	100.0
	Total	65	100.0	100.0	

These three barriers are a commonly reported factor impacting teacher literacy in the mastery of information technology, according to the findings of interviews and classroom observations. Teachers frequently experience technical disruptions, and they lack prompt access to resources to address the issue. As a result, the assessment's implementation is disrupted, which interferes the students' ability to answer coherently to the evaluated portions of the alternate assessment. The assessment's execution also becomes disorganized. This finding is relevant to the research conducted by Nufus (2023) who also identified challenges associated with utilizing technology to test students' language, such as the difficulties of controlling the devices to assess students' and teachers' language. When using the gadgets as a teaching tool, students' performance and grade are affected by the internet connection.

Information technology is facilitating the deployment of innovative alternative evaluation methods, yet there are challenges and impediments that provide feedback. The challenges and barriers that exist need to be given more attention when addressing them mainly in relation to exploitation access to technological resources and the lack of adequate technological infrastructure in order to find ideals innovative alternative assessment methods.

CONCLUSION

The positive perception of the effectiveness and acceptance of innovative alternative assessments facilitated by information technology, as well as the various formats offered explicitly suggests that such assessment methods can play a role as determinants of student competence access comprehensively regardless conventional assessment does. Thus, teachers and students are challenged and motivated to implement learning, particularly new method of assessments. Technology use in the classroom has the potential to raise teachers' technological awareness and instructional preparation, both of which have an impact on students' willingness to learn (Nufus, 2023).

Finally, the potential of the employment of innovative alternative assessment should be recognized by policy and decision makers, instructional designers, teachers in response to the amazing technological advancements that have already fundamentally changed many facets of education including in EFL teaching.

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