EXAMINING TEACHERS' PERCEPTIONS AND ATTITUDES TOWARDS THE INTEGRATION OF TECHNOLOGY IN ASSESSMENT PRACTICES

Wahyu Restu Indayani
Universitas Muhamadiyah Gresik, Indonesia
Email: *w.restuindayani@gmail.com*

Slamet Asari
Universitas Muhamadiyah Gresik, Indonesia
Email: asari70@umg.ac.id

Nirwanto Maruf
Universitas Muhamadiyah Gresik, Indonesia
Email: nirwanto.maruf@umg.ac.id

Abstract: The integration of technology in education has become increasingly important, and understanding how teachers perceive and approach online assessment is crucial for effective implementation in the field of EFL teaching. This study investigates the perceptions and attitudes of EFL teachers in Junior High Schools in East Java towards online assessment. Despite the potential benefits of online assessment, there is a research gap in how EFL teachers in this context perceive and utilize it. This research aims to explore EFL teachers' beliefs and views about online testing and the specific challenges they encounter when adopting online assessment. Employing a mixed-methods approach, data were gathered from 100 EFL teachers through surveys and semi-structured interviews. Findings reveal that EFL teachers generally hold a positive perception and attitude towards online assessment, acknowledging advantages like faster grading and accurate measurement of learning outcomes. However, they face challenges related to technological proficiency, student competence assessment, and teacher confidence in using ICT. These findings contribute to the field by emphasizing the importance of supporting teachers' technological proficiency and fostering an inclusive learning environment, optimizing the potential benefits of online assessment in EFL classrooms.
Keywords: *challenges and strategies; EFL teachers; online assessment; perception and attitudes.*

INTRODUCTION
Assessment can be utilized to judge on how well students comprehend brand-new material and demonstrate that the objective was met (Arifani, 2022; Brown, 2019; Voronov et al., 2018). Evaluations are used to motivate students to learn extensively rather than just regurgitate information for tests (Phongsirikul, 2018).

In the past, assessments were mostly utilized to assess students and gauge memory (Tosuncuoglu, 2018). Like the vast majority of conventional tests, it was also given on paper (Cirit, 2015). Due to the technology's quick evolution, current evaluations combine online and paper-based components. Due to its integration, student development can now be assessed and tracked more quickly and easily (Guangul et al., 2020).

Online assessment has become increasingly popular recently (Lie et al., 2020; Monroe & Haug, 2022; Tang et al., 2020) . This has been a well-liked strategy to encourage learning flexibility (Alavi et al., 2022) as it is so straightforward to accurately and thoroughly assess student learning (Zheng et al., 2020). Since it yields fast feedback (Zhang et al., 2022), it is made simple by online tests to track students' progress (Mai et al., 2022) and quickly assign scores (Daradoumis et al., 2019). The online test's rapid quickness will have an effect on the test-takers trust in the outcomes (Maruf & Anjely, 2020; Momeni, 2022).

The ease with which students can obtain additional materials' while taking the test makes cheating one of the biggest issues (Abduh, 2021). Students who had the simplest access to alternative resources cheated most frequently (Tarigan et al., 2021). According to Patak et al., (2021), these plagiarism-related actions may result in academic dishonesty and other negative effects.

Another challenge is ensuring the reliability and validity of online assessments (Hewson & Charlton, 2019), as it can be difficult to monitor and control the testing environment. These issues emphasize the necessities for significant strategies and technologies to enhance the security and accuracy of online assessments (Surahman & Wang, 2022). Despite this, student internet connectivity issues made it difficult to complete the assessments on time, which may have a negative impact on their learning (Elsa & Anwar, 2021; Onuh et al., 2022)

Online assessment has been shown to be difficult for both teachers and students, according to a prior study. Lack of resources and skills among university lecturers makes it difficult to integrate ICT, which makes it difficult to engage students (Suherman, 2021). At a few schools, it can be challenging to assess learners' online competencies as the schools lack the essential tools (Lestiyanawati & Widyantoro, 2020; Mujayanah et al., 2023);

Most teachers do not believe that online assessment enables them to explore students' unique learning styles, while a small number of teachers agree that it enables them to measure outcomes accurately (Momeni, 2022; Maruf & Anjely, 2020). Another reveals that teachers are developing language assessments while learning a new skill and still giving all students an equal chance regardless of whether they have access to the advanced technology (Fitriyah & Jannah, 2021; Maruf, 2023). The teacher argues that effective evaluation methods should be put into place in order to ensure justice, equity, and a connection between the distribution and the needs of the students (Azizi, 2022; Purwantoro et al., 2021).

Immediate feedback from online assessments fosters a positive attitude that enables teachers to quickly track progress and plan additional activities for students (Vurdien & Puranen, 2022; Zuhri et al., 2021). Through online assessment, the teacher as facilitator guides students to brainstorm answers from various sources, so the idea not come only from the teacher (Loi & Ang, 2022). Flexibility in taking exams can lessen the anxiety and stress that come with timed exams (Russell, 2020).

Previous research discovered that online formative assessment enabled teachers to become innovators by developing peer assessments, games, and question-and-answer forms (İlhan et al., 2022).

A previous study found that this online test also fosters the undesirable idea that there is no guarantee that students will come up with answers when taking the test (Vurdien & Puranen, 2022). Another point was that task design typically necessitates lengthy organizing, developing, checking, testing, adjusting, and reexamining processes (Arifani et al., 2020; Bawanti & Arifani, 2021). Having trouble seeing students' cheating and being used to the exam format are problems for teachers (Mustafa, 2021). By doing this, teachers intend to teach students crucial information that students might have yet to acquire in a regular assessment setting (Coomey & Stephenson, 2018), boosting student adaptability and practical methods of assessing their knowledge and skills (Rapanta et al., 2020).

In past research, perspectives and attitudes of different teachers about online assessment examined. The study emphasized the benefits of online testing, including its capacity to provide quick feedback (Lopes & Soares, 2022) and precise input (Xian, 2020), monitor student growth (Pospíšilová & Rohlíková, 2023), and support flexible learning (Tran & Ma, 2021). Online assessments preferred by teachers due to provide short turnaround times (Ali et al., 2021) that allow teachers to monitor students' progress (Lisyowati et al., 2021) and develop new lesson plans (Chen, 2022). Online assessment can help students keep a positive attitude and lessen the pressure of timed exams (Jahara et al., 2022).

Earlier research on online assessment was limited in that it mostly concentrated on how students and teachers perceived online assessment in relation to specific teaching demographics, such as adult learners. Although it has been able to compile important information on the viewpoints and attitudes of EFL teachers that include online assessment in their sessions for language learning. Another issue is that past research relied heavily on quantitative techniques like surveys to estimate the rise in assessment usage.

In line with the broader context of technology growth in assessment practices, the current study employed explanatory research toanalyze the understanding of teachers' perspectives, attitudes, challenges, and approaches related to online assessment. As a guide for the investigation, the following research issues were developed: (1) What beliefs and views do EFL teachers have about online testing? (2) What specific issues do EFL teachers have when adopting online assessment into their language classrooms and how do they manage these limitations and challenges?.

METHOD
This mixed-method study explores teachers'

perspectives and attitudes towards online assessment in an East Java Junior High School, using surveys and semi-structured interviews to identify challenges and strategies for effective technology integration.

This research explored the impact of integrating technology into education evaluations, focusing on English teachers from junior high schools in East Java. One hundred of teachers completed a closed-ended questionnaire, and six teachers participated in semi-structured interviews, selected using purposive sampling based on their expertise in technology assessment. The participants varied in age, experience, and educational background. Data gathered through interviews and a Google Forms-based questionnaire, offering insights into technology integration in different educational contexts.

Table 1. *Demographic participants*

Partici pants	Age	Gender	Experienc e	Education
T1	26 - 30	Female	1-5 years	Bachelor
T2	41 - 45	Female	16-20 years	Master
T3	46 or above	Male	More than 20 years	Bachelor
T4	46 or above	Male	More than 20 years	Master
T5	31 - 35	Male	11-15 years	Master
T6	36 - 40	Male	5-10 years	Master

Table 2. *Frequency use of online assessment*

Participants	Frequency
T1	*51-75%*
T2	*26-50%*
T3	*0-25%*
T4	*0-25%*
T5	*51-75%*
T6	*51-75%*

Table 2. *Learning media use*

Participants	Learning Media Use
T1	Learning Management Systems, Online quiz platforms, Video conferencing tools
T2	Learning Management Systems
T3	Learning Management Systems
T4	Online quiz platforms
T5	Learning Management Systems, Online quiz platforms, Video conferencing tools
T6	Learning Management Systems, Online quiz platforms, Video conferencing tools

The data analysis demonstrates significant patterns in the participants' use of educational resources and frequency of online assessments. Participants between the ages of 26 and 40 (T1, T5, and T6) exhibit higher usage (51–75%) across a variety of tools, whereas participants over the age of 41 (T2, T3, and T4), with at least 16 years of experience, exhibit lower usage (0–50%) and a greater reliance on particular platforms. The adoption of online assessments and learning media preferences are greatly influenced by age, experience, and technological familiarity. These results offer insightful information about the characteristics of teachers and their methods for conducting online assessments.

This study utilized a closed-ended survey and semi-structured interviews conducted through Google Forms (Creswell, 2009b). The survey was adopted from previous studies (Momeni, 2022; Pongsakdi et al., 2021), gathered quantitative data on teachers' perceptions and attitudes towards technology integration in assessment. It incorporated categories from these studies, including perception and attitude. Administered online via Google Forms, the questionnaire ensured convenience and accessibility for participants.

Semi-structured interviews conducted through Google Forms obtained qualitative data, providing deeper insights into teachers' perspectives on online assessment and technology integration. The interviews aimed to explore challenges faced by teachers, strategies employed, and overall perceptions of technology integration in assessment practices.

These research instruments, the close-ended questionnaire with its categories, and the semi-structured interviews were carefully selected to comprehensively capture teachers' experiences and attitudes towards technology integration in assessment. By combining quantitative and qualitative data, the study facilitated a thorough analysis of the research topic, enabling a richer understanding of the impact of technology integration on assessment practices in education (Creswell, 2009b).

The research involved carefully selecting expert English teachers proficient in integrating technology into evaluation. Data collection utilized close-ended questionnaires and semi-structured interviews administered through Google Forms. Questionnaires explored participants' perspectives on technology in assessment and attitudes (Momeni, 2022; Pongsakdi et al., 2021). Interviews delved deeper into experiences with online assessment and technology adoption. Thematic analysis was applied to qualitative data,

identifying recurring themes (Creswell, 2009a).

Descriptive statistical analysis summarized quantitative data. Findings integrated both methods to understand participants' perceptions and experiences regarding technology adoption in assessment practices. Results were presented clearly, discussed in relation to existing literature, and explored implications for effective implementation (Creswell, 2009b). Ethical considerations were maintained throughout the process (Creswell, 2009b). The research procedure involved participant selection, data collection using questionnaires and interviews, analysis of qualitative and quantitative data, integration of findings, and presentation with implications for implementation, all while maintaining ethical standards (Creswell, 2009b).

The data gathered from the surveys and interviews were subjected to a comprehensive analysis to gain meaningful insights into the impact of technology adoption in assessment practices.

For the survey, which were directly adopted from previous study (Momeni, 2022; Pongsakdi et al., 2021), frequencies and percentages were calculated for each question. This descriptive analysis allowed for a clear understanding of the distribution of responses and the relative popularity of different options among the participants. This facilitated easy comparison between different options and offered a clearer understanding of the relative popularity of each choice.

Conversely, thematic analysis was done on the qualitative data obtained from the semi-structured interviews. The transcripts were carefully review, coded, and analyzed to identify recurring themes and patterns. These themes captured the participants' experiences, perspectives, and recommendations related to online assessment and the integration of technology (Mirza, 2021; Momeni, 2022; Wicaksono, 2022).

By integrating the quantitative findings from the questionnaires and the qualitative insights from the interviews, a comprehensive understanding of the participants' perspectives on technology adoption in assessment practices achieved. This allowed for a deeper exploration of their perceptions, experiences, and recommendations, resulting in a more nuanced interpretation of the data (Poth, 2018).

The interpretation of the data was guide by the research objectives and relevant theoretical frameworks. The relevance and impact of the results in the fields of instructional technology and evaluation are highlighted and addressed in light of previous research. The limitations of the study were also acknowledged, providing insights for future research and suggesting areas for further exploration (Poth, 2018).

RESULTS AND DISCUSSION

This study aimed to explore the perceptions and attitudes of EFL teachers of Junior High School in East Java towards online assessment. The research utilized a questionnaire to collect data on the teachers' perceptions and attitudes, and descriptive statistics were employed to analyze the responses. The findings offer valuable insights into the application of online assessment in the educational context and provide a comprehensive understanding of how EFL teachers perceive and approach this form of assessment.

Research question #1: What beliefs and views do EFL teachers have about online testing?

This study sought to investigate how EFL teachers felt about and viewed online testing. In order to get insight into the usage of online assessment in the field of education, descriptive statistics were employed to examine a survey regarding perspective and attitudes.

Table 3. *EFL teacher perception and attitude*

I. Perception of Technology in Assessment					
ITEM	SD	D	N	A	SA
I prefer online assessments to paper-based assessments.	10%	36%	30%	19%	5%
Online assessment helps teachers improve their technological skills to assess students effectively using various techniques	7%	13%	28%	36%	16%
Effective evaluation of students' performance is possible in online assessment.	3%	8%	19%	62%	8%
Online assessment measures students' achievements fairly.	6%	62%	20%	10%	2%
Effective use of the online assessments platform enables teachers to assess their students more effectively.	0%	20%	25%	48%	7%
Compared to paper-based assessments, online assessments provide faster entry of grades into the electronic grading center.	0%	10%	30%	51%	9%

Online assessment allows teachers to measure learning outcomes more accurately.	3%	18%	34%	39%	6%
Online assessments help instructors explore the unique learning styles of individual students.	0%	10%	38%	43%	9%
Providing teachers with managerial, pedagogical, and technological support during online assessment enables them to increase the accuracy with which they assess.	2%	80%	10%	8%	0%
E-portfolios, a form of online assessment, support students' reflective thinking, develop creativity and increase collaborative work.	0%	8%	29%	60%	3%
Online assessment approaches such as online discussion and personal activities for learning problem solving are effective assessment strategies.	1%	18%	26%	53%	2%
II. Attitudes toward Technology in Assessment					
I rely on my ability to use ICT	4%	19%	20%	57%	0%
I want to learn more about using ICT to support learning and teaching.	0%	5%	23%	67%	5%
ICT needs to be used more at school because it helps to learn better.	0%	0%	10%	78%	12%
The use of ICT in studying develops students' collaborative skills.	12%	38%	30%	12%	8%
I have enough tools for process-oriented assessment	3%	7%	40%	5%	0%

Table 4. *Descriptive statistic result*

		Perception	Attitude
N	Valid	100	100
	Missing	0	0
Mean		3,0900	3,4000
Std. Error of Mean		,02876	,04924
Median		3,0000	3,0000
Std. Deviation		,28762	,49237
Skewness		2,909	,414
Std. Error of Skewness		,241	,241
Kurtosis		6,595	-1,866
Std. Error of Kurtosis		,478	,478
Range		1,00	1,00
Minimum		3,00	3,00
Maximum		4,00	4,00

Sum		309,00	340,00

The data in Tables 4 and 5 provide insight into how EFL teachers perceive and use online assessment. The samples for this study came from 100 EFL teachers at Junior High Schools' in East Java. Table 1 employs a Likert scale of 1 to 5, with 1 representing strongly disagree (SD), 2 expressing disagree (D), 3 referring to neutrality (N), 4 representing agreement (A), and 5 representing strongly agree (SA).

Table 4's data shed light on the opinions and views of EFL teachers regarding the application of technology to assessment. A 3.09 average perception score indicates a generally positive perception. It suggests that teachers prefer online examinations to paper ones and believe that taking exams online improves their technology proficiency so they can successfully grade students using a variety of techniques. Additionally, teachers perceive that using online assessment allows them to accurately measure learning outcomes, evaluate students successfully, and use online communication and personal activities as effective problem-solving strategies.

The mean score for attitudes, on the other hand, is 3.4, showing a generally positive attitude toward technology in assessment. It implies that the majority of teachers rely on their proficiency with ICT and indicate an interest to discover more about how to use ICT to enhance learning and teaching. Teachers believe that student collaboration skills improved by using ICT during class. The research also shows that teachers believe they have sufficient tools for process-oriented assessment. Table 2 provides descriptive statistics related to perception and attitudes. The mean score of 3.09 for perception and 3.4 for attitude indicates that EFL teachers have a medium positive perception and attitude toward online assessment.

The distribution and shape of the data show that most EFL teachers have a positive perspective and attitude toward online testing. The small rightward skew in the data indicates that most teachers have a positive view of online assessment.

According to the research, EFL teachers in junior high schools in East Java have an attitude and perception of the use of technology in assessment is generally favorable. They prefer online tests to paper ones and think technology assists them to evaluate students more effectively.

Teachers also view online assessment as the way to effectively gauge student-learning outcomes and employ techniques for efficient problem solving, such as online discussion and personal activities. Teachers also acknowledge the

advantages of using ICT in helping students build their collaboration skills and display a positive attitude toward their own ICT skills. These results can guide the development of online assessment processes in the context of EFL learning.

The favorable perception of online evaluation among EFL teachers is consistent with earlier research that emphasizes its advantages, such as immediate feedback, flexibility, accessibility worldwide, customization, and efficiency (Alruwais et al., 2018). The survey also showed that EFL teachers believe that online evaluation may be utilized to successfully evaluate students, accurately measure learning outcomes, and employ personal activities and online discussion as problem-solving techniques. These results are consistent with other research, which claims that online assessment can offer staff and students continuous feedback on their progress toward learning objectives (Behforouz, 2022).

Academic integrity and student equity are another two issues raised by the study that relate to online assessment (Behforouz, 2022). These findings are in accordance with earlier research, which contends that online assessment poses hazards and practical difficulties, particularly for summative evaluations (Al-Maqbali & Raja Hussain, 2022). The study nevertheless indicates that efficient use and strategies for implementing online evaluation can help optimize its potential benefits while limiting its problems (Wibowo & Novitasari, 2021).

Research question #2: What specific issues do EFL teachers have when adopting online assessment into their language classrooms and how do they manage these limitations and challenges?.
According to survey results, the majority of EFL teachers in East Java believe favorably in online assessment. The purpose of this study is to get an in-depth understanding of teachers' experiences with the constraints and difficulties associated with adopting online assessment, as well as the techniques teachers use to deal with these issues. In this study, six teachers freely took part in semi-structured interviews. The participants are chosen based on the demographic data that is mentioned in the section on instrument of the study.

A number of themes relating to the difficulties teachers have when implementing online assessments were found after the responses were thematically analyzed. The following topics apply to the challenge of online assessment: (1) Technological Proficiency. (2) Student Competence Assessment. (3) Teacher Confidence in ICT

It draws attention to a number of issues, including the preference of teachers for online evaluation over paper-based evaluation, their struggle to develop technological proficiency for efficient evaluation, and the perceived efficiency of online evaluations in determining learning outcomes and judging students' proficiency. Regarding technical aptitude, teacher 1 with 1–5 years of teaching expertise shares her perspective on online assessment.

> "Incorporating technology in assessment is essential, but it can be overwhelming at times. [...]"

Additionally, teacher 2 shared her perspective on the difficulty in assessing learners' technology competency and competence in general,

> "In my experience, providing instructions and rubrics to students using technology in assessment is difficult because sometimes students don't understand it. So, I help them understand what is expected. [...]"

In the meantime, some participants' responses to concerns about students' assessment abilities, such as those indicated by Teacher 3,

> "In the beginning I have challenge to assigning students personal activities. I confuse about how the way to overcome this. Also not all students can have the same access one to another. [...]"

Teacher 4 illustrated the same challenge by saying,

> "Actually, my students are not ready yet for this online assessment. My students mostly late in submitted their work, have no or low internet connectivity. So, when it comes to speaking time, they cannot showing their live video and I cannot assess them fairly. [...]"

Teachers underlined the importance of teacher confidence in using ICT for assessments while discussing the use of ICT in the classroom. As teacher 5 highlighted,

> "Ensuring teacher readiness is also crucial for successful implementation. As educators, we need continuous professional development opportunities to stay up-to-date with the latest technological advancements in assessment. [...]"

Meanwhile teacher 6 stated,

> "I am not too confident in ICT, but I believe that continuous assessment resource evaluation and investing in appropriate tools and platforms are essential to support teachers' needs. But in fact, my school is not that ready to use various platform. So, I try to collaborate with other teacher and discuss what is the best way to overcome it. Sometimes I use quizzes or google form or moodle that already provided or asking students to make their own video then submitted to me. It works on me."

Teacher 3 shares his knowledge as to how to overcome the difficulties.

> "[...] To address the challenge of assigning personal activities through online assessment, I implemented strategies to ensure equitable participation. I diversified the types of activities to accommodate students' varying access levels to technology. Additionally, I provided clear instructions and maintained open communication with students to create a supportive learning environment, enabling them to engage effectively in the assessment tasks."

It can be difficult for teachers to incorporate technology-based assessments. They used a variety of approaches to get around this, with teacher 1 using a workshop and seeking advice from tech experts as part of her strategy.

> "[...] To tackle this challenge, I attended workshops and training sessions to enhance my technological proficiency. I also asking guidance from my colleagues whose expert in technology."

As a strategy for conquering the abilities of students in evaluation, teacher 4 shares his experience in overcoming his limitations during speaking time.

> "[...] To overcome the challenge of students' readiness for online assessment, I have implemented strategies such as providing alternative submission methods for students with limited internet connectivity and scheduling one-on-one sessions to assess speaking skills through alternative means. I also maintain regular communication with students to offer reminders and support for timely submissions, fostering a more inclusive online assessment environment."

The results are in accordance with earlier research that underlines the difficulties of conducting online assessments, such as gauging students' abilities and teachers' comfort levels with ICT (Fitriyah & Jannah, 2021; Wibowo & Novitasari, 2021).

Despite a largely favorable impression and attitude toward online assessment, teachers encountered challenges in properly integrating technology, assessing student requirements, and maintaining a helpful online learning environment. These results are in keeping with other research, which contends that online assessment offers risk factors and practical difficulties, particularly for summative examinations (Mohamadi, 2018; Mohamadi Zenouzagh, 2019).

Teachers used a variety of ways to address these restrictions, including attending seminars, obtaining advice from colleagues, providing clear directions, and offering alternative evaluation methods. These results are in accordance with earlier research, which contends that online assessment can help maximize potential while avoiding obstacles with effective use and strategies for implementation (Behforouz, 2022; Fitriyah & Jannah, 2021; Rahmawati Astiandani & Anam, 2021)

CONCLUSION

In conclusion, this study explored EFL teachers' attitudes towards online assessment of Junior High School in East Java using surveys and semi-structured interviews. Most teachers exhibited positive attitudes, recognizing the benefits of quicker grading and improved evaluation. Challenges included students' technological skills and teachers' confidence in ICT use. Conversely, teachers demonstrated resilience through collaboration and workshops to enhance technology integration. The findings have implications for creating a supportive environment to leverage online assessment advantages and improve student-learning experiences. Future research should focus on professional development for teachers to enhance technological proficiency, consider students' perspectives, and explore innovative assessment mechanisms, fostering equitable and efficient technology integration in EFL classrooms.

ACKNOWLEDGEMENT

REFERENCES

Abduh, M. Y. M. (2021). Full-time online assessment during COVID -19 lockdown: EFL teachers' perceptions. *Asian EFL Journal*, *28*(11).

Al-Maqbali, A. H., & Raja Hussain, R. M. (2022). The impact of online assessment challenges on assessment principles during COVID-19 in Oman. *Journal of University Teaching and Learning Practice*, *19*(2), 73–92. https://doi.org/10.53761/1.19.2.6

Alavi, S. M., Dashtestani, R., & Mellati, M. (2022). Crisis and changes in learning behaviours: technology-enhanced assessment in language learning contexts. *Journal of Further and Higher Education*, *46*(4). https://doi.org/10.1080/0309877X.2021.1985977

Ali, S., Hafeez, Y., Abbas, M. A., Aqib, M., & Nawaz, A. (2021). Enabling remote learning system for virtual personalized preferences during COVID-19 pandemic. *Multimedia Tools and Applications*, *80*(24), 33329–33355. https://doi.org/10.1007/s11042-021-11414-w

Alruwais, N., Wills, G., & Wald, M. (2018). Advantages and challenges of using e-assessment. *International Journal of Information and Education Technology*, *8*(1), 34–37. https://doi.org/10.18178/ijiet.2018.8.1.1008

Arifani, Y. (2022). *Development and validation of an instrument to asses EFL teachers' perceptions of task assessment using RAIS frameworks* (1st ed.). Deepublish Publisher.

Arifani, Y., Suryanti, S., Wicaksono, Bayu Hendro, & Inayati, N. (2020). EFL teacher blended professional training: A review of learners' online and traditional learning interactions quality. *3L: The Southeast Asian Journal of English Language Studies*, *26*(3), 124–138. https://ejournal.ukm.my/3l/article/view/38650

Azizi, Z. (2022). Fairness in assessment practices in online education: Iranian University English teachers' perceptions. *Language Testing in Asia*, *12*(1). https://doi.org/10.1186/s40468-022-00164-7

Bawanti, P. K. D., & Arifani, Y. (2021). The students' perceptions of using zoom application on mobile phone in improving speaking skills during online learning at Ban Loeiwangsai School, Loei Province, Thailand. *Journal of English Teaching, Literature, and Applied Linguistics*, *5*(1), 54. https://doi.org/10.30587/jetlal.v5i1.2212

Behforouz, B. (2022). Online assessment and the features in language education context: A brief review. *Journal of Language and Linguistic Studies*, *8*(1), 564–572.

Brown, G. T. L. (2019). Is Assessment for learning really assessment? *Frontiers in Education*, *4*. https://doi.org/10.3389/feduc.2019.00064

Chen, M. (2022). Establishing a common design language and process for unit development using miro template. *ASCILITE Publications*, e22223. https://doi.org/10.14742/apubs.2022.223

Cirit, N. C. (2015). Assessing Elt pre-service teachers via web 2.0 tools: Perceptions toward traditional, online and alternative assessment. *Turkish Online Journal of Educational Technology*, *2015*.

Coomey, M., & Stephenson, J. (2018). Online learning: it is all about dialogue, involvement, support and control - according to the research. In *Teaching & Learning Online: New Pedagogies for New Technologies*. https://doi.org/10.4324/9781315042527-6

Creswell, J. W. (2009a). Research design : qualitative, quantitative, and mixed methods approaches / 3rd ed Chapter 1 : Selection of a research design. In *Research Design Qualititative Quantitative and Mixed Methods Approaches* (Issue 3).

Creswell, J. W. (2009b). Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.). In *Sage Publications, Incage Publications, Inc* (Vol. 20, Issue 2).

Daradoumis, T., Marquès Puig, J. M., Arguedas, M., & Calvet Liñan, L. (2019). Analyzing students' perceptions to improve the design of an automated assessment tool in online distributed programming. *Computers and Education*, *128*. https://doi.org/10.1016/j.compedu.2018.09.021

Elsa, E., & Anwar, K. (2021). The perception of using technology canva application as a media for English teacher creating media virtual teaching and English learning in Loei Thailand. *Journal of English Teaching, Literature, and Applied Linguistics*, *5*(1), 62. https://doi.org/10.30587/jetlal.v5i1.2253

Fitriyah, I., & Jannah, M. (2021). Online assessment effect in EFL classroom: An investigation on students and teachers' perceptions. *IJELTAL (Indonesian Journal of English Language Teaching and Applied Linguistics)*, *5*(2). https://doi.org/10.21093/ijeltal.v5i2.709

Guangul, F. M., Suhail, A. H., Khalit, M. I., & Khidhir, B. A. (2020). Challenges of remote assessment in higher education in the context of covid-19: A case study of Middle East College. *Educational Assessment, Evaluation and Accountability*, *32*(4). https://doi.org/10.1007/s11092-020-09340-w

Hewson, C., & Charlton, J. P. (2019). An investigation of the validity of course-based online assessment methods: The role of computer-related attitudes and assessment mode preferences. *Journal of Computer Assisted Learning*, *35*(1). https://doi.org/10.1111/jcal.12310

İlhan, N., Güngör, H., & Gülseven, E. (2022). Scale of attitudes towards online formative assessment: Teacher' attitudes during covid-19 pandemic. *International Journal of Educational*

Methodology, 8(2). https://doi.org/10.12973/ijem.8.2.241

Jahara, S. F., Hussain, M., Kumar, T., Goodarzi, A., & Assefa, Y. (2022). The core of self-assessment and academic stress among EFL learners: the mediating role of coping styles. *Language Testing in Asia*, 12(1), 21. https://doi.org/10.1186/s40468-022-00170-9

Lestiyanawati, R., & Widyantoro, A. (2020). Strategies and problems faced by Indonesian teachers in conducting e- learning system during covid-19 outbreak. *CLLiENT Journal*, 2(1).

Lie, A., Tamah, S. M., Gozali, I., Triwidayati, K. R., Utami, T. S. D., & Jemadi, F. (2020). Secondary school language teachers' online learning engagement during the covid-19 pandemic in Indonesia. *Journal of Information Technology Education: Research*, 19. https://doi.org/10.28945/4626

Lisyowati, W., Wiyaka, W., & Prastikawati, E. F. (2021). English teachers' conceptions of formative assessment in online teaching. *Language Circle: Journal of Language and Literature*, 16(1), 177–186. https://doi.org/10.15294/lc.v16i1.29998

Loi, C. K., & Ang, M. C. H. (2022). Online learning and online assessments: Attitude change and students' perceptions. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 7(4). https://doi.org/10.47405/mjssh.v7i4.1412

Lopes, A. P., & Soares, F. (2022). Online assessment using different tools and techniques in higher education. *Edulearn,* 510–517. https://doi.org/10.21125/edulearn.2022.0157

Mai, T. T., Bezbradica, M., & Crane, M. (2022). Learning behaviours data in programming education: Community analysis and outcome prediction with cleaned data. *Future Generation Computer Systems*, 127, 42–55. https://doi.org/10.1016/j.future.2021.08.026

Maruf, N. (2023). Understanding the relationship between teachers' beliefs and attitudes about differentiated instruction and its implementation in efl classrooms in Indonesia. *English Review: Journal of English Education*, 11(2), 357–364. https://doi.org/10.25134/erjee.v11i2.7251

Maruf, N., & Anjely, A. M. R. (2020). Utilizing Cooperative Integrated Reading and Composition (CIRC) with mobile learning to enhance students' reading comprehension. *British (Jurnal Bahasa Dan Sastra Inggris)*, 9(2), 10–19.

Mirza, H. S. (2021). University teachers' perceptions of online assessment during the covid-19 pandemic in Lebanon. *American Academic & Scholarly Research Journal*, 13(1), 11–24.

Mohamadi, Z. (2018). Comparative effect of online summative and formative assessment on EFL student writing ability. *Studies in Educational Evaluation*, 59, 29–40.

https://doi.org/10.1016/j.stueduc.2018.02.003

Mohamadi Zenouzagh, Z. (2019). The effect of online summative and formative teacher assessment on teacher competences. *Asia Pacific Education Review*, 20(3), 343–359. https://doi.org/10.1007/s12564-018-9566-1

Momeni, A. (2022). Online assessment in times of covid-19 lockdown: Iranian EFL teachers' perceptions. *International Journal of Language Testing*, 12(2), 1–24. https://doi.org/10.22034/IJLT.2022.157122

Monroe, R. W., & Haug, J. C. (2022). Assessment of telework in a federal agency at the operational phase. *Public Organization Review*, 22(3), 725–742. https://doi.org/10.1007/s11115-021-00538-0

Mujayanah, S., Maruf, N., & Asari, S. (2023). Whatsapp use on reading comprehension: Exploring the impact among EFL learners. *English Review: Journal of English Education*, 11(2), 391–404. https://doi.org/10.25134/erjee.v11i2.7712

Mustafa, E. (2021). Preservice teachers' views on online assessment. *I-Manager's Journal of Educational Technology*, 18(3), 42–53. https://doi.org/10.26634/jet.18.3.18261

Onuh, W., Legaspi, O. M., Mostajo, S. T., Malabanan, D. S., & Reyes, R. T. (2022). The link between internet connectivity and missed assessments in the online class modality. *IAFOR Journal of Education*, 10(2). https://doi.org/10.22492/ije.10.2.01

Phongsirikul, M. (2018). Traditional and alternative assessments in ELT: Students' and teachers' perceptions. *REFLections*, 25(1), 61–84.

Pongsakdi, N., Kortelainen, A., & Veermans, M. (2021). The impact of digital pedagogy training on in-service teachers' attitudes towards digital technologies. *Education and Information Technologies*, 26(5), 5041–5054. https://doi.org/10.1007/s10639-021-10439-w

Pospíšilová, L., & Rohlíková, L. (2023). Reforming higher education with ePortfolio implementation, enhanced by learning analytics. *Computers in Human Behavior*, 138, 107449. https://doi.org/10.1016/j.chb.2022.107449

Poth, C. (2018). The contributions of mixed insights to advancing technology-enhanced formative assessments within higher education learning environments: an illustrative example. *International Journal of Educational Technology in Higher Education*, 15(1), 9. https://doi.org/10.1186/s41239-018-0090-5

Purwantoro, A., Asari, S., & Maruf, N. (2021). The effectiveness of e-learning madrasah in English teaching and learning. *BIRCI-Journal*, 4(3).

Rahmawati Astiandani, F., & Anam, S. (2021). EFL teachers' perceptions towards the implementation of online formative assessment amidst the covid-19 pandemic. *ELT Worldwide: Journal of English Language Teaching*, 8(2),

269–277. https://doi.org/10.26858/eltww.v8i2.21326

Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2020). Online university teaching during and after the covid-19 crisis: Refocusing teacher presence and learning activity. *Postdigital Science and Education*, *2*(3). https://doi.org/10.1007/s42438-020-00155-y

Russell, V. (2020). Language anxiety and the online learner. *Foreign Language Annals*, *53*(2). https://doi.org/10.1111/flan.12461

Suherman, A. (2021). *Proceeding of 2 nd International Conference on the Teaching of English and Literature Bengkulu Examining How Indonesian EFL Teachers Engage with Online Formative Assessment During Covid-19 Pandemic*. 310–318.

Surahman, E., & Wang, T. (2022). Academic dishonesty and trustworthy assessment in online learning: A systematic literature review. *Journal of Computer Assisted Learning*, *38*(6), 1535–1553. https://doi.org/10.1111/jcal.12708

Tang, S.-K., Lei, P., Tse, R., Lam, C.-T., & Cheong, C. W.-L. (2020). Overcoming the sudden conversion to online education during the covid-19 pandemic: A case study in computing education. *2020 IEEE International Conference on Teaching, Assessment, and Learning for Engineering (TALE)*, 17–22. https://doi.org/10.1109/TALE48869.2020.9368384

Tarigan, R. N., Nadlifatin, R., & Subriadi, A. P. (2021). Academic dishonesty (cheating) in online examination: A literature review. *International Conference on Computer Science, Information Technology, and Electrical Engineering (ICOMITEE)*, 148–152.

Tosuncuoglu, I. (2018). Importance of assessment in ELT. *Journal of Education and Training Studies*, *6*(9). https://doi.org/10.11114/jets.v6i9.3443

Tran, T. T. T., & Ma, Q. (2021). Using formative assessment in a blended EFL listening course. *International Journal of Computer-Assisted Language Learning and Teaching*, *11*(3), 17–38. https://doi.org/10.4018/IJCALLT.2021070102

Voronov, A. A., Garkovenko, V. E., Safonov, A. M., & Kosnikov, S. N. (2018). Higher education competitiveness: Definition, assessment and ways of growth. *European Research Studies Journal*, *21*. https://doi.org/10.35808/ersj/1202

Vurdien, R., & Puranen, P. (2022). Teacher attitudes toward online assessment in challenging times. In *Intelligent CALL, granular systems and learner data: short papers from EUROCALL 2022*. https://doi.org/10.14705/rpnet.2022.61.1486

Wibowo, F. E., & Novitasari, U. (2021). An analysis of online assessment in teaching English. *PROJECT (Professional Journal of English Education)*, *4*(3), 521–529.

https://doi.org/10.22460/project.v4i3.p521-529

Wicaksono, A. L. (2022). Teachers' perceptions towards the practice of assessment in online classroom during pandemic of covid-19. *ELite Journal : International Journal of Education, Language, and Literature*, *2*(4), 211–218. https://journal.unesa.ac.id/index.php/elite/article/view/19762

Xian, L. (2020). The effectiveness of dynamic assessment in linguistic accuracy in EFL writing: An investigation assisted by online scoring systems. *Language Teaching Research Quarterly*, *18*, 98–114. https://doi.org/https://dx.doi.org/10.32038/ltrq.2020.18.07

Zhang, L., Huang, Y., Yang, X., Yu, S., & Zhuang, F. (2022). An automatic short-answer grading model for semi-open-ended questions. *Interactive Learning Environments*, *30*(1). https://doi.org/10.1080/10494820.2019.1648300

Zheng, L., Zhang, X., & Cui, P. (2020). The role of technology-facilitated peer assessment and supporting strategies: a meta-analysis. *Assessment and Evaluation in Higher Education*, *45*(3). https://doi.org/10.1080/02602938.2019.1644603

Zuhri, S., Anwar, K., & Maruf, N. (2021). The correlation between extensive reading, critical reading , and self- esteem in students' reading abilities. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, *4*(3).