



ICT DEVELOPMENT IN SHIFTING FROM OFFLINE TO ONLINE ASSESSMENT

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Abstract

The study aims to analyze how Information and Communications Technology (ICT) development is shifting from offline paper-based assessment to online assessment in Indonesia. Nowadays, the rapid development of ICT has altered many areas of the educational process, including the shift from offline to online assessment. In addition, the period emerging from the COVID-19 pandemic at the early of 2020 required all educational (including assessment) practices to shift online delivering tests from a distance. Online assessments are becoming more popular than offline assessments such as paper-and-pencil tests since it allows for the evaluation of what students understand. The implementation of digital information and ICT tools in online assessment offers students with efficient and effective access to digital information. Online assessments provide students with immediate feedback. The study used a qualitative descriptive approach with literature review to find existing literature in the field of ICT for assessment and evaluation with formulating comparative results from several source journals. The results show ICT has influenced the assessment process in Indonesia.

keyword: ICT, assessment, online assessment, new technology, ICT development

Abstrak

Penelitian ini bertujuan untuk menganalisis Teknologi Informasi dan Komunikasi Perkembangan (ICT) beralih dari penilaian berbasis kertas offline ke online di Indonesia. Saat ini, pesatnya perkembangan ICT telah merubah banyak bidang pendidikan, termasuk peralihan penilaian dari offline ke online. Selain itu, masa munculnya pandemi COVID-19 di awal tahun 2020 mengharuskan semua praktik pendidikan (termasuk penilaian) untuk berpindah ke sistem online. Penilaian online menjadi semakin penting dan lebih populer daripada penilaian offline seperti tes kertas dan pensil memungkinkan untuk mengevaluasi apa yang dipahami siswa. Implementasi dari informasi digital dan alat ICT dalam penilaian online menawarkan kepada siswa akses informasi digital yang efisien dan efektif. Penilaian online menyediakan umpan balik

langsung. Penelitian ini menggunakan deskriptif kualitatif pendekatan dengan tinjauan literatur untuk menemukan literatur yang ada di bidang ICT untuk penilaian dan evaluasi dengan merumuskan hasil perbandingan dari beberapa sumber jurnal. Hasilnya menunjukkan ICT telah mempengaruhi proses penilaian di Indonesia.

kata kunci: TIK, penilaian, penilaian online, teknologi baru, TIK perkembangan

A. INTRODUCTION

Information and Communication Technology (ICT) is facilities and infrastructure in the form of use ware, software and hardware. These facilities and infrastructure facilitate systems for organizing, sending, processing, interpreting, storing and obtaining data and information (Warsita, 2008). There are classifications of ICT utilization into three types, namely: first, ICT as a media (helping tool) Education is only a complement to clarify the descriptions presented. Second, ICT as a source, namely as sources of information and searching for information. Third, ICT as a system of learning (Abdulhak, 2005). While science is developing rapidly, great teachers are spread all over the world. Apart from that, books and teaching materials are also updated continuously. Innovation requires collaborative thinking accompanied by technology. This aims to obtain up-to-date sources of learning materials.

The future promising trends vary from an increase of digital technology based settings in the process of teaching and learning to the emergence of virtual settings that ensure adaptable learning situations. These trends also strengthen the idea of integrating educational software in order to provide quick and minute response and make the teachers able to bring the process of learning to the level which suits most the learners (Becker & Ravitz, 2001).

ICT is also applied in the educational sector, such as electronic books and e-learning methods. With the use of ICT, the complex learning process can become easier and more interesting. ICT can be said to be a learning resource because it has easy access to information and knowledge that is extensive, fast and easy. Everyone can access information from anywhere any time, any time, without knowing the boundaries of space and time.

A massive transformation occurred in the face of education in the midst of this Covid-19 pandemic situation. Learning that was originally carried out face-to-face turned into online learning. Including the form of assessment that occurs. Online assessment is a success of paperless policy because no assignment is delivered in physical form (Pramono et al., 2021). Here, ICT offers many opportunities for supporting assessment formats that can capture complex skills and competences that are otherwise difficult to assess (Redecker & Johannessen, 2013). Thus, ICT development and assessment are interrelated to each other.

Previous studies show that the shifting from paper-based assessment to e-assessment requires four generations i.e. e-assessment, adaptive tests, transforming assessment and automated scoring (Shaheen et al., 2019). The former two are practiced more frequently in the educational setting, while there is a need to practice the latter two. Moreover, the study aims to analyze how ICT development is shifting from offline paper based to online assessment in Indonesia.

B. LITERATURE REVIEW

1. ICT and Assessment

Technology Information and Communication (ICT) is electronic equipment consisting of: hardware, software, and all activities related to processing, managing, and information. Perron et al. (2010) define ICT as electronic instruments that may be used to access, transmit, and preserve information.

The role of ICT in assessment in detail, particularly various types of ICT based assessments tools. There are mainly two major forms of ICT based assessment. These are:

Computer-Assisted Assessment or Computer- Aided Assessment (CCA), refers to the use of computers to manage or support the assessment process and evaluate assignments.

Computer-Based Assessment (CBA), the use of digital tools for conducting assessments- related activity. ICT are basically tools, they can be hardware such as computers, projectors, mobile phones, etc., and software such as Microsoft Word, Power Point, etc. (Wang and Woo, 2007). Nowadays, ICT in online assessment has developed very rapidly and has influenced the world of education in a positive and more advanced way. There are three types of ICT use: first as a media tool or educational tool, which means as a supplement to explain the material presented by teacher, second as an information source, in which students gather information such as through ICT based on the teacher's guidance, and third as a system learning, in which ICT is developed as an integrated learning system as a function of media, resources, and also learning (Abdulahak in Rusman 2015). Teaching process is a method of organizing the teacher, the learner, the curriculum, and other elements in a systematic manner to achieve predetermined goals and objectives, Mafang'ha (2016). The ICT expected can lead the students to learning in depth. So, the Students are expected to be able to have high motivation, analyze, and comprehend the study more broadly.

2. Offline Assessment

Offline assessments are done in school or any other physical location. Offline assessment uses pen, paper, and the physical presence of students and teachers in the classroom. Several characteristics of offline learning media according to Dabbagh and Ritland (2005) are: (1) integrated learning material, (2) fixed/definite learning time, (3) controlled by the teacher/instructor, (4) unidirectional/linear learning, (5) a fixed source of information.

3. Online Assessment

Technology in education plays an important role, nowadays conventional learning has shifted to online learning. Online assessment describes the assessment of students learning with methods including information and communication technologies (Conrad & Openo, 2018). Online assessment is a digital testing method where students can take exams, quizzes, or assessments through an internet-connected device. The implementation of e-learning needs to support mobile devices such as handphones, laptops, computers, etc to access the internet anywhere and anytime (Gikas and Grant in Indrayana & Sadikin, 2020). These assessments measure students' knowledge, skills, and understanding of a particular subject. Online learning is basically a form of transformation of human thinking in communicating and collaborating (Garrison in Cahyaningtyas, 2020). Online assessments provide wide space for students to be more flexible and efficient in increasing engagement in learning. Other examples of online assessments include a pedagogical agent acting like a virtual coach tutoring learners and providing feedback when needed (Jhonson & Lester, 2016). There are two effective ways to improve students' language skills: traveling abroad and using multimedia (Muslem and

Abbas, 2017). There are several types of ICT that can be integrated in EFL classroom teaching learning activities as online assessment (Anjar Lusiani, 2022):

a. LCD

Using a multimedia projector in the classroom, the teacher may present a material not only orally but also visually, which helps learners focus better in the classroom. They can also discuss collaboratively between verbal and nonverbal concerns, as well as theoretical and material difficulties.

b. Computer/ Laptop

A computer allows for a print-rich learning environment. It may be utilized for a wide range of issues and can give learning settings for students to investigate and experiment with mathematical relationships, as well as provide fresh approaches to assignment.

c. Smartphone

Learners can use the dictionary feature on their mobile phones to add new terms to their vocabulary. They can check the spelling, pronunciation, and usage of the word they are looking for. Additionally, user can communicate with their professors via Short Message Services (SMS) and get their doubts clarified.

d. Internet

Teachers can benefit from using the internet since it can give a wealth of educational tools. Teachers may quickly obtain diverse things for their classrooms by using the internet.

e. Google Classroom

Google Classroom has a number of sophisticated features that make it an excellent tool to utilize. The advantage of adopting Google Classroom is that teachers can control and produce or gather students' assignments, as well as spend much more time with students and much less time on paperwork.

f. Email

E-mail is the best for developing skills in online literacy. We all write differently online and also for a different audience. Students can communicate with native speakers of the target language via email by creating a free personal email account (e.g. g-mail, yahoo, or Hotmail). Students may mail their homework to the appropriate teachers and get it corrected in turn. Additionally, the teacher may make modifications, feedback, and ideas for the improvement of each piece of work and return them.

g. Social Media

According to Gupta (2014) and Siti (2020), social media refers to many online platforms and technologies that individuals use to exchange material, pictures, perspective, insights, and experiences with others. Social media refers to social networking sites such as Facebook, Twitter, Instagram, Whatsapp, and online forums, chat rooms and so on. Teachers may utilize social media to further their professional growth.

h. Youtube

YouTube is a video program that may be viewed from a laptop, computer, or mobile phone. Teachers frequently utilize YouTube to show information in English classes. YouTube videos may be utilized in English language instruction to improve vocabulary, accents, pronunciation, and many other characteristics of English.

i. PowerPoint

PowerPoint is a software tool that is frequently used in information and knowledge presentation activities. Text, picture, and video elements can be

used to create presentation material. Using PowerPoint as projected media in English classes makes instruction more existing and gives various choices.

j. Microsoft Word

Microsoft Word has a strong presence in the teaching and learning process, and it presently the most widely used program in education. It provides several broad relative benefits to instructors and students in terms of teaching and learning. Teachers may improve the learning experience by using Microsoft Word.

k. Podcast

Students may listen to fresh clips, music, and videos on the web and spend more time viewing movies at the theater, on TV, or on their computers. A podcast is a collection of digital media files that are disseminated through the internet. Many free podcasts for English instruction are available for teachers to download.

4) Approaches in Language Assessment

Brown (2003) in his book, highlights several evolutions in language assessment approaches. These developments reflect an evolution in the understanding of language testing, transitioning from isolated and focused testing on small language components toward more integrative and contextual testing to support communicative competence. Presently, teachers and test designers encounter ongoing challenges as they strive to develop instruments that are not only more effective and valid but also aligned with the advancements in technology. This pursuit reflects a dynamic landscape in language assessment, acknowledging the need for assessments to keep pace with the evolving demands of language education in an increasingly technological era. Brown (2003) outlines various language assessment approaches that contribute to this evolving landscape.

a. Discrete Point Tests

Discrete-point tests are designed to assess specific aspects of language independently, based on the idea that language can be broken down into separate elements. These elements cover the skills of listening, speaking, reading, and writing, as well as individual units of language, like phonology, graphology, morphology, lexicon, syntax, and discourse (Brown, 2003). In essence, the main focus is on evaluating specific elements within language, such as particular grammar rules, pronunciation, vocabulary usage, or other linguistic components. As explained by Oller J. W. (1973), discrete-point items are generally geared towards testing one specific aspect of grammar, phonology, vocabulary, or anything similar, at a time.

The assessment may involve providing a sentence with a missing section, prompting the participant to select the appropriate choice to fill in the blank space. Discrete-point tests are often encountered in the form of multiple-choice questions or short fill-in-the-blank questions. Therefore, this type of test can be easily adapted to online situations. The use of interactive language applications can be a highly effective solution to create a more engaging learning environment such as PowerPoint, Duolingo, Quizizz and other language learning apps.

b. Integrative Tests

In contrast to discrete-point tests that break down language proficiency into distinct, integrative test consider a broader context. Integrative tests often involve tasks that require the application of multiple language skills simultaneously, reflecting the interconnected nature of language use in authentic situations. There are two types of tests that have been recognized as examples of integrative assessments: cloze test and dictation.

Cloze Test

A highly encouraging form of integrative skills assessments that has been suggested for evaluating either accomplishment or proficiency in foreign language or second language scenarios is the cloze test. As described by Oller J. W. (1973). The technique in a cloze test involves removing every n-th word (usually the 5th, 6th, or 7th) from a passage. Subsequently, students are required to replace the missing words or restore the text by placing other contextually appropriate words in the blank spaces. In online situations, various technologies can be utilized to implement an online form of the cloze test such as Microsoft Word, Canva, PowerPoint, etc.

Dictation

Dictation is a well-known language teaching technique that has transformed into an assessment method. In essence, participants listen to an orally presented passage, typically consisting of 100 to 150 words, read aloud by an administrator (or played on an audiotape). Subsequently, they transcribe the passage by writing down what they hear, adhering to proper spelling. In offline class, a dictation exercise in the classroom where students listen to an audio recording and write down what they hear on the paper. This type of test also can be easily adapted to online situations. The use of apps or social media with voice note features can be an alternative to use.

c. Communicative Language Testing

Both integrative and communicative tests underscore the significance of language use over the form and structure of language. However, integrative test more importance to the use of all kinds of language skills, not two or more than two skills as required by the integrative test (Mao, 2022). A communicative test requires students to complete authentic tasks that reflect their real-world experiences. These tasks may involve reading, writing, and speaking, testing students' receptive and productive skills, as well as their ability to recognize and produce language. This approach adds authenticity to the testing process, connecting learning to everyday life contexts. In offline situation, it can be a face-to-face language assessment where students engage in a real-life conversation with an examiner, discussing familiar topics and responding to prompts. Sangkala (2014) suggested role-play as the example of a communicative language test in offline situation, wherein students engage in scenarios prompted by the teacher. This may include simulating a visit to the doctor or imagining a situation in a market. This kind of test also can be readily adjusted for online situation with the use of Microsoft Words for writing, video conference apps (Zoom, Google Meet, etc) for speaking test, and other technology tools.

C. RESEARCH METHOD

The research approach used in this study is qualitative research with meta analysis. Meta-analysis integrates several similar individual research results to produce a finding to understand the rapid development of research (Mufit et al., 2020). The study focused on the issue of assessment, offline assessment, online assessment, and ICT. The data. Data collection techniques in the study use literature studies, to explore previous studies that examine ICT development in shifting from offline to online assessment from various articles. The data is collected based on inclusion and exclusion criteria. Inclusion and exclusion criteria will help the researcher with a clear decision-making framework regarding the relevance of works to be included (Nashruddin & Mustaqimah, 2020).

Inclusion Criteria

- 1) The study must focus on the use of ICT in assessment, including online

assessment, e-learning, and digital tools.

- 2) The study must be a journal article, as it will be a literature review.
- 3) The study must be published within the last 5 years to ensure relevance and currency of the information.
- 4) The study must be conducted in a reputable journal (have DOI number).
- 5) The study from a website with identified authors.

Exclusion Criteria

- 1) The study must not focus on ICT in general, but specifically on ICT in assessment.
- 2) The study must not be a review article, as it will be a literature review itself.
- 3) The study must not have been published more than 5 years ago to ensure relevance and currency of the information.
- 4) The study must not be conducted in a non-reputable journal (without DOI number)
- 5) The study from website without identified authors

Data analysis in the study is based on Popenoe et al. (2021) that data analysis in a literature review typically focuses on synthesizing the information from the selected studies rather than analyzing each study individually. This involves identifying patterns, themes, and trends across the literature to answer the research question. Furthermore, data analysis in the study using thematic analysis involves synthesizing the findings from the selected literature to identify patterns and trends related to the use of ICT in offline and online assessment. Such as identifying the benefits and challenges of online assessment, the effectiveness of different ICT tools, and the best practices for implementing ICT in assessment.

D. FINDINGS AND DISCUSSION

FINDINGS

Table 1. Article Matrix Summarizing Studies

Assessment procedures	Description	Assessment tools using ICT
Formative assessment	<p>process of providing information to curriculum developers during the development of a curriculum or programme, in order to improve it.</p> <p>Such as</p>	<p>Another important part in education is the assessment. When implementing ICT in class, digital assessment is important in terms of feedback, control of the learning rates that vary from individual to individual and learning quality to be achieved at the end of the assessment process. Web 2.0 tools are made to allow interaction and communication between users. Thus, the tools are to be fully utilized for educational purposes to create a student-centered environment. A lot of ICTtools readily available, but teachers need to explore and choose the tools accordingly to ensure the effectiveness of the tools (Hoesni et al., 2020).</p>

<ul style="list-style-type: none"> • Daily quizzes • Reading checks • Homework • Discussion questions 	<p>The teachers responded that they prefer teaching online using video conferencing software (virtual classrooms, Skype, QQ, etc.) to offline (tutoring face-to-face or traditional classrooms). Online teaching was preferred 58.97% of the time, where face-to-face teaching was preferred 41.03% of the time. When teaching online, there is a slight preference for teaching using virtual classrooms over using other video conferencing software, such as Skype, QQ, or Adobe Connect. The features of virtual classroom systems, specifically the video, chat, and text features, provide the opportunity for students to have constant interaction, which increases the students' engagement, along with their sense of community (Manegre & Sabiri, 2022)</p>
	<p>The finding revealed that most of the respondents used i-Learn as the online learning method. This is due to the fact that some subjects in this university are taught using a blended learning method. Students access i-Learn to download notes, learning material, take quizzes, take part in discussion and so on. Other than i-Learn, most of the respondents use WhatsApp as a form of online learning method as well. YouTube, Google Classroom and Zoom are other online learning methods used by respondents. The use of online learning methods is not uniform among the students. This could be due to the fact that the i-Learn platform is not appealing and user friendly compared to other platforms such as Google Classroom. Also the use of WhatsApp is way more convenient. Above all, the choice of online methods are determined by the lecturer's preference and their own personal initiatives (Chung et al., 2020).</p>
	<p>Quizizz is a great online assessment tool that can help students to not only check their knowledge but also their progress in learning English. Quizizz has an attractive display which is interesting and fun, students can't cheat during the test, Quizizz creates a competitive atmosphere in the classroom, and Quizizz is better than the traditional formative test (Amalia, 2020).</p>
	<p>the technologies most used to support teaching during the lockdown period were the university web platform; instant messaging tools (WhatsApp, Telegram); video-conferencing tools (Zoom, Skype, Google Hangouts, Google Meet); and educational apps (Google Classroom); combined with email and telephone conversations to maintain individualized contact with students. Other technologies were also generally useful (Cisco WebEx, GoToMeeting, Microsoft Teams, Monosnap, Loom, OBS).</p> <p>The technological resources available provide multiple options for teaching, such as giving lectures by videoconference, sharing material (e.g., slides, videos, presentations), interacting through chats, creating debate forums or workgroups, supervising practical activities, evaluating and tutoring students, recording explanations and making them available to students, etc. (García-Morales et al., 2021)</p>

		<p>The results of English learning students that learned using online learning media are higher than offline learning media. The results of English learning students which have an open interpersonal communication interpersonal closed higher. There is interaction between the use of instructional media with interpersonal communication in influencing the outcomes of learning English (Arnesti & Hamid, 2015).</p>
Summative assessment	<p>Process of providing information to decision makers, after the programme is completed, about whether or not the programme was effective and successful</p> <p>Such as</p> <ul style="list-style-type: none"> • Graded tests • Research reports • Structured essays • Final exams • A midterm exam • A final project • A paper 	<p>ICT based technology can be bitterly used for assessment of the students in classroom situations. Computers can be used as the medium for testing, scoring tests and test score analysis. Computer Based Testing and Computer Adaptive Testing are the application of ICT in assessment practice in which students perform the test while sitting in forward-facing of a computer device. It also supports students in completing their assessment tasks such as the use of electronic portfolios and project-based assessment. The teachers can be empowered by providing them access to the e-portfolio and project with the help of a rubric that is capable of assessing not only the process and product, but also the use of technology by students (Majid, 2020).</p>
		<p>ICT learning using the google classroom application is entertaining because it can be carried out anywhere and anytime. how to apply google classroom is effortless to understand. no paper required to do the task. The submission of online assignments by students can also be supervised in an organized way. The google classroom application is great to use for distance learning ICT during the Covid-19 pandemic (Ali & Maksum, 2020).</p>
		<p>Padlet, which is formerly known as Wall Wisher, is a free web-based application that allows teachers and students to create an online bulletin-like board (Sangeetha, 2016). The function of Padlet is similar to sticky notes, but the ideas and answers are shown on the wall inside the application. In this 'wall', the users can post words, links, pictures, videos and other related materials in which the contents are viewable by anyone who has access to the link or address to a wall in Padlet</p> <p>Padlet was suitable to be used in writing assessment. From the survey questionnaire, most of the respondents agreed that Padlet helped them in reviewing their students' progress in writing and providing feedback for their students' writing. The main purpose of writing assessment was to produce feedback on students' writing skills and performance, and feedback was crucial in developing the writing skills amongst students. Hence, Padlet has the potential to be an assessment tool for the writing skill as progress review and feedback can be obtained through this online learning platform (Jong & Tan, 2021).</p>

		<p>screen-to-screen teaching mode replaces face-to-face teaching, the percentage of user frequency indicates the teachers use Word and PPT, audio/video recording, and online learning tools to teach Chinese online more frequently than they teach in a traditional classroom. One participant, Nick, commented positively on using PPT or audio-video.</p> <p>Use of resource sharing, such as Google Docs, makes it incredibly easy for both teachers and students to share documents across platforms and work on them together in real-time. Eleanor, who uses Google Docs much more frequently than before.</p> <p>Teaching became more convenient in an interactive environment, where teacher-student collaboration is highly favored. Integrating different digital tools into language teaching helps teachers to establish an environment that helps cultivate a meaningful experience (Zhang, 2020).</p>
		<p>online assessment such as Google form, Google Classroom, Quizzes, Edmodo. Whereas for certain skills like speaking the teacher has used Instagram and Google Classroom. Students make a video then upload it on Instagram or Google Classroom. For reading and writing the teacher almost used Google form and Google Classroom. The advantage obtain from online assessment are auto marking, quality feedback or immediately feedback (Wibowo & Novitasari, 2021)</p>

E. DISCUSSION

Formative assessment

Formative Assessment is carried out during the instructional process to provide feedback to adjust ongoing teaching and learning in order to improve the students' achievement of intended instructional outcome (Chan, 2021). The process of formative assessment generally takes place at school using an offline mode that requires face-to-face interaction such as daily quizzes, reading checks, homework, and discussion questions (Torres, 2019). However, as the era changes into digital the assessment also changes from offline to online. Because of its multiple advantages, online evaluation has grown in popularity in education. When compared to traditional paper-based tests, online assessment systems provide a more effective option since they reduce administrative overhead, are faster to mark and give results, and provide strong insights through data analysis. Online assessment tools also provide flexibility and convenience because they can be completed at any time and from any location, and they stimulate self-reflection, rapid course correction, and a greater comprehension of the subject matter. Furthermore, online assessment tools establish a digital teaching-learning environment, reduce faculty effort, and improve examination flexibility. Formative evaluation has shifted from traditional paper-based daily quizzes, reading checks, homework, and discussion questions to ICT and internet-based assessments such as Google Forms, Google Classroom, Quizzes, Edmodo, Instagram, and Zoom (Amalia, 2020; Chung et al., 2020; García-Morales et al., 2021; Hoesni et al., 2020;

Manegre & Sabiri, 2022).

Summative Assessment

Summative Assessment is carried out at the end of an instructional unit or course of study for the purpose of giving information on students' mastery of content, knowledge and skills, assigning grades or certifying student proficiency (Chan, 2021). Summative assessment outcomes have shifted away from traditional paper-based examinations, research reports, structured essays, final exams, midterm exams, final projects, and papers and toward more digital and internet-based evaluations. Flexibility, simplicity, reduced administrative effort, faster marking and result issuing, collaborative question development, on-screen marking tools, and a more environmentally responsible approach are all advantages of online assessment over traditional approaches. Online evaluations can also encourage self-reflection, give timely course correction, a greater comprehension of the subject matter, and deliver strong insights through data analysis. The move to online assessments has increased security, decreased the chance of cheating, and given a more efficient option for both learners and training providers. The use of digital tools and online resources. The introduction of digital tools and online assessment platforms, such as Google Classroom, Google Forms, Padlet, and Instagram, has altered the way summative assessment is conducted, providing benefits such as auto-marking, quality feedback, and quick feedback (Majid, 2020; Ali, 2020; Jong, 2021; Zhang, 2020, and Wibowo, 2021).

F. CONCLUSION

The transition from offline to online evaluation has resulted in various advantages for the educational process. Traditional methods of formative evaluation, such as daily quizzes, reading checks, homework, and discussion questions, have given way to more digital and internet-based examinations, such as Google Forms, Google Classroom, Quizzes, Edmodo, Instagram, and Zoom. Summative evaluations have also moved away from traditional paper-based examinations, research reports, structured essays, final exams, midterm tests, final projects, and papers and toward more digital and internet-based evaluations. Flexibility, simplicity, reduced administrative effort, faster marking and result issuing, collaborative question development, on-screen marking tools, and a more ecologically responsible approach are all advantages of online assessment over traditional approaches. The use of digital technologies and online assessment platforms has shifted the way summative and formative assessments are conducted, delivering benefits such as auto-marking, quality feedback, and quick feedback. To summarize, the shift from offline to online assessment has had a huge impact on education, boosting the speed and efficacy of the assessment process while also providing students with a more engaging and dynamic learning environment.

REFERENCES

- Ali, M. K., & Maksum, H. (2020). Utilization of e-learning-based ICT learning using the Google Classroom application during the Covid-19 pandemic. *Journal of Education Research and Evaluation*, 4(4), 373–379.
- Amalia, D. F. (2020). Quizizz website as an online assessment for English teaching and learning: Students' perspectives. *Jo-ELT (Journal of English Language Teaching) Fakultas Pendidikan Bahasa & Seni Prodi Pendidikan Bahasa Inggris IKIP*, 7(1), 1–8.
- Arnesti, N., & Hamid, A. (2015). Penggunaan media pembelajaran online–offline dan komunikasi interpersonal terhadap hasil belajar bahasa inggris. *Jurnal Teknologi Informasi & Komunikasi Dalam Pendidikan*, 2(1), 85–99.
- Becker, H. J., & Ravitz, J. L. (2001). Computer use by teachers: Are Cuban's predictions correct. *Annual Meeting of the American Educational Research Association, Seattle, WA*, 142, 261–315.
- Chan, K. T. (2021). Embedding formative assessment in blended learning environment: The case of secondary Chinese language teaching in Singapore. *Education Sciences*, 11(7), 360.
- Chung, E., Noor, N. M., & Mathew, V. N. (2020). Are you ready? An assessment of online learning readiness among university students. *International Journal of Academic Research in Progressive Education and Development*, 9(1), 301–317.
- García-Morales, V. J., Garrido-Moreno, A., & Martín-Rojas, R. (2021). The transformation of higher education after the COVID disruption: Emerging challenges in an online learning scenario. *Frontiers in Psychology*, 12, 616059.
- Heil, J. & Ifenthaler, D. (2023). Online assessment in higher education: A systematic review. *Online Learning*, 27(1), 187-218. DOI: 10.24059/olj.v27i1.3398
- Hoesni, W. E. W., Hassan, F. N. A., Ajmain, M. T., & Rosli, N. A. M. (2020). The Effects of ICT Towards Students' Attitude. *Khazanah Pendidikan Islam*, 2(2), 90–99.
- Jong, B., & Tan, K. H. (2021). Using Padlet as a Technological Tool for Assessment of Students' Writing Skills in Online Classroom Settings. *International Journal of Education and Practice*, 9(2), 411–423.
- Majid, I. (2020). ICT in Assessment: A Backbone for Teaching and Learning Process. *Online Submission*, 1(3), 38–40.
- Manegre, M., & Sabiri, K. A. (2022). Online language learning using virtual classrooms: An analysis of teacher perceptions. *Computer Assisted Language Learning*, 35(5–6), 973–988.
- Mufit, F., Asrizal, A., & Puspitasari, R. (2020). Meta-Analysis of the effect of cognitive conflict on physics learning. *Jurnal Penelitian & Pengembangan Pendidikan Fisika*, 6(2), 267–278.
- Nashruddin, W., & Mustaqimah, H. A. Z. (2020). Critical literature review in TEFL research: Towards interdisciplinary study. *ELT Echo Journal*, 5(2), 1–5.
- Popenoe, R., Langius-Eklöf, A., Stenwall, E., & Jervaeus, A. (2021). A practical guide to data

- analysis in general literature reviews. *Nordic Journal of Nursing Research*, 41(4), 175–186.
- Pramono, D., Ngabiyanto, N., Isnarto, I., & Saputro, I. H. (2021). Online Assessment pada Pembelajaran di Masa Pandemi Covid-19: Transformasi Dunia Pendidikan Menuju Paperless Policy. *Indonesian Journal of Conservation*, 10(2), 97–99.
- Redecker, C., & Johannessen, Ø. (2013). Changing assessment—Towards a new assessment paradigm using ICT. *European Journal of Education*, 48(1), 79–96.
- Shaheen, M. N. K., Shah, N. H., & Naqeeb, H. (2019). The use of ICT for assessment and evaluation. *International Journal of Distance Education and E-Learning (IJDEEL)*, 5(1), 17–28.
- Simanjuntak, H. (2020). Bakti Peran Teknologi Informasi dalam Proses Kegiatan Belajar Mengajar di Sekolah Dasar.
- Torres, J. O. (2019). Positive impact of utilizing more formative assessment over summative assessment in the EFL/ESL Classroom. *Open Journal of Modern Linguistics*, 9(1), 1–11.
- Warsita, B. (2008). Teori belajar robert m. gagne dan implikasinya pada pentingnya pusat sumber belajar. *Jurnal Teknodik*, 64–78.
- Wibowo, F. E., & Novitasari, U. (2021). An analysis of online assessment in teaching English. *PROJECT (Professional Journal of English Education)*, 4(3), 521–529.
- Zhang, C. (2020). From face-to-face to screen-to-screen: CFL teachers' beliefs about digital teaching competence during the pandemic. *International Journal of Chinese Language Teaching*, 1(1), 35–52.