

From Paper-Based to Digital Assessment: Adoption and Challenges of Learning Evaluation Applications in Islamic Education

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ABSTRACT

The digital transformation of education has significantly altered the landscape of learning assessment, including in the field of Islamic Education (PAI). The transition from traditional paper-based assessments to digital evaluation methods through various applications has become an emerging trend. However, despite these advancements, the adoption of digital assessment tools among PAI teachers remains inconsistent. This study investigates the extent of adoption and the challenges faced by PAI teachers in utilizing digital learning assessment applications in Blitar Regency, Indonesia. Employing a quantitative-descriptive research design, data were collected through surveys and interviews with PAI teachers. The findings reveal that 90.9% of respondents have integrated digital assessment applications into their teaching practices, with Google Forms (90.9%), Quizizz (45.5%), Kahoot (36.4%), and Zipgrade (9.1%) being the most commonly used platforms. Several factors influence the adoption of these technologies, including accessibility, ease of use, efficiency, and the ability to generate objective learning outcome data. However, challenges such as limited technological proficiency, inadequate training, and insufficient infrastructure hinder broader implementation. These findings underscore the need for targeted professional development programs and institutional support to enhance digital assessment adoption in Islamic education. This study contributes to the growing discourse on digital learning transformation by providing empirical insights into the opportunities and barriers associated with integrating digital assessment tools in Islamic educational settings.

Keywords: digital assessment, learning evaluation, adoption challenges, islamic education, educational technology.

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INTRODUCTION

Digitalization in the education sector has changed the paradigm of learning assessment from the conventional paper-based model to online digital technology-based assessment without the use of paper (paperless).¹ Differentiation of current learning evaluation models is realized in the form of transformation of learning assessment models using the help of digital applications. Various applications used in learning assessment (1) Google Form, (2) Kahoot, (3) Quizziz, (4) Mentimeter, (5) Wordwall, (6) Quizlet,² (7) Edmodo, (8) Plickers, (9) Thatquiz, (10) Testtomz, (11) Quizstar, and (12) Proprofs.³ So in line with these developments, educators are provided with assistance in utilizing learning assessment applications.⁴ Thus, it has been easier for educators to track students with the help of digital applications for evaluation.

Evaluation is a benchmark for assessing a process intended to know the student's learning process and their success. So, the implementation of evaluation must be carried out comprehensively, periodically, and continuously.⁵ The learning evaluation aims to assess and improve the effectiveness of learning strategies, the effectiveness curriculum programs, help students learn, identify students' strengths and weaknesses and provide data that helps in making decisions.⁶ Thus, assessment is an obligation that must be carried out in every learning process to see the success and obstacles student in learning.⁷

Based on the author's field survey and interviews with 11 PAI teachers who teach in schools spread across several regions, including Blitar, Kediri, Tulungagung, Nganjuk and Malang, it was found that 3 out of 11 young teachers had also used digital-based assessment software in the form of google forms, quizziz and that quiz, although still limited to the final semester exam (UAS). However, the author also found that 8 out of 11 other teachers did not use digital assessment applications for learning evaluation. Details of 7 respondents did not use learning assessment applications, and one respondent used

¹ Muhammad Azhar and Marlina Rahmawati, "Software Dan Aplikasi Digital Penunjang Evaluasi Pembelajaran," September 23, 2022, <https://doi.org/10.31219/osf.io/kamxh>.

² Aishiyah Saputri Laswi, Rohayati Arifin, and Muhammad Akram Hamzah, *Aplikasi Evaluasi Pembelajaran: Teori Dan Praktik*, ed. Andryanto A., Eureka Media Aksara (Eureka Media Aksara, 2023).

³ Azhar and Rahmawati, "Software Dan Aplikasi Digital Penunjang Evaluasi Pembelajaran."

⁴ Sekar Dwi Ardianti and Himmatul Ulya, "Pendampingan Pemanfaatan Aplikasi Untuk Penilaian Pembelajaran Secara Daring Bagi Guru Sekolah Dasar," *Dedication : Jurnal Pengabdian Masyarakat* 5, no. 2 (2021).

⁵ Haryadi Haryadi and Fahmi Rizky Ferdiansyah, "Pengembangan Penilaian Afektif Melalui Google Form Pada Pembelajaran Jarak Jauh (PJJ) Selama Pandemi Covid 19," *Jurnal Ekonomi, Bisnis Dan Akuntansi (JEBA)* 23, no. 3 (2021): 106–14, <https://core.ac.uk/download/482738321.pdf>.

⁶ Nabila Nayyrotul Fitria, Luk Luk Nur Mufidah, and Puput Setiawati, "Summative Assessment of Islamic Education Subject in Merdeka Curriculum," *Journal of Educational Research and Practice* 2, no. 3 (November 14, 2024): 112–22, <https://doi.org/10.70376/jerp.v2i3.157>.

⁷ Fitri Yeni and Wahyu Kurniawati, "Efektivitas Penggunaan Aplikasi Quizziz Untuk Penilaian Pembelajaran," *Primary: Jurnal Pendidikan Guru Sekolah Dasar* 11, no. 3 (June 25, 2022): 915, <https://doi.org/10.33578/jpkip.v11i3.8947>.

assessment applications but was more functional as learning media rather than as a learning evaluation tool.⁸

The data highlights the lack of innovation in learning evaluation and assessment. Several factors may contribute to this issue. One key reason is that educators have limited knowledge of using learning assessment applications. Second, optimal training and technical guidance for learning assessment innovation are lacking. Third, the limited school infrastructure. These three reasons are stated based on social facts encountered by the author, starting from the age of teachers entering old age, technological guidance that is more delegated to young teachers, and the lack of school accommodation in providing wi-fi or internet quota.

Considering these problems, the dynamic of development technology should ideally be balanced with knowledge, skills, and competence in using digital technology products. However, in reality, these problems are far from the function and expectations of the emergence of a technology. The function of technology is to facilitate human life. However, this is not greeted with innovation and skills in developing evaluation models and learning assessments that align with the times' development.

Based on previous research, Haryadi and Ferdiansyah stated that there were efforts to develop application tools in the form of Google Form software, which was used to assess students' affective aspects. Google Form software used as an assessment tool in distance learning (PJJ), especially in the aspect of affective or attitude assessment.⁹ In her research, Balqis reported that in the current era, elementary school/Islamic elementary school education levels have implemented digital-based assessments with the help of application software in the form of Google Forms, Proprofs and Quizizz.¹⁰ In line with the research results, Azhar and Rohmawati stated that other software used to support learning evaluation include Edmodo, Quizizz, Google Form, Kahoot, Plickers, Thatquiz, Testomz, Quizstar and Proprofs.¹¹

These results showed that previous studies provide a general theoretical description of the types and kinds of learning assessment applications. However, the applicative and implementative aspects of using learning assessment applications in the field have not been explained much. Meanwhile, from a methodological perspective, previous studies use more qualitative approaches than literature studies. Therefore, more specific and measurable research on learning assessment applications is needed.

This research will examine using learning assessment applications, especially PAI's learning in schools. This study offers a new contribution to the study of learning evaluation by highlighting the level of use and utilization of digital applications by PAI Teachers in Blitar Regency. The study focuses on adopting a different approach, precisely a quantitative-

⁸ Survei dan wawancara penulis pada hari Ahad tanggal 5 Mei 2024

⁹ Haryadi dan Ferdiansyah, "Pengembangan Penilaian Afektif Melalui Google Form Pada Pembelajaran Jarak Jauh (PJJ) Selama Pandemi Covid 19."

¹⁰ Balqis Fauzatul Rohmah, "Analisis Aplikasi Penilaian Pembelajaran MI/SD Berbasis Digital," *EL-AULADY* 1, no. 1 (October 10, 2022): 1–20, <http://jurnal.stitdarussaliminw.ac.id/index.php/el-aulady/article/view/28>.

¹¹ Azhar and Rahmawati, "Software Dan Aplikasi Digital Penunjang Evaluasi Pembelajaran."

descriptive method. This methodological approach addresses a research gap, as previous studies have primarily relied on qualitative methods, providing only a general overview of the types of applications used for evaluation based on literature reviews. Therefore, the author will focus this research study on the level of use of learning assessment applications among PAI Teachers in Blitar Regency and the influence of factors to adopt it.

METHOD

This study uses a quantitative-descriptive approach. Quantitative descriptive research is a type of research that aims to describe systematically, factually and accurately the facts and characteristics of a particular population or tries to describe a phenomenon in detail. This research focuses on PAI Teachers in Blitar Regency as research respondents who were taken using purposive sampling techniques based on the criteria set by the researcher.¹²

The research data was taken in October 2024. Data were collected through a survey. Data collection in a survey can be done in several ways: telephone interviews, distributing questionnaires to groups directly, or sending questionnaires via the post office. The data collection technique is a non-test technique with a questionnaire as a tool. A questionnaire is a data collection technique in the form of a list of questions addressed to respondents, either directly or indirectly.¹³ In this study, researchers collected data through a survey by distributing questionnaires to Islamic Education Teachers in Blitar Regency using Google Form media and telephone interviews.

The collected data was analyzed using descriptive analysis techniques. Descriptive data analysis is a statistic used to analyze data by describing or using the collected data as it is without intending to make general conclusions, not generalizing. Descriptive statistical data analysis techniques include data presentation through tables, graphs, diagrams, percentages, frequencies, and calculations of mean, median, and mode.¹⁴ The descriptive statistics used by the author in presenting data were tables, diagrams, and percentages.

DISCUSSION

Result

Level of Use of Learning Assessment Applications in Blitar Regency

The PAI learning assessment application in the Blitar District is widely used among PAI teachers. Survey data in Figure 1 demonstrates this, revealing that 90.0% of PAI teachers have utilized various learning assessment applications. In contrast, 9.1% of teachers have never used such applications.

¹² Sugiyono, Sugiyono, *Metode Penelitian Dan Pengembangan Pendekatan Kualitatif, Kuantitatif, Dan R&D* (Bandung: Alfabeta, 2015).

¹³ Nur Fadilah Amin, *Populasi Dan Sampel, Metode Penelitian Pendekatan Kuantitatif*, vol. 14, 2021.

¹⁴ Agus Zaenul Fitri and Nik Haryanti, *Metodologi Penelitian Pendidikan: Kuantitatif, Kualitatif, Mixed Method, Dan Research and Development*, 1st ed. (Malang: Madani Media, 2020), <https://inlisite.uin-suska.ac.id/opac/detail-opac?id=35333>.

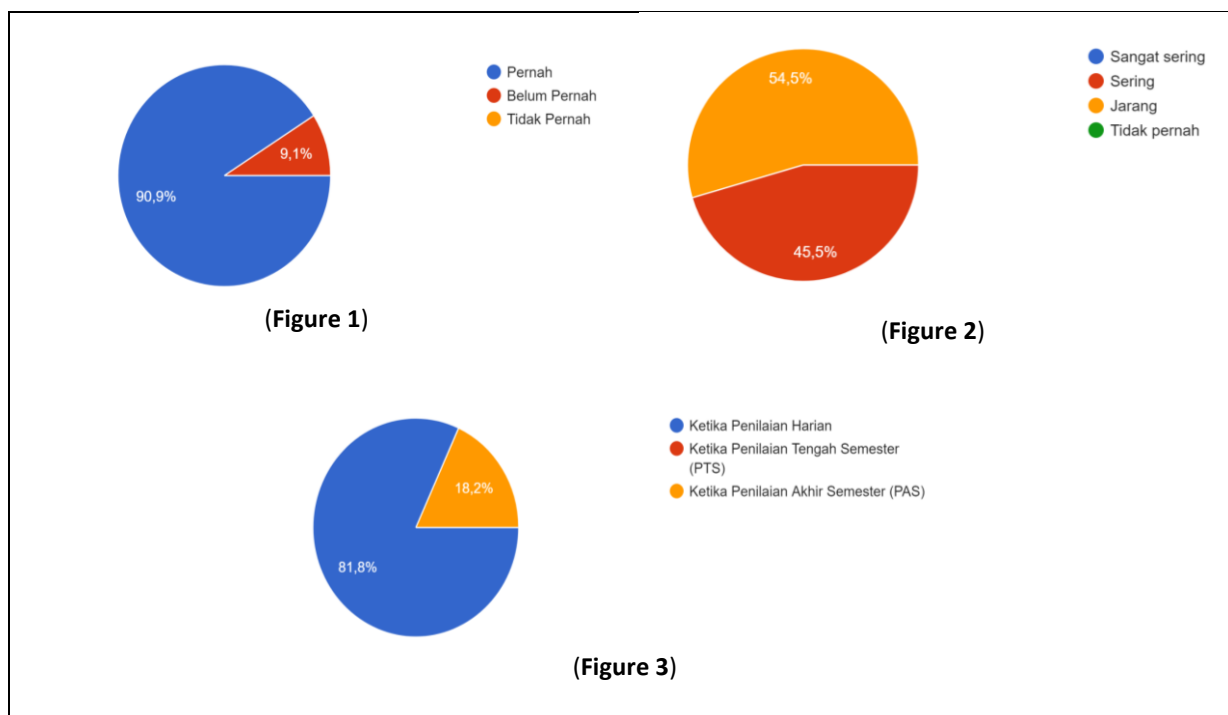


Figure 1. Level of Use of Learning Assessment Applications in Blitar Regency; **Figure 2.** Intensity of Use of Learning Assessment Applications; and **Figure 3.** Purpose of Using the Assessment Application

Based on these data, it can be known that modern PAI learning evaluation is implemented in Blitar Regency. PAI teachers in Blitar have transformed the assessment from a conventional paper-based model to a paperless assessment using digital software. These data show that the transformation of learning, especially in learning evaluation, has shifted from conventional paper-based assessment to modern assessment based on digital technology.

The utilization of assessment applications in PAI learning remains relatively rare. According to the data presented in the pie chart, 54.5% of PAI teachers use learning assessment applications infrequently, while the remaining 45.5% use them more often. The difference in usage frequency between these two groups is relatively small. In this context, "often" refers to fairly regular use but does not indicate consistent application in every assessment. Consequently, the use of learning assessment applications aligns with the field's specific needs, situations, and conditions. Although the difference is slight, the data effectively illustrates the variation in practical implementation.

In the context of assessment, learning assessment applications are predominantly used for daily assessments (PH). Survey data indicates that 81.8% of PAI teachers utilize these applications during daily assessments, requiring students to bring electronic devices, such as mobile phones, for cognitive evaluations. Meanwhile, 18.2% of teachers use them for end-of-semester assessments. Technological, device, and school infrastructure limitations continue to pose significant challenges. Consequently, PAI teachers may still depend on manual assessments due to these constraints.

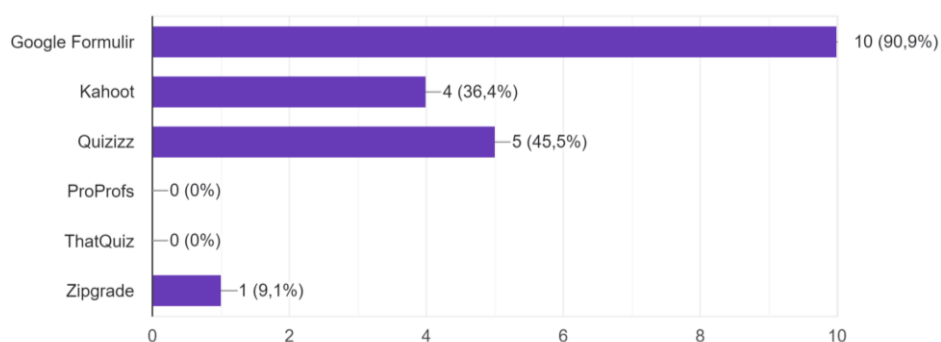


Figure 4. Types of applications used by PAI teachers as assessment tools

PAI teachers in Blitar Regency utilize various learning assessment applications. Survey data indicates they employ multiple digital tools, including Google Forms, Kahoot, Quizizz, and Zipgrade. Google Forms ranks as the most widely used application, with 90.9% of teachers incorporating it into their assessments. Quizizz follows in second place, with a usage rate of 45.5%. Kahoot ranks third at 36.4%, while Zipgrade is the least used, with only 9.1% of teachers adopting it.

Factors Influencing the Adoption of Learning Assessment Applications

First, ease of access and use. One of the factors that influences the adoption of assessment applications in PAI learning. Based on a survey, 7 out of 11 people agreed that assessment using digital software assistance is very easy. This convenience can be reviewed from several sides, including easy to access, operate, and display significant results. Easy to access here means easy in terms of use. All users, teachers and students find the application easy to use. Students do not have difficulty completing the assessment because the available devices are compatible with the application.

Easy operation means that teachers can easily prepare measuring instruments through the application by following the procedures or steps for using them. Meanwhile, students can efficiently operate it because the application is quite familiar. Therefore, this assessment application can be used well. The assessment results can appear immediately after the exam ends because the features provided by the application can be set accordingly. This makes it easy for teachers to obtain objective data on student learning outcomes. Therefore, teachers no longer need to assess one by one manually. Thus, student learning outcomes can be avoided from the subjectivity of teacher assessment.

Second, effectiveness and efficiency of time and energy. Learning assessment applications such as Google Forms, Kahoot, Quiziz, and Zipgrade greatly assist teachers' work in the cognitive assessment aspect. The applications used can speed up teachers' work and make it easier for teachers to obtain student learning outcome data, and the accuracy of the scores is not in doubt. Therefore, learning assessment using the assistance of assessment applications is more effective and efficient. This statement above is supported by the survey, which illustrates that no respondents rated 1 or 2 from the aspect of the application's usefulness. The average gave a score of 4 with a percentage of 45.5%, followed

by 36.6% giving a score of 3 and 18.2% giving a score of 5 regarding the usefulness of the learning assessment application. The data shows that PAI teachers benefit significantly from using the application.

Third, the learning assessment application is simple and attracts students' interest. The simplicity of this assessment application is quite interesting for students in the assessment process. The assessment becomes more varied, not monotonous, and enjoyable. Because the variety of features provided by the application contains innovation in the assessment process. Based on the information from the resource person, it is explained that it is not uncommon for students to be more enthusiastic during daily assessments. In addition to the need for daily assessments, students can access and utilize digital technology products.

Based on the data above, there are several factors underlying the adoption of learning assessment applications, which can be simplified by the table below.

Table 1. Factors Influencing the Adoption of PAI Learning Assessment

Learning Assessment Adoption Indicators	Respondent Number
Ease of access and use	1,2,4,6,7
Effectiveness and efficiency	3,8,9
Simple and attractive	5, 10, 11

Discussion

Level of Use of Learning Assessment Applications in Blitar Regency

The research data above showed that learning assessment applications in Blitar Regency have been widely used. 90.9% of PAI teachers have used learning assessment applications, transforming the assessment model from manual-conversional paper-based to IT-based assessment using digital software assistance. In line with Azhar and Rahmawati, who stated that the massive digitalization in the education sector has changed the paradigm of learning assessment from a conventional paper-based model to an online digital technology-based assessment without the use of paper (paperless).¹⁵ The utilization technology in assessment process in line with the mandate of the Education Policy in the Regulation of the Director General of Teachers and Education Personnel Number 7607/B.B1/HK.03/2023 which contains strategic instructions in managing the performance of teachers and school principals through a technological approach.¹⁶ This means that PAI teachers in Blitar have implemented this policy within the scope of classroom learning.

The intensity of using learning assessment applications reached 45.5%, often used in learning assessment applications, indicating that the school's situation, conditions, and circumstances allow IT-based assessments to be conducted. This aligns with the ease of

¹⁵ Azhar and Rahmawati, "Software Dan Aplikasi Digital Penunjang Evaluasi Pembelajaran."

¹⁶ Mochamad Nashrullah et al., "Transformasi Digital Dalam Pendidikan Indonesia: Analisis Kebijakan Dan Implikasinya Terhadap Kualitas Pembelajaran," *Mudir : Jurnal Manajemen Pendidikan* 7, no. 1 (January 1, 2025): 52–59, <https://doi.org/10.55352/mudir.v7i1.1290>.

access to digital-based education in schools. Therefore, an internet-based assessment system is easier to use.¹⁷ Besides the 54.5% figure being rarely used, it implies that the field conditions of each institution are very different. Many factors influence the non-use of learning assessment applications, including limited facilities and infrastructure and the absence of an internet quota. This affects the teacher's decision to use or not use the learning assessment application.

Assessment applications are more widely used for assessments reviewed from a cognitive perspective. This learning assessment application is more widely used on a small scale, namely cognitive assessments on daily tests. This is based on the survey data, showing that 81.8% of teachers use it for daily assessments. The remaining 18.2% are for end-of-semester assessments. This means that the decision to use this assessment application is a form of teacher initiative to facilitate daily assessments directly under the teacher's authority. Meanwhile, regarding end-of-semester assessments, teachers will follow the policies of the centre or local education office to use the recommended application. Meanwhile, from the affective aspect, assessment using assessment applications is still very limited. The author still found one research title entitled *Development of Affective Assessment Through Google Forms in Distance Learning (PJJ) During the Covid-19 Pandemic* by Haryadi and Ferdiansyah.¹⁸

Various learning assessment applications make it easier for teachers to choose them by considering the situation and conditions. In PAI learning, the various assessment applications used in Blitar Regency consist of Google Forms, Kahoot, Quizizz, and Zipgrade. This is in line with research by Balqis, who informed that in the current era, elementary school/Islamic elementary school education levels have implemented digital-based assessments with the help of application software in the form of Google Forms, Proprofs, and Quizizz.¹⁹

Thus, the differentiation of learning models and evaluations requires an educator to be more technologically literate so that the function of technology intended to facilitate human life can be used properly. This digital technology-based assessment model can be appropriate and help make it easier for teachers to assess, process, and analyze the development results of learning achievements.

Factors Influencing the Adoption of Learning Assessment Applications

Adopting learning assessment applications in Blitar Regency is motivated by various factors, including ease of access and use. Second, effectiveness and Efficiency. Third, simple and attractive. The following is a simultaneous analysis of research data and a review of previous research. The use of the Google form application in Blitar reached 90.9%.

¹⁷ Ika Puspitasari, Aliyatul Ilmi Suryani, and Shokhibul Arifin, "Pengembangan Alat Penilaian Mata Pelajaran Pendidikan Agama Islam Dengan Menggunakan Quizizz Di Sekolah Menengah Pertama," *Jurnal Basicedu* 7, no. 1 (February 17, 2023): 816–27, <https://doi.org/10.31004/basicedu.v7i1.4678>.

¹⁸ Haryadi and Ferdiansyah, "Pengembangan Penilaian Afektif Melalui Google Form Pada Pembelajaran Jarak Jauh (PJJ) Selama Pandemi Covid 19."

¹⁹ Rohmah, "Analisis Aplikasi Penilaian Pembelajaran MI/SD Berbasis Digital," 1.

Respondents considered Google Forms straightforward, easy to use, easy to understand, easy to access, easy to present results, and flexible. Google Forms has a simple appearance and is easy to understand. Access and operation of Google Form can be said to be very easy.²⁰ The utilization of the Google Form application has been proven to be very effective in implementing PAT or summative assessment.²¹

In line with the results of Tria's research quoted by Azhar, showed that the use of Google Form as an alternative for making evaluations is considered capable and suitable. This is proven by the percentage of 100% of teachers who are interested in making learning evaluations through Google Forms in terms of ease 33%, speed 44%, practicality 66%, and efficiency 66%.²² Google Forms are also more effective and efficient in terms of cost and workforce compared to paper-based assessments. This also shows the advantages of Google Forms as an evaluation tool for learning. While the weakness's Google forms will be constrained when the signal is unstable.²³

Based on the above, the advantages of Google Forms are (1) Easy, (2) Cheap, (3) Fast, and (4) Effective and (5) Efficient. The disadvantages include (1) the need to be connected to the internet, (2) if the connection is unstable, it can cause the answer results to be lost if the account owner does not set the automatic save filling. The use of Quizizz in Blitar Regency reached 45.5% because this application is interesting, varied, easy to use and understand. Quizizz uses a game base with an attractive and non-monotonous design.²⁴ Fitriyani's research showed that Quizizz has several advantages, including: (1) The questions presented are easy to read (2) Assessment is more effective in the sense of being objective compared to conventional models (3) Time efficient (4) Easier to use than other applications (5) Facilitates the collection of learning assessments.²⁵ Interaction in Quizizz can increase students' motivation in working on questions.²⁶ Providing quizzes via quizizz has been proven to increase students' learning motivation based on experimental research

²⁰ Muhammad Fachrurrozi Bafadal and Andika Triansyah, "Google Form: Alternatif Penilaian Pendidikan Jasmain Saat Covid-19," *Science Tech: Jurnal Ilmu Pengetahuan Dan Teknologi* 6, no. 2 (August 3, 2020): 48–57, <https://doi.org/10.30738/jst.v6i2.8066>.

²¹ Suriyanti Suriyanti, "Efektifitas Pembelajaran Daring Melalui Penggunaan Aplikasi Google Form Dalam Penilaian Akhir Tahun (Pat) Tahun Pelajaran 2020/2021 Peserta Didik Mts Al-Qadr Betun," *Jurnal Ilmu Pendidikan (JIP)* 6, no. 1 (April 10, 2021), <https://doi.org/10.59098/jipend.v6i1.517>.

²² Azhar and Rahmawati, "Software Dan Aplikasi Digital Penunjang Evaluasi Pembelajaran."

²³ Samsiadi Samsiadi and M. Nurul Humaidi, "Efektivitas Google Form Sebagai Media Penilaian Dan Evaluasi Pembelajaran PAI Di SMK Negeri 1 Berau Kaltim," *Research and Development Journal of Education* 8, no. 2 (July 26, 2022): 666, <https://doi.org/10.30998/rdje.v8i2.13634>.

²⁴ Wahyudi Wahyudi, Intan Sari Rufiana, and Dwi Avita Nurhidayah, "Quizizz: Alternatif Penilaian Di Masa Pandemi Covid-19," *Jurnal Ilmiah Soulmath : Jurnal Edukasi Pendidikan Matematika* 8, no. 2 (November 16, 2020): 95–108, <https://doi.org/10.25139/smj.v8i2.3062>.

²⁵ Ibid, 920-923

²⁶ Herlina Pusparani, "Media Quizizz Sebagai Aplikasi Evaluasi Pembelajaran Kelas VI Di SDN Guntur Kota Cirebon," *Tunas Nusantara* 2, no. 2 (December 14, 2020): 269–79, <https://doi.org/10.34001/jtn.v2i2.1496>.

significantly.²⁷ The drawbacks are related to the internet connection which can hinder the assessment process.

Kahoot in Blitar Regency is ranked third at 36.4% because it is easy to use, easy to understand, varied and keeps children from getting bored. Students also pay more attention to explanations and are more competitive in working on questions, and the application provides student quiz results.²⁸ The Kahoot application is also practical. This is evidenced by the ease indicator of 93.3% of respondents agreeing that this application is easy to operate; in terms of interest, 93.3% of respondents agree that Kahoot can attract students' interest in learning. Moreover, 94.2% of the display is said to be very good so that it can be attractive and easy to understand.²⁹ Kahoot helps improve students' thinking and learning abilities.³⁰ The data shows that Kahoot has advantages including (1) Easy to operate, (2) Has an attractive appearance, (3) Can make students enthusiastic about learning. The weakness is that if the internet connection is unstable, students will exit the game directly even though they can rejoin.³¹

Proprofs and ThatQuiz are not used in Blitar as learning assessment applications. The data prove that 0% of Blitar PAI teachers use this application. Proprofs and Thatquiz are applications that are used and recommended to help with assessment.³² Proprofs or, more fully called Proprofs Brain Games is a tool used to measure students' understanding of learning materials. Proprofs has been tested through R&D research and is suitable for assessing students' understanding of PAI learning materials.³³ Proprofs as an assessment tool has many interesting features, for example various games, certificates after completing the questions and a recapitulation system for student answers.³⁴ Proprofs is used among students as a paperless test aid. Surveys show that 75% of students are satisfied with using

²⁷ Rahmania Rahman, Erric Kondoy, and Awaluddin Hasrin, "Penggunaan Aplikasi Quizziz Sebagai Media Pemberian Kuis Dalam Meningkatkan Motivasi Belajar Mahasiswa," *JISIP (Jurnal Ilmu Sosial Dan Pendidikan)* 4, no. 3 (July 7, 2020), <https://doi.org/10.58258/jisip.v4i3.1161>.

²⁸ Fatonah Salfadilah, Andi Prastowo, and Yusuf Rendi Wibowo, "Aplikasi Kahoot Sebagai Media Penilaian Kognitif Berbasis Hots Di Sekolah Dasar," *JRPD (Jurnal Riset Pendidikan Dasar)* 6, no. 1 (April 7, 2023): 36–45, <https://doi.org/10.26618/jrpd.v6i1.9791>.

²⁹ Septina Rahmawati, "Efektivitas Penggunaan Aplikasi Kahoot Dalam Pembelajaran IPA SD," *Jurnal Elementary* 6, no. 1 (January 18, 2023): 30, <https://doi.org/10.31764/elementary.v6i1.12834>.

³⁰ Nurul Fajri et al., "Penerapan Aplikasi Kahoot Dalam Evaluasi Pembelajaran PAI Pada Materi Masuknya Islam Ke Nusantara Di Kelas IX Di SMP N 1 Banuhampu Kabupaten Agam," *Jurnal Kajian Dan Pengembangan Umat* 4, no. 2 (December 29, 2021), <https://doi.org/10.31869/jkpu.v4i2.3040>.

³¹ *Ibid*

³² Azhar dan Rahmawati, "Software dan Aplikasi Digital Penunjang Evaluasi Pembelajaran."

³³ Nurjanah Nurjanah et al., "Pemanfaatan Website Proprofs Brain Games Untuk Mengukur Pemahaman Siswa Dalam Pembelajaran PAI Kelas V SD," *Pedagogi: Jurnal Penelitian Pendidikan* 9, no. 1 (July 27, 2022), <https://doi.org/10.25134/pedagogi.v9i1.5758>.

³⁴ Primardiana H. Wijayati et al., "Proprofs: Platform Asesmen Daring Pilihan Ganda, Hostpot, Dan Game Hangman," *Jurnal Graha Pengabdian* 3, no. 2 (July 30, 2021): 191, <https://doi.org/10.17977/um078v3i22021p191-205>.

the prop profs application with indicators of informativeness, information format, timelessness, ease of use and reliability.³⁵

The advantages of the prop profs application include (1) it does not require a lot of costs, it is flexible in terms of space and time, (2) the score results come out immediately, (3) students receive appreciation in the form of a certificate after the evaluation, (4) teachers find it easy to record grades because the assessment is determined on the website.³⁶ In line with this statement, according to Wijayanti, other advantages of Proprofs include (1) having the most significant number of questions (question banks) in the world, (2) having world-class services and support, (3) secure security and backup, (4) data portability policy can be accessed quickly, (5) being the most extensive quiz maker application with many users, (6) offering a lot of experience for users because it is integrated with the web, (7) there are non-paid updates with the latest features, (8) a simple and easy-to-use display, (9) compatible with all devices.³⁷ Meanwhile, the disadvantages are: (1) this application must be connected to the internet, (2) it is challenging to implement in schools with limited facilities, (3) it requires teacher supervision for the effectiveness and Efficiency of using the application.³⁸

Thatquiz is an online test software accessed on the page www.thatquiz.org. Thatquiz is a free service site that educators can use to help with assessments or tests on a paperless basis with an online test model. On this site, an assessment service is provided that can be instructed to analyze values and progress in a class or each individual quickly. For students, this application is handy for training skills, especially understanding by working on existing practice questions. For educators, this application can be used as a tool for measuring and assessing student learning outcomes.³⁹ The application of "that quiz" can facilitate teachers to create accounts that can be used to present materials and practice questions as well as evaluation tools at the end of learning.⁴⁰ The test models provided by that quiz are varied, starting from multiple choice questions, matching or matching. Other facilities provided include test administration, class editing or class editing, import-delete test printing, and downloadable tests.⁴¹ The advantages of the Thatquiz application include: (1) Attracting

³⁵ Avin Wimar Budyastomo, "Survei Kepuasan Mahasiswa IAIN Salatiga Terhadap Penggunaan Aplikasi Proprofs Sebagai Media Pembelajaran Online," in *SINTAK* (Universitas Stikubank Semarang, 2019), <https://www.unisbank.ac.id/ojs/index.php/sintak/article/view/7569?PageSpeed=noscript>.

³⁶ Nurjanah et al., "Pemanfaatan Website Proprofs Brain Games Untuk Mengukur Pemahaman Siswa Dalam Pembelajaran PAI Kelas V SD."

³⁷ Wijayati et al., "Proprofs: Platform Asesmen Daring Pilihan Ganda, Hostpot, Dan Game Hangman."

³⁸ Nurjanah et al., "Pemanfaatan Website Proprofs Brain Games Untuk Mengukur Pemahaman Siswa Dalam Pembelajaran PAI Kelas V SD."

³⁹ Arlin Astriyani et al., "Pemanfaatan Aplikasi Daring Thatquiz.Org Untuk Mengembangkan Tes Berbasis Online Pada Pembelajaran Matematika," *Abdimas Pedagogi: Jurnal Ilmiah Pengabdian Kepada Masyarakat* 4, no. 1 (April 29, 2021): 9, <https://doi.org/10.17977/um050v4i1p9-17>.

⁴⁰ Kuncahyono Kuncahyono, Beti Istanti Suwandayani, and Abdurrohman Muzakki, "Aplikasi E-Test 'That Quiz' Sebagai Digitalisasi Keterampilan Pembelajaran Abad 21 Di Sekolah Indonesia Bangkok," *Lectura : Jurnal Pendidikan* 11, no. 2 (August 5, 2020): 153–66, <https://doi.org/10.31849/lectura.v11i2.4687>.

⁴¹ Astriyani et al., "Pemanfaatan Aplikasi Daring Thatquiz.Org Untuk Mengembangkan Tes Berbasis Online Pada Pembelajaran Matematika."

students' interest so that they are more active in learning,⁴² (2) Allows teachers to switch questions with other teachers, (3) Tests can be downloaded for Android, iPad, Windows devices.⁴³ The weakness is that this application must be connected to an internet network.

Zipgrade is one of the learning assessment applications used in PAI learning in Blitar. However, the use of this application is minimal because not many people use it. Based on research data, the use of Zipgrade reaches 9.1% or 5 times lower than Quizizz. Zipgrade is an application for learning assessment that provides multiple choice via smartphone to scan student answer sheets.⁴⁴ Zipgrade is a technology product in the form of efficient digital software to help provide educational values and assessments in the current era. The use of Zip grade can provide faster feedback to students; in addition, through this application, students can be more precise in improving their insight because there are parts that show their shortcomings. The use of the Zipgrade application is also an initiator of fair assessment because it explains in detail the student's score.⁴⁵ The adoption of Zigrade as an assistive technology in student formative assessment offers several advantages, including ease of use, direct feedback, and active involvement of students in the assessment process. However, when using grades, there must be physical evidence of student answer sheets. Zipgrade tends to be used for multiple-choice question assessments.⁴⁶

In Table 2, the researcher presents a simplified discussion table to make it easier for readers to identify factors in adopting learning assessment applications based on discussions and data presentation.

Adopting learning assessment applications is undoubtedly inseparable from other supporting factors such as (1) Technology factors consisting of internet access, computing devices, and ICT infrastructure and (2) organizational factors in the form of institutional support. (3) environmental factors in the form of academic integrity, and (4) individual factors consisting of digital skills and user perceptions.⁴⁷

⁴² Kuncahyono, Suwandayani, and Muzakki, "Aplikasi E-Test 'That Quiz' Sebagai Digitalisasi Keterampilan Pembelajaran Abad 21 Di Sekolah Indonesia Bangkok."

⁴³ Astriyani et al., "Pemanfaatan Aplikasi Daring Thatquiz.Org Untuk Mengembangkan Tes Berbasis Online Pada Pembelajaran Matematika."

⁴⁴ Resti Amalia et al., "Pelatihan Penggunaan Aplikasi Zipgrade Sebagai Pendukung Kegiatan Belajar Mengajar Di Smp Islam Raudlatul Hikmah," *KOMMAS: Jurnal Pengabdian Kepada Masyarakat* 1, no. 3 (December 31, 2020): 103–10, <https://doi.org/10.4108/EAI.17-10-2018.2294317>.

⁴⁵ P. Ndahimana, V. Archibong, and J. K. Gashegu, "Effectiveness of the Zipgrade App in Marking and Data Analysis in the Human Anatomy Department of the School of Medicine and Pharmacy at the University of Rwanda," *Rwanda Medical Journal* 81, no. 1 (April 13, 2024): 181–86, <https://doi.org/10.4314/rmj.v81i1.23>.

⁴⁶ Bani Arora and Abdulghani Al-Hattami, "Technological Tool for Formative Assessment in Higher Education: ZipGrade," *Canadian Journal of Learning and Technology* 50, no. 2 (January 11, 2025): 1–18, <https://doi.org/10.21432/cjlt28759>.

⁴⁷ Gilbert Mahlangu and Lucia Makwasha, "Factors Affecting the Adoption and Use of Online Assessment for Learning at Polytechnics in Zimbabwe," *Cogent Education* 10, no. 1 (December 31, 2023), <https://doi.org/10.1080/2331186X.2023.2177475>.

Tabel 2. Factors of Adoption of Learning Assessment Applications

Factors	Discussion
Ease of Access and Use	Applications used in Blitar such as Google Form, Quizizz, and Kahoot, Zipgrade are considered easy to access and use by teachers and students.
Effectiveness and Efficiency	This application enables the assessment process to be faster, more cost-effective and less labor-intensive than conventional methods.
Simple and Attractive	The attractive and interactive design of applications such as Quizizz and Kahoot increase motivation and enthusiastic student in learning.

Based on the explanation above, it can concluded that the factors for adopting the PAI learning assessment application in Blitar Regency are (1) ease of access, (2) ease of operation, (3) ease of obtaining objective learning outcome data, (4) ease of teacher administration, (5) effective and efficient in terms of time and, (6) the attractiveness of the IT-based assessment model that makes students more enthusiastic. The learning assessment application presented by the author is practical in helping educators obtain learning outcome data, especially in the PAI subject. In general, the advantages of the software lie in (1) ease of creation, (2) speed of assessment, and (3) accuracy of assessment results. The disadvantages lie in the requirement for a stable internet connection because all these assessment applications can work if connected to an internet network.

CONCLUSION

The utilization of PAI learning assessment applications in Blitar Regency is quite massive. This is supported by survey data showing that 90.9% of PAI teachers have conducted learning assessments using the help of learning assessment applications. The learning assessment applications used are Google Forms, Kahoot, Quizizz, and Zipgrade. The use of Google Forms reached 90.9%, Kahoot 36.4%, Quizizz 45.5%, and Zipgrade 9.1%. Google Forms ranks first in terms of use because it is very easy to access, cheap, and not complicated, and the assessment scores can be received directly.

Fuady et al. mentioned that Digital-based assessment application software is more widely used in the context of student assessment in cognitive aspects manifested in the form of daily assessments, formative assessments and summative assessments.⁴⁸ The factors influencing the adoption of learning assessment applications include 1) ease of access and use, 2) effectiveness and efficiency of time and energy, and 3) simple applications that attract student interest. In addition, other supporting factors for adopting a learning assessment application include technological, organizational, environmental, and individual factors.

⁴⁸ Moch. Rizal Fuadiy, M. Asep Fathur Rozi, and Siti Marpuah, "SEM Model to Assess the Impact of Mobile Gaming on Islamic Education Learning," *Journal of Educational Research and Practice* 2, no. 2 (July 26, 2024): 51–70, <https://doi.org/10.70376/jerp.v2i2.195>.

The limitations of this study are in the scope of the scale, which only covers part of the Blitar area. Therefore, the author can recommend that future researchers develop this research on a broader scale, and the results obtained can represent the entire region. This is intended to strengthen the scientific treasury of using learning assessment applications. Thus, the theory produced from this study can have theoretical stability that can be used as a basis for compiling future research instruments.

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