

Language Assessment Literacy in EFL Edupreneurship Among Lecturers at Muhammadiyah University of Makassar and Samarkand Institute

Uyunnasirah Hambali^{1*}, Ratu Yulianti Natsir² , Erwin Akib³ , Petrosyan Nelya Valeryevna⁴

^{1, 2, 3}Faculty of Teacher Training and Education, Muhammadiyah University of Makassar, Indonesia

⁴Lecture of Samarkand Institute, Uzbekistan

¹uyunhambali@unismuh.ac.id, ²ratu.yulianti@unismuh.ac.id, ³erwin@unismuh.ac.id, ⁴nelyapetrosyan1971@gmail.com

*Corresponding Author

Article Info

Article history:

Submission June 10, 2024

Revised August 08, 2024

Accepted December 04, 2024

Published December 09, 2024

Keywords:

Language Assessment Literacy

EFL Lecturers

Assessment Knowledge

Digital Assessment



ABSTRACT

Language Assessment Literacy (LAL) is a crucial competency for language teachers, encompassing the knowledge and skills required to effectively conduct assessment activities. **This research aims** to explore the perceptions of EFL lecturers at Muhammadiyah University of Makassar and Samarkand Institute regarding different types of LAL, and how technological innovations and digital tools can enhance these skills. The study utilized a purposive sampling technique to select ten lecturers from both institutions, who participated in an online questionnaire focusing on two main categories "knowledge and skills". Within these categories, assessments were divided into digital assessment, test efficacy and accuracy, language proficiency, instructional assessment methods, grading standards, and test outcomes. **The results indicated** that the majority of participants predominantly employed methods of instructional assessment (87.5%) and test efficacy and accuracy (82.5%). Other areas, such as language proficiency (72.5%) and test outcomes (75%), were also significantly applied. Digital assessment and grading standards were less utilized (70% and 67.5% respectively). The findings suggest the need for EFL lecturers to be equipped with the necessary knowledge and skills to implement quality assessments effectively. **Integrating SDGs**, particularly Goal 4 (Quality Education), this study underscores the importance of enhancing teacher competencies through innovative technologies and digital tools to achieve inclusive and equitable quality education. **By improving LAL**, educators can better support students learning outcomes and contribute to sustainable educational practices.

This is an open access article under the [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/) license.



DOI: <https://doi.org/10.34306/att.v6i3.432>

This is an open-access article under the CC-BY license (<https://creativecommons.org/licenses/by/4.0/>)

©Authors retain all copyrights

1. INTRODUCTION

Assessment is critical aspect of successful teaching and learning process. Some researchers supported for the use of assessment to enhance deep learning, improve students learning motivation, create self-concept recognition, and enhance understanding of the assessment quality [1]. Therefore, it is crucial to ensure that assessment is implemented effectively in order to offer accurate information regarding the academic achievement of students accomplishment to all parties involved, including students, teachers, and assessors [2]. In fact, assessment and teaching are interrelated in the sense that teaching can assist teachers in improving the

accuracy of their assessments, and assessments can assist teachers in improving the quality of their teaching [3]. However, such a relationship is exceedingly unlikely to establish if teachers do not have proper assessment abilities [4].

The principle of "assessment literacy" has been given and created to manage the necessity of teachers to be educated and understanding of assessment [5]. Assessment literacy of second language education largely focuses on evaluating stakeholders grasp of assessment concepts and their ability to apply that knowledge in practice [3].

Language lecturers must acquire a high level of LAL in accordance with the criteria outlined in the Standards of Teacher Competence in Educational Assessment of the Students despite the need for more agreement regarding the concept [5], [6]. This proficiency would enable them to develop and administer appropriate testing methods, score tests for instructional purposes, communicate outcome of tests are provided to participants and turn into informed about the outcomes of assessments [7]. In a similar with [8] emphasized the critical significance of LAL, which enables educators to gather precise data regarding the academic progress of their pupils and utilize this data to enhance their pedagogical approaches [9]. Therefore, language instructors at all levels of education, including higher education, are expected to indicate a high level of LAL, as noted by [10]. In this regard, [11] emphasized the importance of investigating the perspectives of university language instructors regarding LAL [12]. University officials may utilize the findings to ascertain whether instructors possess the mandatory LAL [13].

Several studies on LAL have been undertaken during the last few decades by scholars from various contexts namely [14] conducted a study in the Chinese educational context to investigate the impact of contextual and experiential components on the assessment literacy of three different groups: the English language as a Foreign Language (EFL) teacher, graduate-level learners, and the language teachers [15, 16]. Their findings revealed that the individuals had diverse LAL profiles at both the individual and group levels [17]. When compared to EFL teachers, graduate students and the teachers language demonstrated a higher level of LAL [18]. Individually, despite having comparable patterns, each subject displayed a separate trajectory of LAL increase. [19] investigated the literacy levels of sixty-six secondary teachers in Hong Kong who were teaching English as a Foreign Language (EFL) and the result of his research indicated that, while the majority of teachers provided the required level of assessment literacy, they were unable to distinguish between two critical components of assessment: "assessment of learning" and "assessment for learning." [20] did a study in Iran to investigate the variations in assessment literacy between English as a Foreign Language (EFL) instructors and non-EFL teachers [21]. The researchers assessed the participants assessment knowledge and skills using an assessment literacy scale. Their findings revealed that both groups of participants had a limited comprehension of the evaluation concept, as well as different perceptions of LAL.

Meanwhile, [22] looked into how teacher educators in Norway see language awareness and language learning in the classroom. Participants in the study highlighted four separate abilities that teachers in the field of LAL should possess: competency in collaboration, pedagogy, assessment-specific competence, and discipline [22, 23]. In the realm of Indonesian education, LAL has emerged as a captivating subject of study in recent years. As an illustration, [24] investigated the perception of LAL among 22 EFL teachers in secondary schools. They used a survey as their study tool. Their research revealed that while the teachers exhibited a profound understanding of assessment concepts, there was a significant disparity between their theoretical knowledge of assessment and their actual implementation of assessment strategies. The mismatch was specifically discovered in two significant phases, namely the implementation and monitoring. At the same time, [25] conducted a study to examine the evaluation literacy of six English as a Foreign Language (EFL) instructors at two secondary schools in Indonesia. Using the Classroom Assessment Literacy Inventory (CALL), the researcher discovered that the teachers demonstrated a moderate level of literacy in LAL. The teachers had challenges in evaluating students development as they struggled to comprehend the fundamental skills outlined in the curriculum. Additionally, they seldom utilized formative assessment techniques due to their limited capacity to effectively manage classroom time. [10] investigated the perception of LAL among 144 elementary school teachers. The researchers utilized the 30-item Classroom Assessment Literacy Questionnaire (CALT) to examine the instructors level of assessment literacy. The results indicated that teachers ability of assessment literacy was considered to be "fair". Between lower-grade and upper-grade teachers, there was no significant difference in the LAL levels.

According to the analysis of previous studies, only a small number of academics have examined LAL in the context of Indonesian higher-level education. In addition, a limited number of scholars have explored

the perspectives of English as a Foreign Language (EFL) instructors on LAL at the higher education level in Indonesia. Hence, this study aims to enhance comprehension of the LAL dimension by examining the perspectives of EFL instructors on LAL in Indonesian higher education, specifically at the Muhammadiyah University of Makassar and Samarkand Institute. This study is required to provide the responses to the subsequent inquiries. What kinds of LAL have EFL university lecturers used at the Muhammadiyah University of Makassar and Samarkand Institute?

2. LITERATURE REVIEW

Language teachers must possess a high level of Language Assessment Literacy (LAL) as outlined in the Standards of Teacher Competence in Educational Assessment [5]. LAL enables educators to design and implement effective assessment methods, evaluate tests for instructional purposes, and communicate test results efficiently. [8] highlights the critical role of LAL in collecting accurate data on students academic progress and refining pedagogical strategies. Teachers across all educational levels, including higher education, are expected to exhibit advanced LAL. In alignment with the Sustainable Development Goals (SDGs), particularly Goal 4 (Quality Education), enhancing LAL through technological innovation supports inclusive and equitable quality education.

Research on LAL has been conducted in various contexts. Examined the influence of contextual and experiential factors on assessment literacy in China, revealing diverse LAL profiles among EFL teachers, graduate students, and language instructors. [19], [14] reported that EFL teachers in Hong Kong displayed adequate assessment literacy but faced challenges in differentiating "assessment of learning" from "assessment for learning". Similarly, [20] observed discrepancies in evaluation concept comprehension between EFL and non-EFL teachers in Iran.

In Norway, identified essential competencies for teachers, including collaboration, pedagogy, assessment-specific skills, and subject expertise. In Indonesia, noted a significant gap between theoretical knowledge and the practical application of assessment strategies among EFL teachers [22], [24]. Found that Indonesian EFL teachers exhibited moderate LAL and encountered difficulties with formative assessment techniques. Furthermore, categorized the assessment literacy of elementary school teachers as "fair" [25], [10].

This study aims to deepen the understanding of LAL in Indonesian higher education, focusing on Muhammadiyah University of Makassar and Samarkand Institute. By improving teacher competencies through technological innovations, this research seeks to contribute to the realization of SDG 4.

3. RESEARCH METHODOLOGY

Muhammadiyah University of Makassar, Indonesia, and the Samarkand Institute collaborated on this research. In order to ascertain the participation of EFL university instructors in this study, purposive sampling was utilized. Five EFL teachers from Muhammadiyah University in Makassar, Indonesia, and five EFL teachers from the Samarkand Institute [26]. This study used a quantitative method using an online questionnaire instrument designed using the Qualtrics questionnaire platforms. The questionnaire consists of six dichotomous questions about the various forms of LAL lecturers applied in their teaching performance.

3.1. Research Design

This research adopted a quantitative approach to understand the types of LAL employed by EFL lecturers at Muhammadiyah University of Makassar and the Samarkand Institute. The study utilized an online questionnaire as the primary data collection tool, designed using the Qualtrics platform [27]. The questionnaire comprised six dichotomous questions, each focusing on different forms of LAL used by lecturers in their teaching activities. This approach allowed for a systematic and structured collection of data, enabling the researchers to quantify the extent and types of LAL practices among the participants [28].

The quantitative design was chosen for its ability to provide clear, objective, and statistical insights into the lecturers assessment practices. By using dichotomous questions, the study aimed to capture precise responses regarding the presence or absence of specific LAL practices. This method facilitated straightforward analysis and comparison of the different types of LAL utilized by the lecturers, providing a robust foundation for identifying prevalent assessment literacy trends [29, 30].

3.2. Participants and Sampling

The study involved a purposive sampling technique to select participants, ensuring that the sample included lecturers who were actively engaged in EFL teaching and assessment activities. Ten lecturers participated in the study, with five from Muhammadiyah University in Makassar, Indonesia, and five from the Samarkand Institute. This targeted sampling approach was designed to gather insights from experienced educators who could provide relevant and informed responses about their LAL practices [31].

Purposive sampling was deemed appropriate for this study as it allowed the researchers to focus on a specific group of educators whose experiences and practices were directly relevant to the research objectives. By selecting lecturers from two distinct institutions, the study aimed to capture a diverse range of perspectives and practices, enhancing the generalizability of the findings within the context of university level EFL education.

3.3. Data Collection and Instrument

Data was collected through an online questionnaire distributed via the Qualtrics platform, ensuring broad accessibility and convenience for participants [32]. The questionnaire was carefully structured, consisting of six dichotomous questions, each meticulously crafted to investigate various aspects of LAL knowledge and skills. These questions were thoughtfully categorized into two main sections "knowledge and skills".

The knowledge category aimed to assess participants understanding of key areas, including digital assessment strategies, the efficacy and reliability of language tests, and overall language proficiency. Each question within this category was designed to target specific dimensions of LAL knowledge, ensuring a comprehensive evaluation of the respondents expertise in these critical domains [33].

In the skills category, the focus shifted towards practical applications of LAL. This section explored lecturers approaches to instructional assessment, their familiarity with grading standards, and their ability to interpret and act upon the outcomes of language tests [34]. By addressing these areas, the questionnaire aimed to provide a nuanced understanding of how lecturers implement LAL practices in real-world educational settings.

The online format of the questionnaire provided numerous advantages. It allowed for seamless distribution to a geographically diverse audience, making it easier for participants to access and complete the survey at their convenience [35, 36]. This approach not only ensured a higher response rate but also streamlined the data collection process. The dichotomous nature of the questions further simplified participation by enabling quick and unambiguous responses, reducing the cognitive load on participants.

Moreover, the design of the questionnaire facilitated straightforward data analysis. The simplicity of the dichotomous responses allowed researchers to efficiently code and quantify the results, identifying patterns and trends with ease. This efficiency was critical in analyzing the types of LAL practices reported by lecturers, providing clear insights into their knowledge and skills. The structured format of the questionnaire also ensured consistency in the data, enhancing the reliability and validity of the findings. Overall, the combination of an online platform and a well-designed questionnaire proved to be an effective method for collecting and analyzing data on LAL practices [37, 38].

3.4. Data Analysis

The collected data underwent thorough analysis utilizing descriptive statistical methods, aiming to unveil the prevalence and distribution of various LAL practices among the participants. With a focus on calculating the percentage of lecturers employing each type of assessment literacy in their teaching, this quantitative approach offered a systematic overview of dominant LAL practices while shedding light on areas where specific types were more or less widespread. Descriptive statistics emerged as the preferred analytical tool due to their capacity to succinctly summarize data in an easily interpretable manner, thus facilitating a comprehensive understanding of the assessment landscape among the participating educators [39].

This quantitative analysis enabled the researchers to discern trends and patterns in assessment practices, laying the groundwork for insightful conclusions regarding the overall LAL landscape among the surveyed lecturers. By identifying which types of assessment literacy were more prevalent, the study provided valuable insights into existing practices and potential areas for improvement. Moreover, it served as a basis for discussing the implications of these findings, guiding future efforts in LAL training and development initiatives aimed at enhancing assessment competencies among EFL lecturers in higher education settings.

In summary, the utilization of descriptive statistical methods in analyzing the collected data not only offered a clear snapshot of the prevailing LAL practices but also facilitated informed discussions on strategies for optimizing assessment practices and fostering continuous professional development among educators.

Table 1. Categories of LAL In Teaching Process

Categories	Sub-categories	Themes
Knowledge	1. Digital assessment	a. Conducting test online
		b. Technological tools
	2. The efficacy and accuracy of tests	a. Test layout
		b. Statistical technique
	3. Proficiency in language	a. Methods of instruction
		b. Procedures for assessment
		c. Media for instruction
Skill	1. Methods of instructional assessment	a. Peer or Self-assessment
		b. Student portfolios of work
	2. Grading standards	a. Criteria for productive skill
		b. Criteria for receptive skill
	3. The outcomes of the test	a. Direct feedback from teachers
		b. Written report from teachers

The Table 1 provides a structured framework for understanding the components of LAL. It categorizes LAL into two main areas "Knowledge and Skill", each further divided into sub-categories and themes. Digital assessment, encompassing the utilization of digital technology to gauge students language proficiency, revolves around two main themes. Conducting tests online offers flexibility in time and location for students, easing access particularly for those in disparate locations. Moreover, online tests can be rendered interactive and engaging through varied formats such as quizzes, simulations, and multimedia, enhancing student participation. Technological tools like exam creation software, analytic applications for evaluating student performance, and mobile devices enabling anytime, anywhere access streamline assessment processes, alleviating teachers workload while furnishing prompt and accurate results [40].

Ensuring the efficacy and accuracy of tests entails two key aspects. The layout of tests plays a pivotal role in ensuring comprehensibility and correct response among participants. A well structured test layout involves clear question formulation, consistent font usage, and adequate time allocation for each test section, thereby reducing student anxiety and ensuring reflective results of their true abilities. Employing statistical techniques in test result analysis ensures assessment validity and reliability. This encompasses item analysis to determine each question difficulty and discrimination levels, along with descriptive and inferential statistics to evaluate overall student group performance, offering profound insights into test effectiveness and identifying areas necessitating improvement.

Language proficiency constitutes a crucial aspect of language assessment, encompassing three primary themes. Firstly, effective teaching methods are vital in enhancing students language skills, involving varied teaching strategies such as project-based learning, collaborative learning, and authentic instructional materials usage, designed to boost student engagement and provide contextual language skill development opportunities. Secondly, comprehensive and systematic assessment procedures aid in accurately evaluating students language proficiency. This encompasses employing various assessment types formative, summative, and diagnostic along with assessment techniques aligned with learning objectives and student characteristics, ensuring assessments not only measure student abilities but also support the teaching-learning process. Lastly, utilizing diverse instructional media like video, audio, and interactive materials aids in enhancing students language proficiency by making learning more engaging and providing varied contexts and situations for language skill practice. By leveraging appropriate media, teachers can help students develop listening, speaking, reading, and writing skills more effectively.

Instructional assessment methods encompass various techniques employed by educators to evaluate student performance, focusing on two key themes. Peer or self-assessment fosters reflective and critical skills development among students. By evaluating their own or classmates work, students gain a deeper understanding of assessment standards and identify areas for improvement, promoting self accountability and heightened awareness of the learning process. Utilizing student portfolios as assessment tools enables teachers to compile diverse samples of student work over time, offering a comprehensive overview of student progress and achievements. Portfolios facilitate holistic, student centered assessment and can document student progress while providing specific and constructive feedback.

Grading standards serve as guidelines for fairly and consistently assessing student skills, addressing

two primary areas. Firstly, criteria for productive skills evaluation, such as speaking and writing, encompass fluency, accuracy, coherence, and vocabulary diversity. These standards ensure objective and consistent assessment of productive skills while providing constructive feedback to students on areas for improvement. Secondly, criteria for receptive skills evaluation, such as listening and reading, focus on students ability to comprehend and interpret information accurately, covering understanding of main ideas, specific details, inference, and conclusions. Clear and specific criteria enable teachers to conduct accurate and meaningful assessment of receptive skills.

The outcomes of tests are pivotal in supporting the learning process and offering valuable feedback to students, emphasizing two key aspects. Firstly, direct feedback from teachers plays a crucial role in helping students understand their strengths and weaknesses. Specific and constructive feedback motivates students to enhance their performance and provides guidance on steps to improve their skills. Secondly, written reports from teachers offer structured documentation of student assessment results, aiding students and parents in understanding student achievements and facilitating effective communication among teachers, students, and parents. Written reports also serve as reflective tools for teachers to evaluate the effectiveness of their teaching methods and assessment strategies.

4. RESULT AND DISCUSSION

The assessment of LAL types among EFL lecturers at Muhammadiyah University of Makassar and Samarkand Institute was conducted through an online questionnaire, revealing valuable insights into their practices in higher education. Figure 1 presents the comprehensive breakdown of LAL types utilized by these educators in teaching contexts. This data serves as a foundational reference point for understanding the landscape of language assessment practices within these academic institutions.

Moving forward, these findings pave the way for further research and initiatives aimed at enhancing among EFL lecturers, thus contributing to the continuous improvement of language teaching and learning practices. Additionally, they provide a basis for institutional policies and interventions designed to support educators in developing their assessment competencies, ultimately enriching the educational experience for both faculty and students.

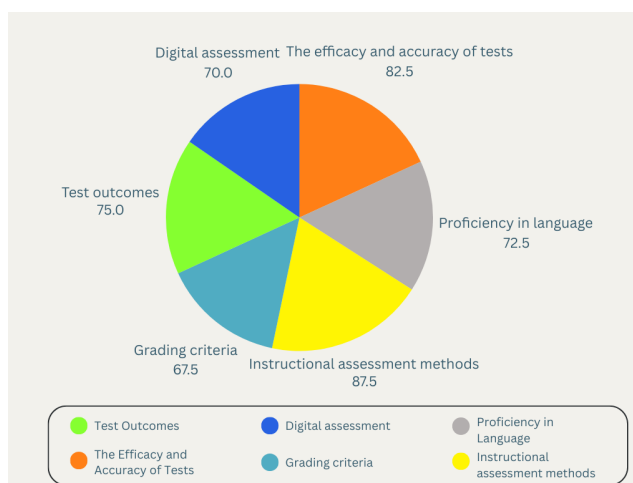


Figure 1. LAL Types for EFL Lecturers in Teaching

The Figure 1 indicate that methods of instructional assessment and the efficacy and accuracy of tests are the most commonly utilized forms of LAL among EFL lecturers. This suggests that lecturers prioritize practical, classroom-based assessment methods and ensuring the validity and reliability of their tests [41]. The significant application of proficiency in language and test outcomes further emphasizes the importance placed on comprehensive assessment strategies that encompass both teaching methods and student feedback [42].

The lower utilization of digital assessment tools points to a potential area for development. As the educational landscape increasingly incorporates digital technologies, enhancing lecturers familiarity and comfort with these tools could improve their assessment practices. Similarly, the less frequent use of grading standards

highlights the need for clearer and more consistent criteria to evaluate both productive and receptive language skills. Integrating Sustainable Development Goals (SDGs), particularly Goal 4 (Quality Education), into LAL practices is crucial. Enhancing LAL through technological innovations supports inclusive and equitable quality education. By improving LAL, educators can better support students learning outcomes and contribute to sustainable educational practices. This aligns with the global effort to provide quality education and lifelong learning opportunities for all.

In conclusion, the study highlights the strengths and areas for improvement in the current LAL practices among EFL lecturers. Emphasizing the integration of digital tools and clear grading standards, along with ongoing professional development, can further enhance the effectiveness of LAL, ultimately supporting the achievement of SDG 4.

5. MANAGERIAL IMPLICATION

The findings of this study highlight the importance of investing in advanced digital assessment tools and providing comprehensive training programs for EFL lecturers. By equipping educators with the necessary technological skills, educational institutions can improve the effectiveness and accuracy of language assessments. Furthermore, developing and implementing clear and consistent grading standards for both productive and receptive language skills will ensure fairness and transparency in the assessment process. These measures will lead to more accurate evaluations of student performance and better support the achievement of Sustainable Development Goal 4 (Quality Education).

Additionally, continuous professional development programs are crucial to keep lecturers updated with the latest advancements in language assessment techniques and technologies. Educational institutions should also encourage collaborative assessment practices, such as peer and self-assessment, to enhance critical thinking and self-reflection among students. Regular monitoring and evaluation of assessment practices, along with integrating LAL into curriculum development, will help create a comprehensive educational framework that supports both teaching and assessment excellence. By implementing these strategies, institutions can significantly enhance the LAL of their EFL lecturers, leading to improved educational outcomes and contributing to the overall advancement of the educational system.

6. CONCLUSION

The purpose of this research was to ascertain the Muhammadiyah University of Makasar and Samarkand Institute EFL teachers perception of the fundamental principles of Language Acquisition and Learning LAL. The data analysis identified two distinct types of LAL domains. The first domain encompassed knowledge and consisted of three independent themes, namely language competence, digital literacy, and test validity and reliability. The second category encompassed competence and consisted of three unique themes, namely formative assessment techniques, grading standards, and test results. Based on the findings, it is evident that EFL teachers must have the necessary knowledge and skills to facilitate the process of conducting rigorous assessments.

The study conclusions have certain educational ramifications. First, in order to assist teachers in enhancing their assessment literacy, school administrators had to set up professional development programs. Secondly, there should be a greater use of formative assessment techniques, such as portfolio, peer, and self-evaluation. If the application of these techniques is tailored to the needs of the students and the teaching situation, it can be advantageous for their learning. Another result is that if teachers take contextual elements (such as students interests, learning styles, cultures, ages, and gender) into account, their evaluation methods are likely to be seen as effective. Finally, some implications are meant for language assessment researchers. They should be aware of the fact that LAL components are subject to change due to shifting perspectives on L2 instruction. It should be highlighted that the current study has limitations notwithstanding the aforementioned conclusions. In addition to the small sample of participants, this research looked at LAL fundamentals from the viewpoints of the teachers.

Future studies can look at the foundations of LAL from the viewpoints of the students in order to provide a more thorough framework. Additionally, this study offered some insightful information about how instructors assessment quality is impacted by their language competency. More investigation is required to determine how students perceptions of quality assessment are impacted by teachers proficiency in language. Although this study focused on the teachers perspectives of digital LAL, future research can also look at digital device LAL from the viewpoints of students and teachers of English as a foreign language. Furthermore, future

research can examine the grading standards that EFL teachers and students believe to be effective. Finally, but just as importantly, researchers with an interest in this field can look into how EFL teachers and students perceive the impact of test outcomes announcements on student learning.

7. DECLARATIONS

7.1. About Authors

Uyunnasirah Hambali (UH)  -

Ratu Yulianti (RY)  <https://orcid.org/0000-0002-8322-7301>

Erwin Akib (EA)  <https://orcid.org/0000-0001-5453-2318>

Petrosyan Nelya (PN)  -

7.2. Author Contributions

Conceptualization: UH; Methodology: RY; Software: EA; Validation: PN and UH; Formal Analysis: RY and EA; Investigation: PN; Resources: UH; Data Curation: RY.; Writing Original Draft Preparation: EA and PN; Writing Review and Editing: UH and RY; Visualization: EA; All authors, UH, RY, EA and PN, have read and agreed to the published version of the manuscript.

7.3. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

7.4. Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

7.5. Declaration of Conflicting Interest

The authors declare that they have no conflicts of interest, known competing financial interests, or personal relationships that could have influenced the work reported in this paper.

REFERENCES

- [1] T. McNamara and U. Knoch, *Fairness, justice and language assessment*. Oxford University Press, 2019.
- [2] M. A. Salmani Nodoushan, "Language assessment: Lessons learnt from the existing literature." *Online Submission*, vol. 14, no. 2, pp. 135–146, 2020.
- [3] C. Coombe, H. Vafadar, and H. Mohebbi, "Language assessment literacy: What do we need to learn, unlearn, and relearn?" *Language Testing in Asia*, vol. 10, no. 1, p. 3, 2020.
- [4] B. Rawat, A. S. Bist, B. S. Riza, A. Oktariyani, and U. Rahardja, "Analysis of examination process during covid and post covid in indian context," in *2021 9th International Conference on Cyber and IT Service Management (CITSM)*. IEEE, 2021, pp. 1–5.
- [5] F. Giraldo, "Language assessment literacy: Implications for language teachers," *Profile Issues in Teachers Professional Development*, vol. 20, no. 1, pp. 179–195, 2018.
- [6] D. S. S. Wuisan, R. A. Sunardjo, Q. Aini, N. A. Yusuf, and U. Rahardja, "Integrating artificial intelligence in human resource management: A smartpls approach for entrepreneurial success," *Aptisi Transactions on Technopreneurship (ATT)*, vol. 5, no. 3, pp. 334–345, 2023.
- [7] A. W. Kusuma, Y. Jumaryadi, A. Fitriani *et al.*, "Examining the joint effects of air quality, socioeconomic factors on indonesian health," *Aptisi Transactions on Technopreneurship (ATT)*, vol. 5, no. 2sp, pp. 186–195, 2023.
- [8] N. Sultana, "Language assessment literacy: An uncharted area for the english language teachers in bangladesh," *Language Testing in Asia*, vol. 9, no. 1, p. 1, 2019.
- [9] U. Rahardja, C. T. Sigalingging, P. O. H. Putra, A. Nizar Hidayanto, and K. Phusavat, "The impact of mobile payment application design and performance attributes on consumer emotions and continuance intention," *Sage Open*, vol. 13, no. 1, p. 21582440231151919, 2023.

- [10] A. N. Marhaeni, A. G. Y. Paramartha, D. G. F. Wirabrata, N. Dantes, I. A. Susilawan, and D. A. P. Handayani, "Uncovering assessment literacy of elementary teachers in singaraja, bali," in *3rd International Conference on Innovative Research Across Disciplines (ICIRAD 2019)*. Atlantis Press, 2020, pp. 252–257.
- [11] B. Kremmel and L. Harding, "Towards a comprehensive, empirical model of language assessment literacy across stakeholder groups: Developing the language assessment literacy survey," *Language Assessment Quarterly*, vol. 17, no. 1, pp. 100–120, 2020.
- [12] D. Robert, F. P. Oganda, A. Sutarman, W. Hidayat, and A. Fitriani, "Machine learning techniques for predicting the success of ai-enabled startups in the digital economy," *CORISINTA*, vol. 1, no. 1, pp. 61–69, 2024.
- [13] M. W. Wicaksono, M. B. Hakim, F. H. Wijaya, T. Saleh, E. Sana *et al.*, "Analyzing the influence of artificial intelligence on digital innovation: A smartpls approach," *IAIC Transactions on Sustainable Digital Innovation (ITSDI)*, vol. 5, no. 2, pp. 108–116, 2024.
- [14] X. Yan and J. Fan, "'am i qualified to be a language tester?': Understanding the development of language assessment literacy across three stakeholder groups," *Language Testing*, vol. 38, no. 2, pp. 219–246, 2021.
- [15] H. A. Winata and F. Simon, "Influence of profitability, audit quality, and corporate governance on earnings management," *APTISI Transactions on Management*, vol. 8, no. 2, pp. 93–104, 2024.
- [16] A. Sevime Sahin, "Language assessment literacy of novice efl teachers: Perceptions, experiences, and training 1," in *Perspectives on Language Assessment Literacy*. Routledge, 2020, pp. 135–158.
- [17] P. Hendradi, "Implementation of the knowledge management (km) model in increasing student body in private universities," *ADI Journal on Recent Innovation*, vol. 6, no. 1, pp. 32–43, 2024.
- [18] M. Salmi, A. Laurent *et al.*, "Penyebarluasan bahaya internet di kalangan pelajar di kabupaten serang: Studi tentang kesadaran dan dampak," *ADI Pengabdian Kepada Masyarakat*, vol. 4, no. 2, pp. 32–37, 2024.
- [19] R. Lam, "Teacher assessment literacy: Surveying knowledge, conceptions and practices of classroom-based writing assessment in hong kong," *System*, vol. 81, pp. 78–89, 2019.
- [20] R. Watmani, H. Asadollahfaham, and B. Behin, "Demystifying language assessment literacy among high school teachers of english as a foreign language in iran: Implications for teacher education reforms," *International Journal of Language Testing*, vol. 10, no. 2, pp. 129–144, 2020.
- [21] A. Jaelani *et al.*, "Pengaruh nilai perkiraan dan kredit terhadap profitabilitas pada pt pegadaian (persero) cabang pasar rumput jakarta," *ADI Bisnis Digital Interdisiplin Jurnal*, vol. 5, no. 1, pp. 8–14, 2024.
- [22] H. Bøhn and D. Tsagari, "Teacher educators' conceptions of language assessment literacy in norway," *Journal of Language Teaching and Research*, vol. 12, no. 2, pp. 222–233, 2021.
- [23] M. Rauf and L. McCallum, "Language assessment literacy: Task analysis in saudi universities," *The assessment of L2 written English across the MENA region: A synthesis of practice*, pp. 13–41, 2020.
- [24] S. Zulaiha, H. Mulyono, and L. Ambarsari, "An investigation into efl teachers' assessment literacy: Indonesian teachers' perceptions and classroom practice," *European Journal of Contemporary Education*, vol. 9, no. 1, pp. 189–201, 2020.
- [25] S. Mirizon, "Teachers of english assessment literacy: Unveiling what they know and do," *Indonesian Research Journal in Education—IRJE—*, vol. 5, no. 1, pp. 124–141, 2021.
- [26] A. Maariz, M. A. Wiputra, and M. R. D. Armanto, "Blockchain technology: Revolutionizing data integrity and security in digital environments," *International Transactions on Education Technology (ITEE)*, vol. 2, no. 2, pp. 92–98, 2024.
- [27] M. Pereira, I. Guvlor *et al.*, "Implementation of artificial intelligence framework to enhance human resources competency in indonesia," *International Journal of Cyber and IT Service Management*, vol. 4, no. 1, pp. 64–70, 2024.
- [28] D. Sulaiman, S. S. Marandi, and L. Tajik, "The status quo of language assessment literacy among syrian efl teachers," *Applied Research on English Language*, vol. 10, no. 2, pp. 33–60, 2021.
- [29] O. Candra, N. B. Kumar, N. K. A. Dwijendra, I. Patra, A. Majdi, U. Rahardja, M. Kosov, J. W. G. Guerrero, and R. Sivaraman, "Energy simulation and parametric analysis of water cooled thermal photovoltaic systems: energy and exergy analysis of photovoltaic systems," *Sustainability*, vol. 14, no. 22, p. 15074, 2022.
- [30] N. Hedayati and M. Khoorsand, "Tapping into assessment literacy: Unfolding assessment as learning strategies and efl learners' writing development," *REiLA: Journal of Research and Innovation in Lan-*

- guage, vol. 6, no. 1, pp. 21–37, 2024.
- [31] M. H. R. Chakim, A. Kho, N. P. L. Santoso, and H. Agustian, “Quality factors of intention to use in artificial intelligence-based aiku applications,” *ADI Journal on Recent Innovation*, vol. 5, no. 1, pp. 72–85, 2023.
 - [32] A. S. Bist, “The importance of building a digital business startup in college,” *Startupreneur Business Digital (SABDA Journal)*, vol. 2, no. 1, pp. 31–42, 2023.
 - [33] E. A. Beldiq, B. Callula, N. A. Yusuf, and A. R. A. Zahra, “Unlocking organizational potential: Assessing the impact of technology through smartpls in advancing management excellence,” *APTISI Transactions on Management*, vol. 8, no. 1, pp. 40–48, 2024.
 - [34] M. B. Karo, B. P. Miller, and O. A. Al-Kamari, “Leveraging data utilization and predictive analytics: Driving innovation and enhancing decision making through ethical governance,” *International Transactions on Education Technology (ITEE)*, vol. 2, no. 2, pp. 152–162, 2024.
 - [35] H. Sun and J. Zhang, “Assessment literacy of college efl teachers in china: Status quo and mediating factors,” *Studies in Educational Evaluation*, vol. 74, p. 101157, 2022.
 - [36] S. Muthoharoh and A. P. Nugraheni, “Evaluasi penerapan simda keuangan pada dinas kepemudaan olahraga dan pariwisata kota magelang,” *ADI Bisnis Digital Interdisiplin Jurnal*, vol. 1, no. 2 Desember, pp. 81–89, 2020.
 - [37] Y. Sun, “A review and discussion of in-service efl teachers’ language assessment literacy level in junior high school in china,” *Studies in Applied Linguistics & TESOL*, vol. 21, no. 2, pp. 65–80, 2022.
 - [38] R. Esfandiari and M. H. Arefian, “Developing collective eyes for iranian efl teachers’ computer-assisted language assessment literacy through internet-based collaborative reflection,” *Education and Information Technologies*, vol. 29, no. 8, pp. 9473–9494, 2024.
 - [39] G. S. Putra, I. I. Maulana, A. D. Chayo, M. I. Haekal, R. Syaharani *et al.*, “Pengukuran efektivitas platform e-learning dalam pembelajaran teknik informatika di era digital,” *Jurnal MENTARI: Manajemen, Pendidikan dan Teknologi Informasi*, vol. 3, no. 1, pp. 19–29, 2024.
 - [40] D. Rustiana, D. Ramadhan, L. Wibowo, A. W. Nugroho, and G. Mahardika, “State of the art blockchain enabled smart contract applications in the university,” *Blockchain Frontier Technology*, vol. 2, no. 2, pp. 70–80, 2023.
 - [41] H. Lee, H. Q. Chung, Y. Zhang, J. Abedi, and M. Warschauer, “The effectiveness and features of formative assessment in us k-12 education: A systematic review,” *Applied Measurement in Education*, vol. 33, no. 2, pp. 124–140, 2020.
 - [42] T. Levi and O. Inbar-Lourie, “Assessment literacy or language assessment literacy: Learning from the teachers,” *Language Assessment Quarterly*, vol. 17, no. 2, pp. 168–182, 2020.
-