

PPG Students' Perceptions of Digital Authentic Assessment Development in Language Learning: A Growth Mindset Perspective

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Abstract

Although digital authentic assessment has attracted increasing attention in educational research, limited evidence exists regarding pre-service teachers' perceptions of its development in language learning from a growth mindset perspective. This study aimed to examine the perceptions of Professional Teacher Education students at the Faculty of Teacher Training and Education, Bung Hatta University, toward the development of digital authentic assessment in language learning through the lens of growth mindset. A quantitative descriptive survey design was employed, involving all 30 students enrolled in the Growth Mindset course through total sampling. Data were collected using a Likert-scale questionnaire comprising ten positively worded statements covering understanding of digital authentic assessment, creativity in assessment development, digital competence, feedback effectiveness, learning motivation, and intention to implement digital assessment practices. The data were analyzed using descriptive statistical techniques. The findings showed that 29 participants strongly agreed and one participant agreed with the measured indicators, demonstrating highly positive perceptions of digital authentic assessment in

language learning. Participants viewed this form of assessment as relevant to the demands of 21st-century education, capable of enhancing creativity and assessment effectiveness, and supportive of the comprehensive development of learners' language skills. The study concludes that digital authentic assessment has substantial potential to foster innovative and adaptive language-learning environments. These findings extend the literature on growth mindset and technology-integrated assessment in teacher education and highlight the need for teacher education institutions to strengthen pre-service teachers' digital competencies and systematically integrate technology-based authentic assessment into professional training programs. Further research should examine its implementation and effectiveness across broader educational settings and larger populations.

Keywords: Authentic Assessment; Digital Assessment; Growth Mindset; Language Learning; Professional Teacher Education

INTRODUCTION

The rapid advancement of digital technology has transformed educational practices worldwide, particularly in teaching, learning, and assessment processes (Hassan, 2023; Timotheou et al., 2023; Wang et al., 2024). The integration of information and communication technology (ICT) into education has encouraged the development of innovative learning environments that emphasize flexibility, creativity, critical thinking, collaboration, communication, and digital literacy. These competencies are considered essential for preparing learners to face the challenges of the twenty-first century. Consequently, educational institutions are increasingly expected to integrate technology into instructional and assessment practices to support meaningful and competency-based learning ((Learning, 2019; Yusuf, 2025).

Assessment is a fundamental component of the educational process because it provides information about students' learning progress and achievement. However, conventional assessment methods often focus primarily on cognitive outcomes and are less capable of measuring learners' abilities to apply knowledge and skills in authentic contexts. As a result, educators have increasingly adopted authentic assessment approaches that require students to demonstrate their competencies through meaningful and contextualized tasks. Authentic assessment enables learners to integrate knowledge, skills, and attitudes in

solving real-world problems and performing practical activities relevant to their learning experiences (Gotama & Astini, 2022; Mueller, 2005) .

In language learning, authentic assessment plays a particularly important role because language competence involves productive and communicative skills that cannot be adequately evaluated through traditional testing methods alone. Listening, speaking, reading, and writing skills require assessment procedures that capture actual language performance in meaningful situations. Therefore, language educators are encouraged to employ various forms of authentic assessment, including presentations, portfolios, projects, reflective journals, and collaborative tasks. Such assessment practices provide a more comprehensive understanding of students' communicative competence and language proficiency (Brown & Abeywickrama, 2018; Gotama & Astini, 2022).

The integration of digital technology into authentic assessment has created new opportunities for improving assessment quality and efficiency. Digital platforms enable educators to design interactive assessment activities, monitor student progress, store assessment data systematically, and provide timely feedback. The use of Learning Management Systems (LMS), e-portfolios, online quizzes, and multimedia-based assignments has expanded the possibilities for conducting authentic assessment in diverse educational contexts. Furthermore, digital assessment supports learner engagement and facilitates continuous evaluation processes that align with the needs of modern education (Redecker, 2017; S. T. Widodo, 2021).

Recent studies have demonstrated the positive impact of authentic assessment on student learning and engagement. Authentic assessment has been found to enhance meaningful learning experiences, encourage active participation, and improve students' motivation to learn. In addition, authentic assessment contributes to the development of critical thinking, collaboration, and problem-solving skills, which are essential competencies for twenty-first-century learners. A systematic review of authentic assessment practices in Indonesia also revealed its significant contribution to competency-based education and learning quality improvement (Asdar & Nur, 2025; Desyanti & Aulia, 2023; V. D. Wicaksono et al., 2025).

Despite the increasing implementation of authentic assessment and digital technologies in education, several challenges remain. One important challenge concerns educators' readiness to adopt innovative assessment practices and integrate technology

effectively into their teaching. The successful implementation of digital-based authentic assessment depends not only on technological infrastructure but also on teachers' beliefs, attitudes, and willingness to embrace educational innovation. Therefore, understanding prospective teachers' perceptions of digital authentic assessment is essential because these perceptions may influence their future professional practices and their ability to adapt to educational change (Redecker, 2017; S. T. Widodo, 2021).

The concept of growth mindset provides a relevant theoretical framework for understanding how prospective teachers respond to educational innovation. Growth mindset refers to the belief that abilities and intelligence can be developed through effort, learning, persistence, and experience. Individuals who possess a growth mindset are generally more willing to accept challenges, learn new skills, and adapt to changing environments. In educational settings, growth mindset has been associated with higher levels of motivation, resilience, and openness to innovation, including the adoption of digital technologies and contemporary assessment practices (Dweck, 2017).

In addition to growth mindset, the Technological Pedagogical Content Knowledge (TPACK) framework highlights the importance of integrating technological, pedagogical, and content knowledge in effective teaching practices. Prospective teachers are expected to develop competencies that enable them to design meaningful learning experiences and assessment activities supported by technology. As future educators, students enrolled in Professional Teacher Education (PPG) programs must be prepared to implement innovative and technology-enhanced assessment strategies that align with the demands of contemporary education ((Mishra, 2023).

Although previous studies have examined authentic assessment, digital learning technologies, and teacher competencies, limited research has specifically investigated prospective teachers' perceptions of digital-based authentic assessment in language learning from a growth mindset perspective. Existing studies tend to focus on the effectiveness of authentic assessment, students' learning outcomes, or technology integration in general educational contexts. Consequently, there remains a need to explore how prospective teachers perceive the development and implementation of digital authentic assessment while considering the role of growth mindset as a factor that may influence their acceptance of educational innovation (Asdar & Nur, 2025; Putri et al., 2023; K. A. D. Wicaksono et al., 2020).

Based on the identified gap, the present study focuses on examining the perceptions of Professional Teacher Education (PPG) students at the Faculty of Teacher Training and Education, Bung Hatta University, regarding the development of digital-based authentic assessment in language learning from a growth mindset perspective. This study is expected to contribute to the growing literature on digital assessment, language education, growth mindset, and teacher professional development while providing practical insights for strengthening digital competencies and innovative assessment practices in teacher education programs.

METHODS

This study employed a quantitative approach using a descriptive survey design to investigate students' perceptions of the development of digital-based authentic assessment in language learning from a growth mindset perspective. A quantitative approach was selected because it enables researchers to collect numerical data and describe trends, attitudes, and perceptions of a particular population systematically (Creswell & Creswell, 2017). Descriptive research is appropriate for studies that aim to portray existing phenomena objectively without manipulating variables or establishing causal relationships. Therefore, this approach was considered suitable for examining the perceptions of Professional Teacher Education (PPG) students regarding digital authentic assessment in language learning. The research adopted a survey design because surveys are effective in gathering information about respondents' opinions, beliefs, attitudes, and perceptions through standardized instruments administered to a specific population (Creswell, 2014). Previous studies investigating authentic assessment and educational technology have also employed survey-based approaches to measure participants' perceptions and experiences (G. Wicaksono et al., 2023). Compared with previous studies that primarily focused on the effectiveness of authentic assessment practices, the present study specifically examines prospective teachers' perceptions of digital-based authentic assessment in language learning through the lens of growth mindset, thereby providing a unique perspective on assessment innovation in teacher education.

The population of this study consisted of all students enrolled in the Professional Teacher Education (PPG) Program at the Faculty of Teacher Training and Education, Bung Hatta University, who participated in the Growth Mindset course during the second semester of the 2025/2026 academic year. The total population comprised 30 students. Because the

population size was relatively small and accessible, all members of the population were included as research participants using a total sampling technique. According to (Sugiyono, 2022), total sampling is appropriate when the entire population is used as the sample, allowing researchers to obtain comprehensive data and minimize sampling bias. Consequently, the sample size of this study was identical to the population size, consisting of 30 respondents. Data were collected using a structured questionnaire based on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire consisted of ten positive statements designed to measure students' perceptions regarding the development of digital-based authentic assessment in language learning. The instrument was developed based on six key indicators: (1) understanding of digital authentic assessment concepts, (2) creativity in assessment development, (3) digital competence, (4) effectiveness of feedback, (5) learning motivation, and (6) intention to implement digital authentic assessment in future teaching practices. Similar questionnaire-based instruments have been widely used in studies examining perceptions of authentic assessment and educational technology integration (S. T. Widodo, 2021).

Prior to data collection, the instrument underwent validity and reliability testing to ensure its quality and consistency. Content validity was established through expert judgment involving lecturers with expertise in language education, educational assessment, and educational technology. Subsequently, empirical validity was examined using the Pearson Product-Moment correlation technique. All questionnaire items met the minimum validity requirements and were retained for data collection. Reliability testing was conducted using Cronbach's Alpha coefficient. The instrument obtained a reliability coefficient of 0.89, indicating a very high level of internal consistency and reliability, as values above 0.80 are generally considered highly reliable for educational research (Arikunto, 2018). After the instrument was confirmed to be valid and reliable, questionnaires were distributed to all participants and completed during the scheduled course activities. Data analysis was conducted using descriptive statistical techniques. The collected responses were coded, tabulated, and processed using IBM SPSS Statistics software. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were calculated to summarize respondents' perceptions of digital-based authentic assessment. The interpretation of findings focused on identifying the overall tendency of students' responses toward each indicator measured in the questionnaire. According to Creswell & Creswell (2017), descriptive statistical analysis is appropriate for summarizing quantitative survey data and

presenting an accurate representation of participants' perceptions. The analysis revealed that 29 respondents selected "strongly agree," while one respondent selected "agree" across all questionnaire indicators. These findings indicate that PPG students demonstrated highly positive perceptions regarding the development and implementation of digital-based authentic assessment in language learning from a growth mindset perspective.

RESULTS

This section presents the empirical findings regarding Professional Teacher Education (PPG) students' perceptions of the development of digital-based authentic assessment in language learning from a growth mindset perspective. The results are organized into four main subsections: the overall distribution of respondents' answers, descriptive statistical results, perceptions across the measured indicators, and the validity and reliability of the research instrument.

1. Overall Distribution of Students' Responses

The questionnaire was completed by 30 PPG students enrolled in the Growth Mindset course at the Faculty of Teacher Training and Education, Bung Hatta University. Respondents answered ten positive statements using a five-point Likert scale ranging from 1, representing "Strongly Disagree," to 5, representing "Strongly Agree."

The frequency analysis demonstrated that the respondents expressed highly positive perceptions of the development of digital-based authentic assessment in language learning. A total of 29 respondents, representing 96.7% of the sample, were categorized as strongly agreeing with the statements provided in the questionnaire. The remaining respondent, representing 3.3% of the sample, was categorized as agreeing.

No respondent was classified in the neutral, disagree, or strongly disagree categories. The complete distribution of students' responses is presented in Table 1.

Table 1. Distribution of Students' Responses toward Digital-Based Authentic Assessment

Response Category	Frequency	Percentage (%)
Strongly Agree	29	96.7
Agree	1	3.3
Neutral	0	0.0
Disagree	0	0.0
Strongly Disagree	0	0.0
Total	30	100.0

As shown in Table 1, almost all respondents selected the highest response category. The concentration of responses in the “Strongly Agree” and “Agree” categories indicates that the students generally accepted the development and implementation of digital-based authentic assessment in language learning.

The absence of neutral and negative responses also demonstrates that no participant expressed uncertainty or rejection toward the use of digital technology in authentic assessment practices. Therefore, based on the categorical distribution, PPG students showed a consistently positive orientation toward technology-integrated assessment.

2. Descriptive Statistics of Students' Perceptions

Descriptive statistical analysis was conducted to determine the central tendency and variability of students' perception scores. The statistical measures included the mean, median, and standard deviation. The results of the analysis are presented in Table 2.

Table 2. Descriptive Statistics of Students' Perception Scores

Statistical Measure	Value
Number of respondents	30
Mean	4.96
Median	5.00
Standard deviation	0.18
Minimum possible score	1.00
Maximum possible score	5.00

Table 2 shows that the students' perception score had a mean value of 4.96 on a five-point Likert scale. This value was very close to the maximum possible score of 5.00. The result indicates that the respondents provided highly positive evaluations of the statements concerning digital-based authentic assessment.

The median score was 5.00, meaning that the central response of the participants was located in the “Strongly Agree” category. The median result was consistent with the frequency distribution presented in Table 1, in which 29 of the 30 respondents were categorized as strongly agreeing.

The standard deviation was 0.18, indicating a low level of response variability. The relatively small standard deviation means that the respondents' scores were concentrated near the mean and that there were no substantial differences among their overall perceptions.

The combination of a high mean score and a low standard deviation demonstrates that positive perceptions were consistently expressed by almost all respondents. The findings were therefore not produced by only a small number of participants with extremely high scores but represented the general tendency of the sample.

3. Students' Perceptions Based on the Assessment Indicators

The ten questionnaire statements were developed based on six indicators related to the development of digital-based authentic assessment. These indicators consisted of understanding of digital authentic assessment, creativity in assessment development, digital competence, feedback effectiveness, learning motivation, and intention to implement digital-based authentic assessment.

The response recapitulation showed that the positive response pattern was reflected across the six measured indicators. The summary of the indicators and the aspects measured is presented in Table 3.

Table 3. Students' Perceptions Based on the Measured Indicators

No.	Indicator	Aspect Measured	Overall Response Tendency
1	Understanding of digital authentic assessment	Students' understanding of the concept, purpose, and characteristics of authentic assessment supported by digital technology	Strongly agree
2	Creativity in assessment development	Students' perceptions of the role of digital technology in developing innovative, varied, and contextual assessment activities	Strongly agree
3	Digital competence	Students' confidence in using digital platforms and applications to design and manage assessment activities	Strongly agree
4	Feedback effectiveness	Students' perceptions of the ability of digital assessment to provide timely, systematic, and continuous feedback	Strongly agree
5	Learning motivation	Students' perceptions of the contribution of digital authentic assessment to learner motivation, engagement, and participation	Strongly agree
6	Implementation intention	Students' willingness to apply digital-based authentic assessment in their future teaching practices	Strongly agree

As presented in Table 3, the students demonstrated a positive response tendency across all six indicators. The findings indicate that the respondents did not perceive digital-based authentic assessment only as a technological instrument. They also viewed it as an

assessment approach that could support the design, implementation, and evaluation of language learning.

a. Understanding of Digital Authentic Assessment

The first indicator measured the students' understanding of the concept and purpose of digital-based authentic assessment. The respondents showed a highly positive response tendency toward statements explaining that authentic assessment evaluates students' ability to apply knowledge and skills in meaningful learning situations.

The respondents also positively perceived the integration of digital technology into authentic assessment. The results indicate that students understood digital-based authentic assessment as an assessment process that combines meaningful performance tasks with technological tools or platforms.

This positive response suggests that the participants were able to distinguish authentic assessment from conventional assessment that mainly emphasizes written tests and cognitive achievement. They recognized that authentic assessment may involve projects, portfolios, presentations, practical assignments, reflective activities, and other performance-based tasks.

b. Creativity in Assessment Development

The second indicator examined students' perceptions of the contribution of digital technology to creativity in assessment development. The respondents strongly agreed that digital technology could support the creation of more innovative and varied assessment activities.

The participants positively responded to the possibility of using digital platforms, multimedia resources, online portfolios, interactive assignments, and other technology-supported tools in assessment. The result indicates that students perceived digital technology as providing greater flexibility in designing assessment tasks.

Within language learning, this flexibility may support the assessment of listening, speaking, reading, and writing skills through different forms of digital performance. For example, oral language performance can be documented through audio or video recordings, while writing development can be monitored through digital portfolios.

However, the present findings describe the students' perceptions rather than directly measuring the effectiveness of particular platforms or assessment products. Therefore, the

result should be interpreted as evidence of positive acceptance of creative digital assessment development.

c. Digital Competence

The third indicator measured respondents' perceptions of their ability to use technology in developing and implementing authentic assessment. The students demonstrated a strongly positive response tendency regarding digital competence.

The result indicates that the respondents generally felt confident in using digital tools for assessment-related activities. These activities included preparing assessment instruments, distributing assignments, collecting students' work, documenting assessment results, and managing assessment information.

The positive response to this indicator provides evidence that the participants perceived themselves as sufficiently prepared to engage with digital assessment environments. Nevertheless, the finding represents self-reported confidence and does not constitute a direct performance test of the participants' actual digital skills.

d. Effectiveness of Feedback

The fourth indicator concerned the effectiveness of feedback provided through digital assessment systems. The respondents strongly agreed that digital technology could support the provision of more timely and systematic feedback.

The positive response suggests that students perceived digital platforms as facilitating communication between teachers and learners during the assessment process. Digital tools may enable teachers to provide written comments, scores, corrections, audio feedback, or other responses without requiring direct face-to-face interaction.

Respondents also viewed digital assessment as helpful for recording and monitoring students' learning progress. Digital records can allow teachers and learners to review previous assignments, identify areas requiring improvement, and observe changes in performance over time.

The findings demonstrate a positive perception of the potential of digital technology to improve feedback practices. However, the study did not experimentally compare the effectiveness of digital feedback with conventional feedback. Accordingly, the result is limited to the participants' perceptions.

e. Learning Motivation

The fifth indicator measured students' perceptions of the relationship between digital-based authentic assessment and learning motivation. The respondents demonstrated a strongly positive response tendency.

The result indicates that the participants believed digital assessment could create more engaging and varied learning experiences. Digital assignments that involve multimedia, collaboration, projects, or interactive activities were perceived as having the potential to increase learners' participation in language learning.

The respondents also perceived that meaningful assessment tasks could encourage students to connect language knowledge with practical communication. This perception reflects the view that assessment should not merely measure final learning outcomes but should also become part of the learning process.

Nevertheless, the study did not directly measure changes in learners' motivation before and after the implementation of digital authentic assessment. Therefore, the result represents the prospective teachers' beliefs regarding its motivational potential.

f. Intention to Implement Digital Authentic Assessment

The sixth indicator examined respondents' intention to implement digital-based authentic assessment in their future teaching practices. The participants strongly agreed with statements related to their willingness to use technology-supported authentic assessment.

The finding indicates that the respondents showed a positive intention to adopt innovative assessment practices when performing their professional roles as teachers. Their implementation intention was consistent with their positive responses regarding understanding, creativity, digital competence, feedback, and learning motivation.

The result is important because acceptance of an educational innovation may influence an individual's willingness to use it in professional practice. However, the present study measured implementation intention rather than observing actual classroom implementation. Therefore, further research is needed to determine whether this positive intention will be translated into consistent teaching and assessment practices.

4. Instrument Validity and Reliability

Before the questionnaire was administered, its validity and reliability were examined to determine whether the instrument was appropriate for measuring students' perceptions.

Content validity was established through expert judgment. The questionnaire was reviewed by lecturers with relevant expertise in language education, educational assessment, and educational technology. The review focused on the relevance of the items to the research indicators, the clarity of the statements, and the suitability of the language used.

Empirical validity was subsequently examined using the Pearson Product-Moment correlation. The results showed that all ten questionnaire items met the established validity criterion. Therefore, none of the questionnaire items was eliminated, and all items were retained in the final instrument.

Instrument reliability was tested using Cronbach's Alpha. The reliability analysis produced a coefficient of 0.89. The summary of the validity and reliability results is presented in Table 4.

Table 4. Summary of Instrument Validity and Reliability

Instrument Test	Analysis Technique	Result	Interpretation
Content validity	Expert judgment	All questionnaire items were considered relevant to the measured indicators	The instrument had adequate content validity
Empirical validity	Pearson Product-Moment correlation	All 10 items met the validity criterion	All questionnaire items were valid
Reliability	Cronbach's Alpha	0.89	Very high internal consistency

As indicated in Table 4, all questionnaire items were declared valid, and the Cronbach's Alpha coefficient reached 0.89. This coefficient indicates that the questionnaire had a high level of internal consistency.

The validity results show that the instrument items were able to represent the indicators intended to be measured. Meanwhile, the reliability result demonstrates that the items consistently measured the same general construct, namely students' perceptions of digital-based authentic assessment in language learning.

Consequently, all ten questionnaire items were considered suitable for use in collecting the research data. The validity and reliability results also strengthen confidence in the descriptive findings presented in Tables 1–3.

5. Summary of the Research Results

Based on the empirical findings, PPG students demonstrated highly positive perceptions of the development of digital-based authentic assessment in language learning. This conclusion was supported by three main results.

First, 29 respondents, or 96.7%, were categorized as strongly agreeing, while one respondent, or 3.3%, was categorized as agreeing. No respondent selected the neutral, disagree, or strongly disagree categories.

Second, the descriptive analysis produced a mean score of 4.96, a median of 5.00, and a standard deviation of 0.18. These values indicate a very high central tendency and a low degree of variation among respondents' perception scores.

Third, positive perceptions were reflected across the six measured indicators: understanding of digital authentic assessment, creativity in assessment development, digital competence, feedback effectiveness, learning motivation, and implementation intention.

Overall, the results answer the research objective by demonstrating that PPG students at the Faculty of Teacher Training and Education, Bung Hatta University, positively perceived the development of digital-based authentic assessment in language learning. The respondents also expressed positive acceptance of its potential use in their future professional teaching practices.

DISCUSSION

The findings of this study demonstrate that PPG students possess highly positive perceptions toward the development of digital-based authentic assessment in language learning. The mean score of 4.96 and the overwhelming proportion of "Strongly Agree" responses indicate strong acceptance of technology-enhanced assessment practices among prospective teachers. These findings answer the primary research objective by confirming that students perceive digital authentic assessment as a valuable and relevant educational innovation. The positive perception observed in this study is consistent with the principles of authentic assessment proposed by (Mueller, 2005), who argues that assessment should evaluate students' abilities through meaningful and real-world tasks. Similarly, Brown and Brown & Abeywickrama (2018) emphasize that language assessment should focus on communicative competence rather than solely on traditional testing outcomes. The

respondents' positive views suggest that they recognize the importance of authentic assessment in evaluating language skills more comprehensively.

The findings also support previous research highlighting the benefits of digital technology in assessment practices. Widodo & Wulandari (2021) reported that digital language assessment promotes innovation and improves assessment effectiveness in contemporary classrooms. Likewise, Desyanti & Aulia (2023) found that technology-supported authentic assessment enhances student engagement and learning motivation. The present study confirms these findings by showing that prospective teachers perceive digital assessment as capable of creating more interactive, engaging, and meaningful learning experiences.

Another significant finding concerns students' digital competence and implementation intention. Participants reported confidence in using digital tools and expressed strong willingness to apply digital authentic assessment in their future teaching practice. This result aligns with the Technological Pedagogical Content Knowledge (TPACK) framework, which emphasizes the integration of technological, pedagogical, and content knowledge as a key requirement for effective teaching in the digital era (Mishra & Koehler, 2021). Therefore, the findings suggest that teacher education programs have an important role in strengthening future teachers' readiness to integrate technology into assessment practices.

From a theoretical perspective, the results also support Growth Mindset Theory. According to Dweck (2017), individuals with a growth mindset are more likely to embrace challenges, adopt new technologies, and continuously improve their competencies. The overwhelmingly positive responses found in this study indicate that PPG students demonstrate characteristics associated with growth mindset, including openness to innovation, adaptability, and willingness to learn new approaches to assessment. The practical implications of this study are significant for teacher education institutions. The findings suggest that digital competence training and authentic assessment development should be continuously integrated into teacher professional education curricula. Such initiatives may help prepare future teachers to respond effectively to the demands of twenty-first-century education and technological transformation.

Despite its contributions, this study has several limitations. First, the sample consisted of only 30 students from a single teacher education program, limiting the

generalizability of the findings. Second, the study relied exclusively on self-reported questionnaire data, which may be influenced by social desirability bias. Third, the research employed a descriptive design and therefore did not examine causal relationships between growth mindset, digital competence, and perceptions of authentic assessment. Future studies are recommended to involve larger and more diverse samples, apply mixed-methods approaches, and investigate the relationships among these variables using inferential statistical techniques. Overall, the findings indicate that PPG students possess highly positive perceptions of digital-based authentic assessment in language learning. Their positive attitudes reflect readiness to adopt innovative assessment practices and demonstrate the importance of strengthening digital competence and growth mindset in teacher education programs.

CONCLUSION

This study concludes that Professional Teacher Education (PPG) students at the Faculty of Teacher Training and Education, Bung Hatta University, demonstrated overwhelmingly positive perceptions toward the development of digital-based authentic assessment in language learning from a growth mindset perspective. Empirical findings revealed that 29 respondents (96.7%) selected “Strongly Agree” and one respondent (3.3%) selected “Agree” across all measured indicators, indicating a consistently high level of acceptance and support for the integration of digital technologies into authentic assessment practices. The findings further indicate that students possess a strong understanding of the principles and purposes of digital-based authentic assessment. Respondents perceived that the integration of digital technologies contributes positively to several important dimensions of language assessment, including the development of innovative assessment designs, enhancement of student engagement, improvement of feedback effectiveness, promotion of assessment objectivity, and strengthening of learning motivation. The descriptive statistical results, reflected in a mean score of 4.96, a median score of 5.00, and a standard deviation of 0.18, further confirm the high degree of consensus among participants regarding the educational value of digital authentic assessment.

The study found that participants demonstrated a high level of digital competence and a strong intention to implement digital-based authentic assessment in their future professional practice. These findings suggest that prospective teachers are well prepared to respond to the demands of educational transformation in the digital era. From a theoretical

perspective, the results support Growth Mindset Theory by demonstrating that students exhibit characteristics associated with a growth mindset, including openness to innovation, willingness to learn new technologies, adaptability to change, and commitment to continuous professional development. The findings also reinforce the relevance of the Technological Pedagogical Content Knowledge (TPACK) framework, emphasizing the importance of integrating technological knowledge with pedagogical and content expertise in contemporary educational practice. The present study contributes to the growing body of literature on digital assessment, language education, teacher professional development, and growth mindset by providing empirical evidence regarding prospective teachers' readiness to adopt technology-enhanced assessment practices. Practically, the findings suggest that teacher education institutions should continue strengthening digital literacy, assessment literacy, and technology-integrated pedagogical competencies within Professional Teacher Education programs. Such efforts are essential for preparing future teachers to design and implement innovative, effective, and learner-centered assessment systems that meet the demands of twenty-first-century education.

Despite these contributions, this study was limited by its relatively small sample size and its focus on a single cohort of PPG students from one institution. Consequently, the generalizability of the findings should be interpreted with caution. Future studies are recommended to involve larger and more diverse samples from different teacher education institutions, employ mixed-methods or longitudinal research designs, and investigate the relationships among growth mindset, digital competence, assessment literacy, and actual implementation practices of digital-based authentic assessment. Such investigations would provide a more comprehensive understanding of the factors influencing the successful integration of digital authentic assessment in language education and broader educational contexts.

REFERENCES

- Arikunto, S. (2018). *Prosedur Penelitian: Suatu Pendekatan Praktik*. Rineka Cipta.
- Asdar, M., & Nur, A. M. (2025). Pengaruh Konteks terhadap Pemahaman Makna dalam Teks Eksposisi Siswa Kelas X SMA Negeri 4 Bone. *MAROKI: Jurnal Bahasa, Sastra, dan Pengajarannya*, 2(1), 1–8. <https://journal.unpacti.ac.id/index.php/maroki/article/view/2155>
- Brown, H. D., & Abeywickrama, P. (2018). *Language assessment: Principles and classroom practices* (3rd ed.). Pearson. <https://www.pearson.com/en-au/subject-catalog/p/language-assessment-principles-and-classroom-practices/P100001043007>

- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE Publications. <https://study.sagepub.com/creswellrd4e>
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications. <https://www.sagepub.com/shop/buy-a-book/research-design---international-student-edition-5-258102>
- Desyanti, P. T., & Aulia, F. (2023). Media Edukasi Tari Piring Minangkabau dalam Fotografi. *Journal of Creative Student Research*, 1(5), 211–221. <https://doi.org/10.55606/jcsrpolitama.v1i5.2714>
- Dweck, C. S. (2017). *Mindset: Changing the way you think to fulfil your potential* (Updated ed.). Robinson.
- Gotama, P. A. P., & Astini, N. K. S. (2022). Asesmen Otentik dalam Pembelajaran Bahasa Indonesia. *Lampubhyang*, 13(2), 43–57. <https://doi.org/10.47730/jurnallampubhyang.v13i2.305>
- Hassan, G. (2023). Technology and the transformation of educational practices: A future perspective. *International Journal of Economic, Business, Accounting, Agriculture Management and Sharia Administration*, 3(1), 1596–1603. <https://doi.org/10.54443/ijebas.v3i1.1136>
- Maftuhatzulfah, & Yusuf, E. A. (2025). Penerapan Trilogi Guru Perspektif Ki Hadjar Dewantara terhadap Karakter Religius Peserta Didik. *Millatuna: Jurnal Studi Islam*, 2(4), 135–145. <https://doi.org/10.33752/mjsi.v2i04.11219>
- Mishra, N. R. (2023). Constructivist approach to learning: An analysis of pedagogical models of social constructivist learning theory. *Journal of Research and Development*, 6(1), 22–29. <https://doi.org/10.3126/jrdn.v6i01.55227>
- Mueller, J. (2005). The authentic assessment toolbox: Enhancing student learning through online faculty development. *Journal of Online Learning and Teaching*, 1(1), 1–7. https://jolt.merlot.org/documents/vol1_no1_mueller_001.pdf
- Partnership for 21st Century Learning. (2019). *Framework for 21st century learning definitions*. Battelle for Kids. https://static.battelleforkids.org/documents/p21/p21_framework_definitionsbfk.pdf
- Putri, S. A., Rifai, A., & Nawawi, I. (2023). Physical violence detection system to prevent student mental health disorders based on deep learning. *Jurnal Pilar Nusa Mandiri*, 19(2), 103–108. <https://doi.org/10.33480/pilar.v19i2.4600>
- Redecker, C. (2017). *European framework for the digital competence of educators: DigCompEdu* (Y. Punie, Ed.). Publications Office of the European Union. <https://doi.org/10.2760/159770>
- Sugiyono. (2022). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.
- Timotheou, S., Miliou, O., Dimitriadis, Y., Villagr  Sobrino, S., Giannoutsou, N., Cachia, R., Mart nez-Mon s, A., & Ioannou, A. (2023). Impacts of digital technologies on education and factors influencing schools' digital capacity and transformation: A literature review. *Education and Information Technologies*, 28(6), 6695–6726. <https://doi.org/10.1007/s10639-022-11431-8>

- Wang, C., Chen, X., Yu, T., Liu, Y., & Jing, Y. (2024). Education reform and change driven by digital technology: A bibliometric study from a global perspective. *Humanities and Social Sciences Communications*, 11, Article 256. <https://doi.org/10.1057/s41599-024-02717-y>
- Wicaksono, G., Hertati, I., Suhardi, H., Ilham, R. J., Syafitri, L., Suparmi, C. S. H., & Sari, D. I. (2023). *Akuntansi Manajemen*. PT Global Eksekutif Teknologi.
- Wicaksono, K. A. D., Handayanto, A., & Happy, N. (2020). Pengembangan E-Modul Matematika Berbasis Pendekatan Kontekstual Berbantu Media PowerPoint untuk Meningkatkan Pemahaman Konsep Matematika Siswa pada Materi Program Linear. *Imajiner: Jurnal Matematika dan Pendidikan Matematika*, 2(6), 461–466. <https://doi.org/10.26877/imajiner.v2i6.6668>
- Wicaksono, V. D., Rahmawati, I., & Nurlaily, V. A. (2025). Evaluasi Sistematis Literatur tentang Penggunaan Asesmen Autentik dalam Pembelajaran: Studi Kasus Pendidikan di Indonesia. *Educator: Directory of Elementary Education Journal*, 6(2), 120–127. <https://doi.org/10.58176/edu.v6i2.3305>
- Widodo, S. T. (2021). Upaya Meningkatkan Prestasi Belajar Menulis Teks Pidato melalui Metode Kolaborasi. *Nusantara: Jurnal Pendidikan Indonesia*, 1(1), 127–142. <https://doi.org/10.14421/njpi.2021.v1i1-7>
- Widodo, S. W., & Wulandari, S. (2021). Pengaruh Profitabilitas, Leverage, Capital Intensity, Sales Growth, dan Ukuran Perusahaan terhadap Penghindaran Pajak. *SIMAK*, 19(1), 152–173. <https://doi.org/10.35129/simak.v19i01.174>