Enhancing Authentic Assessment Through Pedagogical Competence: Insights from Indonesian Language Teachers in Riau

Adristi Afdal¹, Desi Sukenti²

¹ Universitas Islam Riau, Pekanbaru, Indonesia; adristiafdal2001@gmail.com

² Universitas Islam Riau, Pekanbaru, Indonesia; desisukenti@edu.uir.ac.id

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ABSTRACT

This study examines the relationship between authentic assessment and pedagogical competence, which encompasses key indicators of the learning process, including planning, implementation, assessment, and evaluation. Mastery of pedagogical competence by teachers enhances the objectivity and quality of authentic assessment. A descriptive quantitative approach using a simple linear correlation method was employed. The study sampled 98 Indonesian language high school teachers in Riau Province. Data collection involved a research questionnaire designed to measure both authentic assessment practices and teachers' pedagogical competence. Analysis was conducted using SPSS software. The findings revealed that pedagogical competence positively influences authentic assessment, with an effect size of 75.2%. This indicates that higher levels of pedagogical competence correlate with improved ease and effectiveness in conducting authentic assessments. Teachers with well-developed pedagogical skills are more likely to achieve optimal outcomes in their assessment practices. The results underscore the critical role of pedagogical competence in facilitating meaningful and objective authentic assessments. This relationship highlights the need for teacher professional development programs that emphasize pedagogical skills to enhance assessment quality. Pedagogical competence significantly impacts the effectiveness of authentic assessment, with stronger competence resulting in better outcomes. This study emphasizes the importance of prioritizing teacher training in pedagogical areas to advance authentic assessment practices, thereby enriching the learning experience for students.

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Corresponding Author: Adristi Afdal Universitas Islam Riau, Pekanbaru, Indonesia; adristiafdal2001@gmail.com

1. INTRODUCTION

Education is a process of increasing knowledge, skills, and abilities and developing students' potential and moral values. Sujana (2019) explains that the main purpose of education is to achieve the goals of the indicators determined in the curriculum to be implemented in the learning process, Lazwardi (2017) explains that success in the learning process can be seen from the achievement of learning outcomes or achievements achieved by students. The learning outcomes can be measured in

the assessment process. This assessment is important because it determines the ability of students to pass or fail in achieving the learning indicators. This assessment is the most important part in determining the success of learning in order to measure the achievement of competencies. Over time, the assessment system changes. The assessment agreed in the 2013 curriculum is authentic assessment.

According to Sani (2022), authentic assessment focuses on developing competence and demonstrating students' ability to address real-world challenges and learning tasks. Similarly, Abdillah, Sulton, and Husna (2021) highlight that authentic assessment is crucial in guiding students to maximize their attitudes, knowledge, and skills, enabling them to effectively solve problems in life. Nisrokha (2018) adds that authentic assessment emphasizes a diverse approach to problem-solving, encouraging students to apply their learning practically in real-life situations. Fauziah, Alawiyah, and Ruslan (2016) further emphasize the role of teachers in conducting detailed assessments, encompassing students' attitudes, behaviors, and comprehensive understanding, integrated seamlessly with teaching and learning activities. However, language teachers often face challenges in implementing authentic assessments during the learning process. To address these barriers, this study aims to equip language teachers with training and tools to enhance their assessment practices effectively.

Authentic assessment is the process of assessing student learning outcomes. Assessment aims to determine the ability of students to obtain information about learning. A very important component in the assessment process is the role of the teacher in designing, planning and assessing student learning outcomes. The assessment process is developed by the teacher in accordance with curriculum developments. Authentic assessment is the main thing that needs to be considered in the activity of assessing the learning process in relation to the things that are assessed in accordance with the indicators and learning objectives. Furthermore, the development of learning indicators is used as an assessment tool in accordance with the requirements of the competences in the curriculum standards. Another thing related to the assessment instrument prepared by the teacher is that it is still not optimal to use it as an appropriate authentic assessment tool to measure the learning done.

Siregar (2018) states that authentic assessment requires students to demonstrate their knowledge, skills, and strategies by producing responses or creating products, placing the focus on student-centered learning. This approach aligns with the primary goal of the curriculum, which is to prepare Indonesians to become faithful, productive, creative, innovative, and empathetic individuals who contribute positively to their communities, nation, and global civilization. Similarly, Ilmiwan, Festiyed, and Usmeldi (2019) note that authentic assessment evaluates students' progress and learning outcomes holistically. It integrates cognitive, affective, and psychomotor domains to provide results that are valid, practical, and effective.

The Ministry of Education and Culture (Kemendikbud) and Abduh (2019) describe authentic assessment as an advanced form of evaluation that allows students to apply their knowledge, attitudes, and skills through various tasks. The outcomes of such assessments enable educators to develop remedial, enrichment, or guidance programs, and to refine teaching practices in alignment with Educational Assessment Standards.

Hakim (2015) highlighted that authentic assessment remains challenging for senior secondary teachers, particularly in its implementation, which often disrupts the effectiveness of the teaching and learning process. This underscores the importance of addressing issues related to authentic assessment by incorporating pedagogical competence as a crucial factor. Pedagogical competence, as mandated by Government Regulation No. 74 of 2008 of the Republic of Indonesia, is a requirement for professional teachers. It encompasses the ability to manage student learning effectively, including understanding student needs, designing and implementing instruction, evaluating learning outcomes, and fostering student development to achieve their full potential.

Tyagita and Iriani (2018) further emphasize that pedagogical competence serves as a foundational framework for teachers to enhance their professional growth continuously. Kurniawan and Astuti (2017) elaborate on the essential skills within pedagogical competence, which include understanding students, planning and organizing instruction, implementing learning processes in compliance with

educational standards, evaluating both the learning process and outcomes, and supporting the development of students' potential.

Strengthening pedagogical competence is not only vital for overcoming the challenges associated with authentic assessment but also for improving overall teaching quality. Teachers equipped with robust pedagogical skills can more effectively align assessment strategies with instructional goals, creating a more cohesive and impactful learning environment. By addressing these interconnected aspects, the integration of pedagogical competence into authentic assessment practices can lead to more effective teaching methodologies and improved student outcomes.

In the era of rapid development of knowledge and technology, the presence of pedagogical competence is increasingly important in the world of education to achieve various aspects such as cognitive, affective, and psychomotor students. Ghufron (2018) argues that if teachers do not have a good pedagogical record, their skills in providing knowledge can be replaced by artificial intelligence. With the development of technology, all knowledge can be accessed through chat-GPT, which is based on artificial intelligence. Therefore, a teacher must have the ability to teach or pedagogical competence to be able to produce a quality learning process in building a superior generation. Russamsi, Hadian, & Nurlaeli (2020) explain that in addition to improving the quality of learning, this pedagogical competence must also be able to create new ideas and concepts and increase teacher innovation in the implementation of learning. The achievement of student learning outcomes is highly dependent on teachers' ideas, imagination, and innovation in the implementation of learning. So, this pedagogical competence is very important for producing effective learning.

Pedagogical competence is important for teachers to understand the role of educators who are able to enhance the potential of students, create space for students to participate in learning, and encourage students to gain experience in the learning process. This pedagogical competence leads teachers to understand that learning is not only focused on the teacher (teacher center), but that they must be able to create space for students to be creative in the learning process.

This research focuses on the development of authentic assessment by examining the pedagogical competence of Indonesian language teachers in Riau Province. While this study aligns with previous research, such as Susanti's (2017) investigation into the correlation between pedagogical competence and personality competence in authentic assessment, and Fiestawa's (2017) study on the effect of teachers' pedagogical competence on social studies learning outcomes, a gap remains in understanding how pedagogical competence specifically influences authentic assessment practices among Indonesian language teachers in Riau Province. Susanti's study was conducted with a small sample of 15 teachers, and Fiestawa's research focused on social studies, not Indonesian language education. These studies emphasize the importance of pedagogical competence, yet they do not fully explore its specific impact on authentic assessment in the context of language teaching in Riau Province.

Thus, the aim of this research is to fill this gap by analyzing how the pedagogical competence of Indonesian language teachers in Riau Province affects the implementation of authentic assessment. The research will answer the following question: How does teachers' pedagogical competence influence the effectiveness of authentic assessment in Indonesian language education? By addressing this, the study aims to contribute to a deeper understanding of how enhancing pedagogical competence can improve authentic assessment practices. The significance of this research lies in its potential to inform teacher training programs and educational policy, ultimately improving teaching quality and student learning outcomes in the region.

2. METHODS

This study adopts a quantitative research approach, which involves the collection and analysis of numerical data to derive insights through statistical measurements (Yam et al., 2022). Specifically, a correlation method is employed to examine the relationship between pedagogical competence and authentic assessment. The purpose of this approach is to determine the extent to which teachers with

strong pedagogical competence influence the effectiveness of authentic assessment practices. By analyzing the strength and significance of this relationship, the study aims to provide a clear understanding of how pedagogical competence impacts assessment implementation. The research focuses on Indonesian language teachers in Riau Province as its target population, ensuring that the findings are contextually relevant and directly applicable to this educational setting.

The sample used in this study were Indonesian language teachers in high schools in Pekanbaru, both private and public schools, with a total of 98 Indonesian language teachers. The sampling technique used was purposive sampling, purposive sampling is sampling based on characteristics that are in accordance with the research objectives. In this study, the sample selected was each representative of Indonesian language teachers in each public and private school in Pekanbaru City, Riau Province.

The data collection technique used was a questionnaire completed by Indonesian language teachers. This instrument was prepared by the researcher based on the theory constructed to measure two variables, namely pedagogical competence and authentic assessment. The scale used to measure and evaluate the answers given by the respondents is very good (SB) with a value of 5, fairly good (CB) with a value of 4, good (B) with a value of 3, less good (KB) with a value of 2, and finally not good (TB) with a value of 1. The total number of statements used in the instrument was 40 statements for authentic assessment and 42 statements for pedagogical competence. The data analysis technique used in this research is simple linear regression technique, which is the process of analysing the relationship between pedagogical competence and authentic assessment in a linear way to test the increase or decrease of authentic assessment results. The analysis technique was used using the SPSS version 26 application, for the sake of clarity the instrument can be described in the table below.

Variable	Code	Form of Statement	Source		
Pedagogical competence	X1.1	Understanding students	(Akbar, 2021)		
(Variable X)	X1.2	Designing and managing learning			
	X1.3	Implementing learning	(Sari, 2014)		
	X1.4	Conducting evaluations			
	X1.5	Developing students			
Authentic assessment	Y1.1	Portfolio assessment	Widiyanti,		
(Variable Y)	Y1.2	Project assessment	Pitoewas, & — Nurmalisa (2019)		
	Y1.3	Performance assessment	— (Pianda, 2018)		
	Y1.4	Product assessment	(

In the next step, this instrument was given to all high school teachers in Riau Province. The questionnaire was distributed from 13 August to 24 August 2024. This instrument was distributed through 2 stages in the online and offline process, and the offline process was carried out directly by the teachers when conducting subject consultations at SMAN 2 Pekanbaru on 24 August 2024, while the online process started from July to the end of August. Then, after the researchers had gotten the respondents, they started the next stage of testing the validity and reliability of the questionnaires filled out by the respondents. The following is the description:

Variable	Instrument	Correlated Item Total Correlation	Cronbach Alpha	Table r	Description
Pedagogical competence (X)	X1.1	.803	.980	.1966	Valid and reliable
	X1.2	.868	.980	.1966	Valid and reliable
	X1.3	.836	.980	.1966	Valid and reliable
	X1.4	.657	.980	.1966	Valid and reliable
	X1.5	.830	.980	.1966	Valid and reliable
Autentic assesment (Y)	Y1.1	.812	.976	.1966	Valid and reliable
	Y1.2	.833	.976	.1966	Valid and reliable
	Y1.3	.738	.976	.1966	Valid and reliable
	Y1.4	.793	.976	.1966	Valid and reliable

Table 2	Validity and	l reliability test
I able 2.		i renability test

Based on the table above, which has been tested for validity and reliability, all teachers provided positive responses, indicating good outcomes. The statements are considered valid as the item-total correlation exceeds the r-table value, confirming the instrument's validity. Items that passed the validity test were subsequently tested for reliability. Reliability was determined using Cronbach's Alpha (CA), where a value greater than 0.6 indicates that the instrument is reliable.

At the normality test stage, the data yielded a Sig. (2-tailed) value of 0.104, which is greater than 0.05, confirming that the data is normally distributed at the 5% significance level. Following this, a simple linear regression analysis was conducted to evaluate the relationship and the extent of the influence of pedagogical competence on authentic assessment. This analysis provided insights into the degree to which pedagogical competence impacts the implementation of authentic assessment practices.

3. FINDINGS AND DISCUSSION

3.1. Findings

3.1.1. Hipotesis Test

This hypothesis test is to read the prediction results of the data that has been obtained. These results can be seen in the following coefficient table:

	, <u>,</u>	
Model	t	Sign.
Constant	3.597	.001
Pedagogical competence	17.134	.000

Table 3. Hypothesis Test

Based on Table 3, the hypothesis is tested if the t-count value is greater than the t-table or significantly less than 0.05, which means that the hypothesis is accepted. This shows that the t-count value is greater than the t-table, namely (17.134> 1.98447) or the sig value. 0.000 < 0.05 means that the hypothesis can be accepted, which means that pedagogical competence has a significant effect on the development of authentic assessment of Indonesian language teachers in Riau Province.

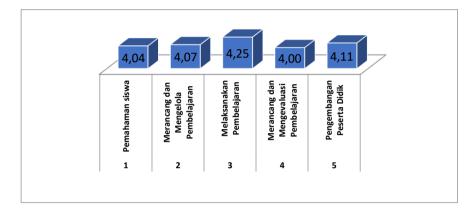


Figure 1. Average score pedagogical competence of Indonesian language teachers

Based on the table above, we can see the results of the average value of pedagogical competence owned by high school teachers in Riau Province. This scale is calculated with a value of 1 to 5. All values owned by Indonesian high school teachers have a value above 4.00, which means that the value of teachers' pedagogical competence in all aspects of the assessment has a very good level of understanding. The highest value is in the aspect of implementation of learning, which means that these Indonesian language teachers have high enthusiasm for carrying out the learning process. In carrying out the learning, these teachers interact directly with students. This can certainly create a conducive learning atmosphere and apply good assessment.

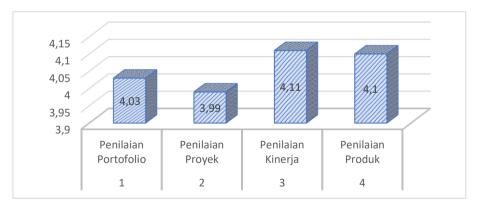


Figure 2. Average score authentic assessment of Indonesia language teachers

The graph above shows the teachers' level of understanding of implementing the authentic assessment process. Using the same scale, 98 of the responding teachers are superior in performance assessment, which means that teachers use real performance in giving instructions to students, teachers

have special skills needed by students in completing tasks and understanding the material provided. Based on the two graphs of the average scores obtained by the teachers, the researchers can conclude that the higher the value of pedagogical competence possessed by high school Indonesian language teachers in Riau Province, the better the score obtained in authentic assessment. Other assessment results will also be the same, if the teacher uses all aspects of pedagogical competence, then the authentic assessment results will be obtained.

3.1.2. Results of the influence of pedagogical competence on authentic assessment

Table 4. Coefficient of determination of pedagogical competence variables on authentic assessment

Correlation R	R Square	Percentage (%)	Adjusted Square	R	Standard Error of the Estimate
.867	.752	75.2%	.749		18.280

Based on Table 4 above, it can be seen that pedagogical competence affects the authentic assessment of Indonesian language teachers in high schools in Pekanbaru City. This can be seen from the R-squared value of 0.752, which means that pedagogical competence influences 75.2% of the authentic assessment of Indonesian language teachers in Pekanbaru City, Riau Province, while the remaining 24.8% of the authentic assessment is influenced by other factors. Then there is an R-value of 86.7% of the resulting influence on authentic assessment when pedagogical competence is applied in the implementation of learning by Indonesian language teachers, meaning that if this pedagogical competence is maximally applied by Indonesian language teachers in Pekanbaru City, Riau Province, it will have a very large influence that will be generated in the authentic assessment process.

Based on the researcher's findings, it was concluded that the figure obtained was 75.2% of the influence of Indonesian language teachers' pedagogical competence on the authentic assessment process. According to Suciana (2018), pedagogical competence concerns how to understand students, how to plan and implement learning well, and how to develop the potential interests and talents possessed by students. All aspects of the pedagogical competencies that teachers need to possess can influence the success of the authentic assessment process. The teacher's ability to understand students can achieve the cognitive aspects of increasing knowledge and processing students' critical thinking skills in the learning process. The teacher's ability to design and implement the learning process well will enable the psychomotor aspects of students to achieve and maximise their abilities so that they can be applied in everyday life. This statement was underlined by Priambudi (2024), who said that the better the quality of pedagogical competence, the better the results are in achieving learning objectives.

3.2. Discussion

The hypothesis in this study examines the relationship between two variables: pedagogical competence and authentic assessment. The research focuses on high school teachers in Riau Province. Field observations indicate that teachers with strong pedagogical competence tend to produce better teaching outcomes and student skills. This aligns with the objectives of authentic assessment, which evaluates cognitive, affective, and psychomotor domains comprehensively (Irianto, Herlambang, Yunansah, Mulyati, & Setiawan, 2021). High-quality pedagogical competence is essential for developing students with critical and creative thinking abilities, outcomes that are directly influenced by the teacher's instructional quality.

Kelter et al. (2021) emphasize that effective pedagogical practices require teachers to empower students by giving them more active roles in the learning process. This includes fostering dialogue during tasks and creating opportunities for students to engage more actively in their learning journey. While various factors influence the successful implementation of authentic assessment, pedagogical competence remains a foundational requirement. Strengthening this aspect ensures more effective and impactful assessments, ultimately supporting the achievement of optimal learning outcomes.

This pedagogical competence is a competence that includes the teacher's ability to manage learning from the stage of preparing learning, preparing lesson plans, and implementing learning properly to the stage of assessing and evaluating learning outcomes. This is in line with the view Nurhafizah, Sripatmi, Subarinah, & Hayati (2021) that pedagogical competence is the teacher's ability to manage learning which includes understanding students, planning and implement learning, evaluating and developing the potential interests and talents of students. Setiawan, Sudrajat, Aman, & Kumalasari (2021) said that the assessment of learning in the current curriculum includes 1) knowledge with written tests, observations, and assignments, 2) skills with performances, projects, products, and portfolios and 3) attitudes with observations, self-assessment and journals and all these aspects are related to one of the teacher's competencies, namely pedagogy, where teachers must understand students, design and manage learning and be able to develop students' abilities, this can cover all aspects needed in authentic assessment. Hermawan, Amri, & Sodiq (2022) conducted a case study at SMAN 10 Malang, in the case study applied teacher performance skills, projects and teacher products to produce authentic psychomotor assessment.

Referring to the research conducted by previous researchers (Susanti, 2017), the effect obtained by pedagogical competence on authentic assessment is 15,000 with sig. 0.000, with a statistical calculation of chisquare 15,000> 3,841, the hypothesis is accepted. Then, the results of the research conducted by (Fiestawa, 2017) also get the same results that pedagogical competence has a positive effect on authentic assessment. The positive effect of pedagogical competence is because there is an assessment process and skills in carrying out authentic assessment by Indonesian language teachers, and this is consistent with the process carried out in authentic assessment. Both previous studies focused on the subject of primary school teachers, the essence of this authentic assessment is more difficult to implement at the secondary level. This is because the process of scientific study at the secondary level is more in-depth and, of course, requires teachers to have additional skills in the application of pedagogical skills in order for the authentic assessment process to run optimally.

Syaifuddin's (2020) research revealed that the development of teachers' authentic research in completing tasks still lacks time, so the expected outcomes have not reached optimal assessment accuracy. The results of his research show that 48% of teachers face obstacles due to limited time, facilities and infrastructure, material that is too difficult, different abilities and characters of students. This is, of course, in line with the findings of researchers who have developed authentic assessment using the teacher's pedagogical competence approach, which has had a major impact on authentic assessment. Tambak, Sukenti, Hanafi, Rianawati, & Amril (2022) showed that the development of pedagogical competence is based on social cognitive theory, it is possible that the increase in pedagogical competence is based on teacher experience, so the more experienced a teacher is, the greater the influence of his pedagogical competence on the results of authentic assessment.

This study found a strong influence of pedagogical competence on teachers' authentic assessment. Pedagogical competence has an effect of 75.2%, which means that as the teacher's pedagogical competence increases, the authentic assessment results will improve, while conversely, as the teacher's pedagogical competence decreases, the quality of the teacher's assessment results will also decrease. The remaining 24.8% of authentic assessment is influenced by other factors. Ajjawi, Tai, Jorre, & Johnson (2021) revealed in their book that there is no single way to approach authentic assessment. When conducting an authentic assessment it is important to consider other factors, such as the impact on education and the effectiveness of implementing learning in order to produce authentic assessment. Zulfadilla & Sukenti (2024) explain that there are other factors that also affect authentic assessment,

namely the social competence factor of the teacher. The study shows that social competence affects 29.6% of authentic assessment results. However, this study was only measured using the results of measures given by teachers to test pedagogical competence and authentic assessment, which also involved and used many data sources that researchers found to measure this. Then the sample size used was relatively small and was only carried out in schools in Riau province, especially the city of Pekanbaru, which means that there may be limitations in the findings that researchers found, meaning that this research cannot be generalised as findings for all Indonesian language teachers. Of course, the hope for future research is to be able to expand the concept of these findings. This research can be continued at a later stage, for example, by applying this research to other regions and different subjects. It is the researcher's hope that these pedagogical competencies can be applied so that we can maximize authentic assessment and achieve future educational goals.

4. CONCLUSION

Based on the findings of this study, pedagogical competence is a crucial element in achieving effective learning outcomes, as it encompasses a wide range of aspects that teachers must master. Numerous studies have emphasized that pedagogical competence is integral to the learning process, serving as the foundation for teaching excellence. It enables teachers to integrate key components such as understanding student needs, managing the learning environment effectively, conducting evaluations, and fostering the continuous development of learners. The results of this study highlight the importance of pedagogical competence in ensuring students' academic and psychological success. These findings aim to raise awareness among teachers about the necessity of mastering pedagogical skills to enhance their teaching effectiveness. Furthermore, it is recommended that Indonesian language teachers actively participate in training programs and technical guidance to refine their pedagogical competencies, thereby fostering professional growth and contributing to improved educational practices in the future.

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REFERENCES

- Abdillah, F., Sulton, S., & Husna, A. (2021). Implementasi Penilaian Autentik Dalam Kurikulum 2013. *JKTP: Jurnal Kajian Teknologi Pendidikan*, 4(1), 41–50.
- Ajjawi, R., Tai, J., Jorre, T. J. D. S., & Johnson, L. (2021). Authentic Assessment Design for Work-Integrated Learning. In S. J. Ferns, D. R. Anna, & E. Z. Karsten (Eds.), *Advance in Research, Theory and Practice in Work-Integrated Learning* (1st ed., p. 10). London: Routledge.
- Akbar, A. (2021). Pentingnya kompetensi pedagogik guru. JPG: Jurnal Pendidikan Guru.
- Fauziah, T., Alawiyah, T., & Ruslan. (2016). Kendala Guru dalam Menerapkan Penilaian Autentik di SD Kabupaten Pidie. *Jurnal Ilmiah Mahasiswa Pendidikan Guru Sekolah Dasar*, 1(1), 147–157.
- Fiestawa, R. (2017). Pengaruh Kompetensi Pedagogik Guru Dalam Melaksanakan Penilaian Autentik Terhadap Hasil Belajar IPS Pada Kurikulum 2013 Di SMPN Kota Bandung dan Kota Cimahi. Universitas Pendidikan Indonesia.
- Ghufron, M. . (2018). Revolusi Industri 4.0: Tantangan, Peluang, Dan Solusi Bagi Dunia Pendidikan. Seminar Nasional Dan Diskusi Panel Multidisiplin Hasil Penelitian Dan Pengabdian Kepada Masyarakat 2018, 1(1), 332–337.
- Hakim, A. (2015). Contribution of Comptence Teacher (pedagogical, Personality, Professional Competence and Social) On the Performance of Learning. *The International Journal of Engineering*

and Science (IJES), 2(4), 1–12.

- Hermawan, D. A., Amri, M., & Sodiq, S. (2022). A Case Study of the Implementation of Alternative Psychomotor Assessment in Japanese Language Online Learning. *Proceedings of the International Joint Conference on Arts and Humanities* 2021 (IJCAH 2021), 618(Ijcah), 92–99.
- Ilmiwan, B., Festiyed, & Usmeldi. (2019). Development of authentic assessment that based on scientific approach to improve students' skills of science process in physics learning. *Journal of Physics: Conference Series, 1185*(1).
- Irianto, D. M., Herlambang, Y. T., Yunansah, H., Mulyati, T., & Setiawan, D. (2021). The Effectiveness of Multiliteration Learning Models in Increasing Ecological Literacy of Primary School Students. *Journal of Physics: Conference Series*, 1764(1).
- Kelter, J., Peel, A., Bain, C., Anton, G., Dabholkar, S., S. Horn, M., & Wilensky, U. (2021). Constructionist Co-Design: A Dual Approach to Curriculum and Professional Development. *British Journal of Educational Technology*, 52(3), 1043–1059.
- Kemendikbud, P. P. P., & Abduh, M. (2019). Panduan penilaian kinerja (performance assessment).
- Kurniawan, A., & Astuti, A. . (2017). Deskripsi Kompetensi Pedagogik guru dan Calon Guru Kimia SMA Muhammadiyah 1 Semarang. *Seminar Nasional Pendidikan, Sains Dan Teknologi*, 2(1), 1–7.
- Lazwardi, D. (2017). 1112-1988-1-Sm. Manajemen Kurikulum Sebagai Pengembangan Tujuan Pendidikan Dedi, 7(1), 99–112.
- Nisrokha. (2018). Authentic Assessment (Penilaian Otentik). Jurnal Madaniyah, 8(2), 209-229.
- Nurhafizah, N., Sripatmi, S., Subarinah, S., & Hayati, L. (2021). Pengaruh Kompetensi Pedagogik Guru Terhadap Motivasi dan Prestasi Belajar Matematika Siswa. *Griya Journal of Mathematics Education and Application*, 1(1), 1–10.
- Pianda, D. (2018). *Kinerja Guru: Kompetensi Guru, Motivasi Kerja dan Kepemimpinan Kepala Sekolah* (1st ed.). Sukabumi: CV Jejak.
- Priambudi, T. (2024). The Influence of Pedagogic, Profesionalcompetency, and Work Motivation On Improving Teacher Performance of Junior High School in Tegal Regency. *Cakrawala*, *18*(1), 1–11.
- Russamsi, Y., Hadian, H., & Nurlaeli, A. (2020). Pengaruh Kepemimpinan Kepala Sekolah Dan Peningkatan Profesional Guru Terhadap Kinerja Guru Di Masa Pandemi Covid-19. *MANAGERE* : *Indonesian Journal of Educational Management*, 2(3), 244–255.
- Sani, R. A. (2022). Penilaian Autentik (1st ed.; R. D. Aningtyas, Ed.). Jakarta: PT Bumi Aksara.
- Sari, Z. I. (2014). Hubungan kompetensi pedagogik guru dengan kinerja mengajar guru di sdit nurul falah kec. Tambun utara kab. Bekasi. 47–53.
- Setiawan, J., Sudrajat, A., Aman, & Kumalasari, D. (2021). Development of higher order thinking skill assessment instruments in learning Indonesian history. *International Journal of Evaluation and Research in Education*, 10(2), 545–552.
- Siregar, L. A. (2018). Penilaian otentik dalam kurikulum 2013. *Al-razi : jurnal ilmu pengetahuan dan kemasyarakatan, 18*(2), 1–11.
- Suciana, N. (2018). Analisis Kompetensi Pedagogik Guru Dalam Pemahaman Terhadap Peserta Didik Di Sd Negeri 009 Ganting Kecamatan Salo. *Jurnal Review Pendidikan Dan Pengajaran*, 1(1), 84–103.
- Sujana, I. W. C. (2019). Fungsi dan Tujuan Pendidikan Indonesia. *Adi Widya: Jurnal Pendidikan Dasar,* 4(1), 29–39.
- Susanti, T. (2017). Korelasi kompetensi pedagogik dan kompetensi kepribadian dalam penilaian otentik di upt pendidikan kecamatan laweyan tahun pelajaran 2016/2017. *Universitas Muhammadiyah Surakarta, 4, 9–*15.
- Syaifuddin, M. (2020). Implementation of authentic assessment on mathematics teaching: Study on junior high school teachers. *European Journal of Educational Research*, 9(4), 1491–1502.
- Tambak, S., Sukenti, D., Hanafi, Y., Rianawati, R., & Amril, A. (2022). How Does Learner-Centered Education Affect Madrasah Teachers' Pedagogic Competence? *Journal of Education Research and Evaluation*, 6(2), 358–366.
- Tyagita, B. P. A., & Iriani, A. (2018). Strategi peningkatan kompetensi pedagogik guru untuk

meningkatkan mutu sekolah. Kelola: Jurnal Manajemen Pendidikan.

- Widiyanti, N., Pitoewas, B., & Nurmalisa, Y. (2019). *Studi Tentang Pemahaman Guru Terhadap Penilaian Autentik Jenis Portofolio Pada Kurikulum* 2013. neliti.com.
- Yam, J. H., Taufik, R., Purwanto, E., Nugroho, P. W., Kusumastuti, A., Khoiron, A. M., ... Dewi, G. (2022). Metodologi Penelitian Kuantitatif. In *QOSIM: Jurnal* books.google.com.
- Zulfadilla, I., & Sukenti, D. (2024). The Influence of Social Competence on the Ability of Indonesian Language Teachers in Carrying Out Authentic Assessments at MTs in Pekanbaru City.