



---

## Local Wisdom Integration and Teaching Readiness among Pre-Service Elementary Teachers

Laelasari<sup>1</sup> Kharimah, NI<sup>2</sup>, Fauzi, NA<sup>3</sup>,

<sup>1</sup> Pendidikan Matematika, Fakultas Pendidikan dan Sains, Universitas Swadaya Gunung Jati Cirebon, Indonesia

<sup>2</sup> Pendidikan Matematika, Fakultas Pendidikan dan Sains, Universitas Swadaya Gunung Jati Cirebon, Indonesia

<sup>3</sup> Pendidikan Bahasa dan Sastra Indonesia, Fakultas Pendidikan dan Sains, Universitas Swadaya Gunung Jati Cirebon, Indonesia

**Corresponding Author:** Laelasari, E-mail: [laelasari@ugj.ac.id](mailto:laelasari@ugj.ac.id)

---

### | ABSTRACT

This study aims to evaluate the teaching readiness of prospective elementary school teachers in integrating local wisdom into thematic learning. The study uses an observational design with an evaluative quantitative approach and is cross-sectional in nature. The study participants consisted of 44 final-year students of the Elementary School Teacher Education Program (PGSD) who were selected using total sampling technique. Data were collected through a questionnaire on teaching readiness based on the integration of local wisdom, which covered four pedagogical dimensions, namely lesson planning, lesson implementation, media development, and authentic assessment. Data analysis was conducted descriptively and inferentially using repeated measures ANOVA and independent t-tests. The results showed that students' teaching readiness was in the moderate to high category, with significant differences between dimensions of readiness. The highest readiness was found in the aspect of lesson planning, while the lowest readiness was found in the aspect of authentic assessment based on local wisdom. In addition, students who had teaching experience showed a higher level of readiness than students without teaching experience. These findings indicate that teaching readiness is a multidimensional construct that develops unevenly and is greatly influenced by practical experience. This study has important implications for the development of teacher education curricula that emphasize the integration of local wisdom in an applied and contextual manner.

### | KEYWORDS

*teaching readiness, local wisdom integration, pre-service elementary teachers, authentic assessment, contextual pedagogy*

---

## I. INTRODUCTION

Primary school teacher education plays a strategic role in preparing educators who are professional, adaptive, and responsive to the dynamics of 21st-century learning. Teachers are no longer positioned solely as conveyors of material, but as learning facilitators who are able to design meaningful, contextual learning experiences that are relevant to the lives of their students.[1][2][3]. Therefore, teaching readiness becomes a key indicator of the success of prospective teachers' education before they enter the professional world[4][5].

In the context of basic education, thematic learning requires teachers to have comprehensive pedagogical skills, including lesson planning, media development, implementation of active learning strategies, and authentic assessment [6]. One approach that is considered relevant to strengthening thematic learning is the integration of local wisdom. Local wisdom contains cultural, social, and environmental values that are close to the realities of students' lives [7][8], thereby potentially increasing learning motivation, conceptual understanding, and character building. This approach is also in line with the characteristics of elementary school students who think concretely and contextually [9][10].

However, various studies show that the integration of local wisdom into learning has not been fully implemented optimally, especially by prospective teacher students [11][12]. Common challenges include limitations in identifying relevant local contexts, difficulties in developing learning tools based on local wisdom, and low capacity to implement authentic assessment in line with thematic learning characteristics. These conditions indicate a gap between ideal

pedagogical demands and the actual readiness of elementary school teacher education students [13][14][15].

So far, research on local wisdom in basic education has focused more on its impact on student learning outcomes or character building [16][17]. However, studies that specifically evaluate the teaching readiness of prospective teachers in integrating local wisdom are still relatively limited, especially in the context of thematic learning. In fact, teaching readiness is an important prerequisite for the successful implementation of pedagogical innovations in the classroom. Without adequate preparation, the integration of local wisdom has the potential to become merely a normative concept without meaningful implementation [18].

Based on these research gaps, this study aims to evaluate the teaching readiness of elementary school teacher education students in integrating local wisdom into thematic learning. The evaluation was conducted by reviewing aspects of pedagogical readiness, including lesson planning, lesson implementation, media development, and the application of authentic assessment. Thus, this study is expected to provide a comprehensive picture of the level of readiness of prospective teachers in implementing contextual learning based on local wisdom.

The results of this study are expected to contribute theoretically to enriching the study of prospective teachers' teaching readiness in the context of local culture-based pedagogy. In practical terms, the findings of this study can serve as a basis for the development of teacher education curricula and the improvement of learning practices in teacher training institutions. In addition, this study is also expected to serve as a reference for policy makers in designing programs to improve the quality of elementary school teacher education that is relevant to the social and cultural context of students.

## II. METHODOLOGY

This study used an observational design with an evaluative quantitative approach and was cross-sectional in nature to evaluate the teaching readiness of prospective elementary school teachers in integrating local wisdom into thematic learning. Data were collected at a single point in time to describe students' actual teaching readiness based on measurable pedagogical indicators and their suitability to the expected competencies in teacher education. The theoretical framework of the study refers to the concept of teaching readiness, which includes readiness in planning, implementing learning, developing media, and authentic assessment, as well as contextual learning based on local culture. The study was conducted over one academic semester.

The research population consists of final-year students in the PGSD program, with the accessible population being PGSD level IV students in the 2024/2025 academic year at a private university in Cirebon City. A sample of 44 was determined using total sampling technique with the inclusion criteria of active students who had taken core pedagogical and thematic learning courses and were willing to be respondents. This technique was chosen to ensure comprehensive representation of the population and minimize selection bias.

Pengumpulan data dilakukan secara naturalistik tanpa intervensi perkuliahan tambahan. Instrumen penelitian berupa kuesioner skala Likert lima tingkat yang telah diuji validitas isi melalui *expert judgment* dan reliabilitas menggunakan koefisien Cronbach's alpha ( $\geq 0,70$ ). Data dikumpulkan secara terstandar dalam satu sesi dan dianalisis setelah pemeriksaan kelengkapan dan konsistensi.

## III. RESULTS AND DISCUSSION

Sebanyak 44 mahasiswa PGSD tingkat IV berpartisipasi dalam penelitian ini dan seluruhnya memenuhi kriteria inklusi, dengan kelengkapan data sebesar 100%. Rata-rata usia partisipan adalah 21,4 tahun ( $SD = 0,7$ ; rentang 20–23 tahun), dengan komposisi jenis kelamin didominasi perempuan (79,5%) dibandingkan laki-laki (20,5%).

Seluruh partisipan telah menempuh mata kuliah pedagogik inti, pembelajaran tematik, dan microteaching. Sebanyak 61,4% mahasiswa memiliki pengalaman mengajar terbatas melalui PPL atau asistensi mengajar, sementara 38,6% belum memiliki pengalaman mengajar langsung. Secara akademik, responden memiliki IPK pada kategori baik hingga sangat baik dengan rata-rata 3,41 ( $SD = 0,29$ ). Rincian karakteristik partisipan disajikan pada Tabel 1.

Table 1. Demographic and Academic Characteristics of Participants

Variable	Category / Statistic	n	% / Mean (SD)
Age (years)	Mean (SD)	-	21.4 (0.7)
	Range	-	20–23
Gender	Female	35	79.5
	Male	9	20.5

Variable	Category / Statistic	n	% / Mean (SD)
Teaching Experience	With teaching experience	27	61.4
	Without teaching experience	17	38.6
Academic Achievement (GPA)	Mean (SD)	-	3.41 (0.29)
Pedagogical Coursework Completion	Completed	44	100.0
Data Completeness	Valid responses	44	100.0

The results of the descriptive analysis show that students' readiness to teach in integrating local wisdom is in the moderate to high category, with a total average score of 3.65 (SD = 0.47) on a scale of 1-5. The learning planning dimension received the highest score (M = 3.83; SD = 0.49), with 70.5% of students in the ready and very ready categories. The learning implementation dimension showed an average score of 3.72 (SD = 0.46) with a relatively even distribution.

The dimensions of local wisdom-based media development (M = 3.44; SD = 0.53) and authentic assessment (M = 3.31; SD = 0.55) showed lower scores, with 40.9% and 45.5% of students, respectively, falling into the fairly prepared category. A total of 15.9% of students were still in the not quite ready category in the authentic assessment dimension. The Shapiro-Wilk test showed a normal distribution of data in all dimensions ( $p > 0.05$ ).

Table 2. Descriptive Analysis of Student Teaching Readiness in Integrating

Dimensions of Teaching Readiness	Mean	SD	95% CI	Score Range	Distribusi
Learning Planning	3,83	0,49	3,68 - 3,98	2,80 - 4,80	Normal
Learning Implementation	3,72	0,46	3,58 - 3,86	2,75 - 4,75	Normal
Media Development Based on Local Wisdom	3,44	0,53	3,28 - 3,60	2,50 - 4,60	Normal
Authentic Assessment Based on Local Wisdom	3,31	0,55	3,14 - 3,48	2,40 - 4,50	Normal
Total Teaching Readiness	3,65	0,47	3,51 - 3,79	2,85 - 4,65	Normal

Complete descriptive statistics are presented in Table 2, while the distribution of scores is visualized in Figure 1.

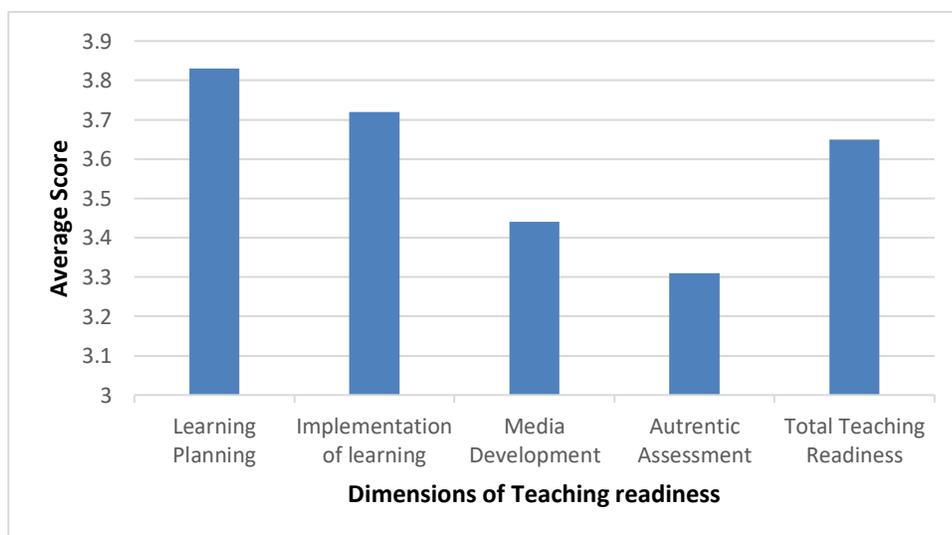


Figure 1. Average Teaching Readiness Scores of Students based on the Dimension of Local Wisdom Integration

The sphericity assumption was met based on Mauchly's Test ( $p = 0.128$ ). The analysis shows a significant difference between the dimensions of teaching readiness,  $F(3,129) = 11.26$ ,  $p < 0.001$ , with a medium-large effect size ( $\eta^2 = 0.21$ ; 95% CI: 0.11-0.29). The Bonferroni post-hoc test shows that learning planning readiness is significantly higher than media development and authentic assessment ( $p < 0.01$ ). In addition, the difference between media development and authentic assessment is also significant ( $p = 0.041$ ). A summary of the inferential analysis results is presented in Table 3.

Table 3. Results of Inferential Analysis of Students' Teaching Readiness in Integration

Analysis	Variables Analyzed	Test Statistics	df	p-value	Effect Size	95% CI
Repeated Measures ANOVA	Planning, Implementation, Media, Authentic Assessment	F = 11,26	(3, 129)	< 0,001	$\eta^2 = 0,21$	0,11 - 0,29
Post-hoc Bonferroni	Planning Vs Media	Mean Diff = 0,39	—	0,003	d = 0,58	0,18 - 0,61
Post-hoc Bonferroni	Planning Vs Authentic Assessment	Mean Diff = 0,52	—	< 0,001	d = 0,71	0,30 - 0,74
Post-hoc Bonferroni	Media Vs Authentic Ratings	Mean Diff = 0,13	—	0,041	d = 0,32	0,02 - 0,41
Independent t-test	Teaching Experience (Yes Vs No)	t = 2,03	42	0,048	d = 0,62	0,01 - 0,53

Subgroup analysis based on teaching experience shows that students with teaching experience obtained higher total teaching readiness scores (M = 3.76, SD = 0.41) than students without teaching experience (M = 3.49, SD = 0.50). This difference is statistically significant based on an independent t-test,  $t(42) = 2.03$ ,  $p = 0.048$ , with a Cohen's d effect size = 0.62.

Sensitivity analysis was performed by excluding two respondents with extreme scores. The results of the analysis showed a pattern of findings consistent with the main analysis, indicating that there was no significant influence of outliers on the research results. These additional findings are presented in Figure 2.

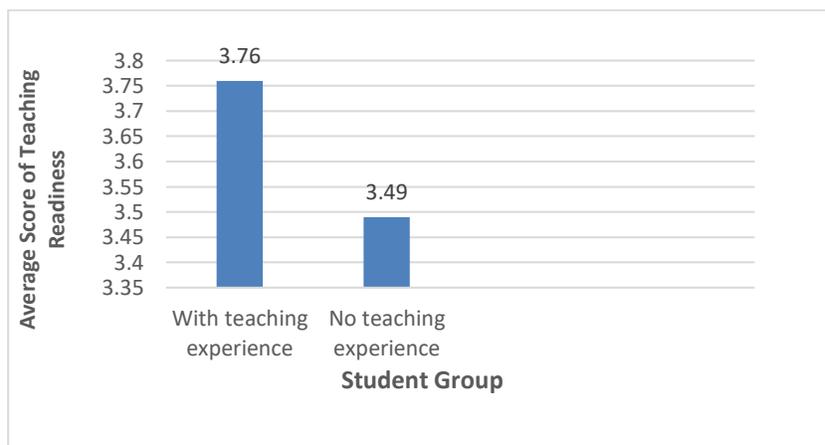


Figure 2. Comparison of Students' Teaching Readiness Based on Teaching Experience

The findings show that PGSD students' readiness to integrate local wisdom into their teaching is at a moderate to high level, with significant differences between pedagogical dimensions. Readiness in planning and implementing learning is higher than in developing media and authentic assessment, indicating that conceptual pedagogical competence is better mastered than applied and contextual competence. A moderate effect size ( $\eta^2 = 0.21$ ) indicates that these differences have practical significance and confirms that teaching readiness is differential according to the complexity of pedagogical demands. Furthermore, teaching experience contributes to increased readiness, indicating that teaching readiness is a dynamic construct resulting from the interaction between theoretical knowledge and practical experience, although causal implications need to be interpreted cautiously due to the observational nature of the research design. [19][20].

This study is in line with various studies showing that prospective teachers are generally better prepared in terms of planning than contextual pedagogical implementation [21][22]. Teacher education is more effective in developing planning competence than enactment competence [23][24]. Meanwhile, the integration of local wisdom often stops at the planning stage. High readiness in media development shows that variations in institutional context, curriculum, and learning strategies can affect students' teaching readiness [25].

Theoretically, the findings of this study appear to contribute to strengthening the concept of teaching readiness as a multidimensional construct that develops non-linearly, whereby teaching readiness is determined not only by mastery of pedagogical knowledge, but also by the ability to authentically integrate socio-cultural contexts into learning practices [26][27]. The results of this study confirm that the contextual dimension needs to be positioned as an essential component in the teaching readiness model. Furthermore, these findings enrich the theory of contextual learning based on local wisdom by showing that its successful integration is highly dependent on teachers' pedagogical readiness from the pre-service stage, while also indicating the need to strengthen the link between contextual learning theory and authentic assessment practices, which have so far been relatively separate [28].

From a practical and policy perspective, the findings of this study emphasize the importance of strengthening teaching practice experiences that explicitly emphasize the integration of local wisdom through the development of media and authentic assessment, not just lesson planning. Teacher training institutions need to design curricula that balance conceptual mastery and applied skills through project-based approaches, lesson study, and school-based practicums, as well as strengthening student teaching and collaboration with schools based on local culture. Higher readiness in planning compared to implementation reflects the dominance of theoretical and document-based learning, while teaching experience acts as a triggering factor that strengthens the transfer of pedagogical knowledge to contextual practice.

#### IV. CONCLUSION

This study concludes that PGSD students' teaching readiness in integrating local wisdom into thematic learning is at a moderate to high level, with significant variations between pedagogical dimensions. Students' readiness is relatively stronger in planning and implementing learning, while the development of media and especially authentic assessment based on local wisdom still shows weaknesses. These findings confirm that conceptual pedagogical mastery has not been fully followed by applicative readiness, and reinforce the view that teaching readiness is a multidimensional construct that develops unevenly. Teaching experience has been proven to contribute positively to increased readiness, emphasizing the importance of practical experience in transferring pedagogical knowledge to learning implementation.

Theoretically and practically, the results of this study place pre-service teacher readiness as a key prerequisite for the success of contextual learning based on local wisdom. Therefore, teacher education needs to strengthen a curriculum that emphasizes authentic practical experiences, particularly in the development of media and contextual assessment, through project-based approaches, pedagogical reflection, and collaboration with schools based on local culture. Further research is recommended to use longitudinal designs or mixed methods to examine the development of prospective teachers' teaching readiness in a more comprehensive and sustainable manner.

#### REFERENCES

- [1] K. E. Ramey and R. Stevens, "Dilemmas Experienced by Teachers in Adapting to the Role of Facilitator in the STEAM Classroom," *Teach. Teach. Educ.*, vol. 133, p. 104271, 2023, doi: <https://doi.org/10.1016/j.tate.2023.104271>.
- [2] R. Ali, "Curriculum Transformation: Integrating Deep Learning to Improve Students' Abilities," *ISTIFHAM J. Islam. Stud.*, vol. 3, no. 1, 2025, doi: [10.71039/istifham.v3i1.100](https://doi.org/10.71039/istifham.v3i1.100).
- [3] M. Ramírez-Montoya, M. Loaiza-Aguirre, A. Zúñiga-Ojeda, and M. Castro, "Characterization of the Teaching Profile within the Framework of Education 4.0," *Futur. Internet*, vol. 13, no. 1, p. 91, 2021, doi: [10.3390/fi13040091](https://doi.org/10.3390/fi13040091).
- [4] Y. Chen, J. Tang, J. Du, and S. Huang, "A Literature Review of Teachers' Preparedness to Teach and its Influencing Factors," *Front. Sustain. Dev.*, vol. 4, no. 5, 2024, doi: [10.54691/57j55m12](https://doi.org/10.54691/57j55m12).
- [5] X. Wang *et al.*, "Developing and validating an Interdisciplinary Teaching Readiness Scale (ITRS) for pre-service teachers in China," *PLoS One*, vol. 19, no. 1, 2024, doi: [10.1371/journal.pone.0315723](https://doi.org/10.1371/journal.pone.0315723).
- [6] P. W. Dhari, W. Wajnah, and N. Susanti, "Analisis Kesiapan Guru dalam Menerapkan Pembelajaran Tematik di Madrasah Ibtidaiyah," *J. Integr. Elem. Educ.*, vol. 1, no. 2, 2021, doi: [10.21580/jieed.v1i2.7749](https://doi.org/10.21580/jieed.v1i2.7749).
- [7] M. T. Larasati, A. N. W. Aini, S. K. Ati, V. Fatimah, M. Nurjanah, and N. P. Adi, "Studi Deskriptif Implementasi Kearifan Lokal sebagai Upaya Penguatan Identitas dan Karakter Peserta Didik Kelas IV di Madrasah Ibtidaiyah," *Elem. J. Inov. Pendidik. Dasar*, vol. 5, no. 3, 2025, doi: [10.51878/elementary.v5i3.6722](https://doi.org/10.51878/elementary.v5i3.6722).
- [8] Y. Hidayah, Y. A. Feriandi, and E. A. V. Saputro, "Transformasi Kearifan Lokal Jawa dalam Pendidikan Karakter Sekolah Dasar," *AULADUNA J. Pendidik. Dasar Islam*, vol. 6, no. 1, 2019, doi: [10.24252/auladuna.v6i1a6.2019](https://doi.org/10.24252/auladuna.v6i1a6.2019).
- [9] A. Daga, D. Wahyudin, and R. Susilana, "Implementation of Teacher's Pedagogical Competence In The 2013

- Curriculum Learning Process in Elementary School," *Eduvest - J. Univers. Stud.*, vol. 2, no. 5, 2022, doi: 10.36418/edv.v2i5.439.
- [10] A. Nurdiansyah, V. Erviana, and N. Mohammad, "Professional Competence of Teachers on Thematic Learning in Elementary Education," *Int. J. Learn. Reform. Elem. Educ.*, vol. 2, no. 1, 2023, doi: 10.56741/ijlree.v2i01.109.
- [11] I. Fitrianto and M. Farisi, "Integrating Local Wisdom into 21st Century Skills: A Contextual Framework for Culturally Relevant Pedagogy in Rural Classrooms," *Int. J. Post Axial Futur. Teach. Learn.*, vol. 3, no. 2, 2025, doi: 10.59944/postaxial.v3i2.444.
- [12] N. Zebua and P. F. P. Malik, "Analysis of Local Wisdom Integration in Biology Learning to Support Education for Sustainable Development (ESD)," *J. Biog.*, vol. 10, no. 2, 2025, doi: 10.30605/biogenerasi.v10i2.5596.
- [13] I. Made *et al.*, "Needs Analysis: Development of Contextual Approach Learning Tools Based on Local Balinese Wisdom," *J. Educ. Technol.*, vol. 7, no. 4, 2024, doi: 10.23887/jet.v7i4.69933.
- [14] R. Diana, A. Rohmaniyah, and R. Kamal, "Reconstruction of Contextual Learning Model Based on Local Wisdom in Sharpening Critical Thinking," *J. Pendidik. Glas.*, vol. 9, no. 1, 2025, doi: 10.32529/glasser.v9i1.3981.
- [15] D. Merika, H. Herpratiwi, and H. Handoko, "Developing a Performance Assessment Instrument for Integrated Thematic Learning in Elementary School Based on Local Wisdom: A Needs Analysis," *Int. J. Educ. Stud. Soc. Sci.*, vol. 7, no. 2, 2022, doi: 10.53402/ijess.v2i3.101.
- [16] N. Hasan, R. Yunus, and M. Ahmad, "Construction of Responsibility Character of Elementary School Students through Karawo Local Wisdom Values," *J. Basic Educ. Res.*, vol. 6, no. 2, 2025, doi: 10.37251/jber.v6i2.1829.
- [17] F. Fairus, B. Maftuh, A. Sujana, R. Pribadi, and F. Azzahra, "Local Wisdom Integration in Learning Implementation in Elementary School," *J. Cakrawala Pendas*, vol. 10, no. 2, 2024, doi: 10.31949/jcp.v10i2.8029.
- [18] N. F. Soumena and R. Harahap, "Improving the Quality of Merdeka Curriculum Through Local Wisdom Based on Literary Works," *J. Aceh Stud.*, vol. 2, no. 1, 2025, doi: 10.63924/joas.v2i1.113.
- [19] P. Alcaide-Pulido, B. Gutiérrez-Villar, E. Ordóñez-Olmedo, and M. Pérez-Escolar, "Analysis of Faculty Readiness for Online Teaching: Assessing Impact and Adaptability in Diverse Educational Contexts," *Smart Learn. Environ.*, vol. 12, no. 5, 2025, doi: 10.1186/s40561-024-00353-2.
- [20] R. Scherer, S. Howard, J. Tondeur, and F. Siddiq, "Profiling Teachers' Readiness for Online Teaching and Learning in Higher Education: Who's Ready?," *Comput. Hum. Behav.*, vol. 118, p. 106675, 2021, doi: 10.1016/j.chb.2020.106675.
- [21] S. De Guia, E. Coronel, and Cruzat Rita, "Pedagogical Competence of Pre-Service Teachers of Sta. Teresa College," *Int. Multidiscip. Res. J.*, vol. 2, no. 1, 2025, doi: 10.54476/ioer-imrj/350780.
- [22] F. Abdumuhammad, "Developing Lesson Planning Competence Based On A Differentiated Approach In Future Teachers," *Int. J. Pedagog.*, vol. 5, no. 5, pp. 292-294, 2025, doi: 10.37547/ijp/volume05issue05-74.
- [23] S. Mok and F. Staub, "Does Coaching, Mentoring, and Supervision Matter for Pre-Service Teachers' Planning Skills and Clarity of Instruction? A Meta-Analysis of (Quasi-)Experimental Studies," *Teach. Teach. Educ.*, vol. 107, p. 103484, 2021, doi: 10.1016/j.tate.2021.103484.
- [24] M. Cevikbas, J. König, and M. Rothland, "Empirical Research on Teacher Competence in Mathematics Lesson Planning: Recent Developments," *Zdm*, vol. 56, pp. 1-13, 2023, doi: 10.1007/s11858-023-01487-2.
- [25] H. Hermawan, J. Surya, and P. Ponijan, "Teacher Readiness in Preparing Learning Media," *JETISH J. Educ. Technol. Inf. Soc. Sci. Heal.*, vol. 3, no. 1, 2024, doi: 10.57235/jetish.v3i1.1966.
- [26] R. Scherer, F. Siddiq, S. Howard, and J. Tondeur, "The More Experienced, The Better Prepared? New Evidence on The Relation Between Teachers' Experience and Their Readiness for Online Teaching and Learning," *Comput. Hum. Behav.*, vol. 139, p. 107530, 2022, doi: 10.31234/osf.io/zm9eh.
- [27] J. Vaiopoulou, T. Papagiannopoulou, and D. Stamovlasis, "Attitudes Towards STEM Education: Nonlinear Effects of Teachers' Readiness and The Crucial Role of Affective Conditions," *Front. Educ.*, vol. 8, 2024, doi: 10.3389/educ.2023.1244678.
- [28] K. Bayley, "The Impact on Practice of Authentic Assessment as Part of a University Postgraduate Taught Programme of Study for Nursing And Healthcare Professionals: A Literature Review.," *Nurse Educ. Today*, vol. 120, p. 105622, 2022, doi: 10.1016/j.nedt.2022.105622.