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Enhancing Early Childhood Teachers' Creativity through the Implementation of the *Merdeka* Curriculum: An Experimental Study in Surakarta

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Abstract

Creativity is a crucial skill for early childhood education (ECE) teachers in fostering innovative and adaptive learning environments. The *Merdeka Curriculum* (Independent Curriculum) in Indonesia provides teachers with the flexibility to design and implement innovative teaching strategies tailored to students' needs. This study examines the impact of the *Merdeka Curriculum* on ECE teachers' creativity using a quantitative experimental method with a One-Group Pretest-Posttest Design. A total of 100 ECE teachers in Surakarta participated in this study. Creativity was assessed before and after three months of curriculum implementation. The results showed a significant increase in teachers' creativity scores from 49.80 (pretest) to 89.55 (posttest). A paired-samples *t*-test confirmed a statistically significant difference ($p < 0.001$), and the *N*-Gain score analysis indicated a high level of effectiveness (0.78). These findings suggest that the *Merdeka Curriculum* fosters teacher creativity by allowing greater autonomy in instructional design and innovative pedagogical practices. However, challenges such as limited professional training and inadequate resources hinder optimal curriculum implementation. This study contributes to the existing literature on teacher creativity by demonstrating the effectiveness of curriculum flexibility in enhancing instructional innovation. Future research should explore the long-term impacts across different regions and examine policy interventions that support sustainable teacher development in ECE settings.

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Introduction

Early childhood education (ECE) plays a crucial role in developing children's potential, ranging from basic life skills to their ability to socialize with their surroundings (Jardine, 2023). Creativity has become one of the key competencies that need to be cultivated in early childhood (Yildirim & Yilmaz, 2023). This is because creativity serves as a fundamental skill for children to navigate an increasingly advanced world that demands constant and rapid change (Mayar et al., 2022). As a result, ECE teachers are required to continuously foster children's creativity in all aspects of learning.

In response to this need, the Indonesian government, through the Ministry of Education and Culture, introduced the *Merdeka Curriculum* (Independent Curriculum), which emphasizes a student-centered learning approach. This curriculum aims to develop students' independence and creativity while ensuring that learning is meaningful and enjoyable (Jannah & Rasyid, 2023; Khotimah et al., 2023). Within the ECE setting, the Independent Curriculum grants teachers the flexibility to design and explore learning materials while making optimal use of various educational media to support the learning process (Indriyani & Jannah, 2023; Qadafi et al., 2023).

The Independent Curriculum indirectly demands that ECE teachers be creative in designing engaging and stimulating learning experiences for young children (Almarisi, 2023). A creative teaching approach fosters a joyful and innovative classroom atmosphere. High-quality ECE teachers are those who continuously develop their creative skills, which in turn enhances

their teaching effectiveness (Boudouaia et al., 2024; Titrek et al., 2023). Moreover, creative ECE teachers are expected to play a significant role in achieving institutional and organizational goals while aligning with the developmental needs of young learners (Milić & Bjelica, 2022).

Creative thinking is considered the highest level of cognitive processing, surpassing basic and critical thinking skills (Guohui & Xiujin, 2024; Štemberger & Čotar konrad, 2022). In his book *Creativity*, Guilford (1950) defines creative thinking as a divergent thinking process in which individuals generate multiple alternative solutions to a given problem. This ability consists of four key components: fluency (the ability to produce a large number of ideas), flexibility (the ability to generate diverse ideas), originality (the ability to produce unique ideas), and elaboration (the ability to develop and refine ideas). A ECE teacher with strong creative thinking skills is often characterized by curiosity and enthusiasm for exploring new activities for their students (Massie et al., 2022).

Research by Arviansyah & Shagena (2022) highlights that the Independent Curriculum enhances ECE teachers' creativity by providing them with more opportunities to experiment and take initiative in the teaching-learning process. Similarly, Shalehah (2023) found that ECE teachers enjoy implementing the Independent Curriculum because it allows them the freedom to develop more relevant and interactive learning materials. Furthermore, Khasanah et al., (2022) explains that ECE teachers can integrate local wisdom into the curriculum, making lessons more meaningful and contextually appropriate for young learners.

However, in practice, many ECE teachers have yet to fully understand and implement the Independent Curriculum effectively. Many still rely on traditional teaching approaches that prioritize information delivery over student development. Preliminary data collected through a questionnaire distributed via Google Forms to 50 ECE teachers in Surakarta revealed that 70% of them lacked a deep understanding of the curriculum. Additionally, many schools tend to replicate each other's curricula rather than creating unique and innovative learning experiences. As a result, teaching practices across different schools remain uniform, with little innovation distinguishing one institution from another. The findings also indicate that teachers struggle to develop creative classroom activities.

Many teachers still feel more comfortable using the 2013 Curriculum and tend to blend its components into their implementation of the Independent Curriculum. Ismayati Marfuah, (2023) notes that many teachers are still in the process of transitioning from the 2013 Curriculum to the Independent Curriculum. Furthermore, some teachers continue to use monotonous and uninspiring teaching methods, such as relying heavily on worksheets, which can lead to passive and uncreative students.

This study seeks to address these gaps by conducting an experimental study on the implementation of the Independent Curriculum in early childhood education. The experiment involves ECE teachers in Surakarta and aims to measure their creativity levels before and after adopting the curriculum. The primary objective is to generate empirical data that can inform future curriculum evaluation and development. Additionally, this study aspires to contribute significantly to the existing literature and ECE educational practices in Surakarta and Indonesia. Through a quantitative research approach, this study provides scientific evidence on the benefits of the Independent Curriculum in fostering teacher creativity, which, in turn, will positively impact young children's learning experiences in ECE settings.

Methods

This study employs a quantitative experimental research method using a One-Group Pretest-Posttest Design. In this design, a pretest is conducted to assess the creativity of early childhood education (ECE) teachers in Class A before the implementation of the *Merdeka Curriculum*, followed by a posttest to measure improvements in creativity after its implementation. The research sample consists of 100 ECE teachers in Class A in the city of Surakarta. The One-Group Pretest-Posttest design is illustrated in Figure 1 below.



Figure 1. One-Group Pretest-Posttest Research Design

Description:

- **O1** : Pretest Score (Before the Treatment)
- **X** : Treatment
- **O2** : Posttest Score (After the Treatment)

However, this design has limitations in internal validity due to the absence of a control group. This may introduce bias in interpreting the results, as it cannot be definitively determined that the observed changes are solely caused by the treatment. Therefore, the use of a Quasi-Experimental Design with a control group is recommended for future research to enhance the validity of findings.

The research instruments used in this study assess the creativity of ECE teachers in Class A. Before use, the validity and reliability of the instruments were ensured through a pilot test, and the results were analyzed. Data collection involved a combination of observations, tests, and interviews. Observations were conducted by researchers using a validated observation guide. The tests consisted of pretest and posttest questions developed based on creativity indicators. Additionally, semi-structured interviews were conducted to gain deeper insights into the factors influencing teachers' creativity.

Once the data were collected, they were analyzed using descriptive quantitative and inferential statistics, employing gain score analysis and paired-sample t-tests via SPSS. Before conducting the paired-sample t-test, a normality test was performed using the Kolmogorov-Smirnov or Shapiro-Wilk test to ensure that the data were normally distributed. The data analysis process followed several stages. First, pretest and posttest scores were analyzed descriptively to observe the distribution of teachers' creativity levels before and after the treatment. Then, a normality test was conducted to confirm the normal distribution of the data. Next, the effectiveness of the treatment was assessed by analyzing the change in pretest and posttest scores using the N-Gain Score. Following this, a paired-sample t-test was conducted to determine whether there was a statistically significant difference between the pretest and posttest scores. Finally, the results were interpreted by comparing the statistical findings with relevant theories to evaluate the effectiveness of the *Merdeka Curriculum* in enhancing ECE teachers' creativity.

The gain score formula used in this study is presented in Figure 2 below.

$$g = \frac{Sf - Si}{100 - Si}$$

Figure 2. Gain Score Formula

Description:

- **g** = Gain Score
- **Sf** = Mean Posttest Score
- **Si** = Mean Pretest Score

The effectiveness category based on the gain score is adapted from Hake (1999). However, in educational research on creativity, additional effectiveness measures such as Cohen's d or Repeated Measures ANOVA are recommended for further analysis.

Table 1. Gain Score Interpretation

Gain Score	Effectiveness Category
$g \geq 0,7$	High (Effective)
$0,7 > g \geq 0,3$	Moderate (Fairly Effective)
$g < 0,3$	Low (Not Effective)

The pretest and posttest questions used to assess the impact of the *Merdeka Curriculum* on ECE teachers' creativity are presented in Table 2 below.

Table 2. Pretest and Posttest Question Indicators

No	Indicator	Sub-Indicator	Question Numbers
1	Idea Generation	Finding solutions to problems through brainstorming with colleagues or asking open-ended questions to students.	1, 2, 3, 4
2	Flexibility	Adapting teaching to facilitate different student learning styles.	5, 6, 7, 8
3	Originality	Creating new games and activities to support learning and planning projects that enhance students' creativity.	9, 10, 11, 12
4	Risk-Taking	Implementing new teaching methods and encouraging students to take risks and try new things.	13, 14, 15, 16
5	Elaboration	Expanding students' ideas to create more complex projects and providing opportunities for students to reflect on their learning.	17, 18, 19, 20

Source: Adapted and developed from Nikkola et al., (2022) and Tok (2022).

Instrument validity was tested using Pearson Product-Moment Correlation, which confirmed that the instrument was valid, as the r -value exceeded the critical r -table value at a 0.01 significance level. Reliability testing was conducted using Cronbach's Alpha, which indicated a high reliability score of 0.809, exceeding the minimum threshold of 0.6. The results of the reliability test are presented in Table 3 below.

Table 3. Instrument Reliability Test Results

Reliability Statistic	
Cronbach's Alpha	N of Items
.809	20

Result

The study's findings were obtained through pre-test and post-test activities involving 100 early childhood education (ECE) teachers in Surakarta City. The pre-test was conducted at the beginning of the study to assess the creativity of ECE class A teachers before implementing the *Merdeka Curriculum* in classroom learning. After the pre-test, the teachers underwent an intervention in which the *Merdeka Curriculum* was implemented in the learning process for three months.

The pre-test results indicated that the average creativity score of the teachers was 49.80. After the three-month implementation period, a post-test was conducted to evaluate changes in the teachers' creativity levels. The post-test results showed a significant increase in the average creativity score of ECE class A teachers, rising to 89.55.

The pre-test and post-test results from the implementation of the *Merdeka Curriculum* to measure ECE class A teachers' creativity are presented in Table 4.

Table 4. Paired Sample Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair	Pre-test	49.80	100	10.048	1.005
	Post-test	89.55	100	3.833	0.383

The paired sample t -test results show that the average creativity score of teachers increased from 49.80 in the pre-test to 89.55 in the post-test. The standard deviation for the pre-test was 10.048, while the post-test standard deviation decreased to 3.833, indicating that the post-test results were more homogeneous than the pre-test results. Similarly, the smaller

standard error mean in the post-test (0.383) compared to the pre-test (1.005) suggests that the mean estimate was more stable after the intervention.

Based on the paired sample correlation test, the correlation coefficient was found to be $r = -0.029$ with a significance value of 0.778. Since the significance value (0.778) is greater than 0.05, this indicates no significant correlation between the pre-test and post-test variables, as shown in Table 5.

Table 5. Paired Sample Correlation

	N	Correlation	Sig.
Pair Pre-test & Post-test	100	-0.029	0.778

Although no significant correlation was found, the paired samples t-test results confirmed a significant difference between the pre-test and post-test scores. This is evidenced by the *Sig. (2-tailed) < 0.001*, indicating a statistically significant effect of the *Merdeka Curriculum* on increasing the creativity of ECE class A teachers in Surakarta City (Table 6).

Table 6. Paired Samples Test

Table 3. Paired Samples Test									
Paired Differences									
95% Confidence Interval of the Difference									
		Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig. (2-tailed)
Pair		-39.750	10.857	1.086	-41.904	-37.596	-36.614	99	<0.001

The *t* value of -36.614, with *df* = 99 and *Sig. (2-tailed) < 0.001*, confirms that the increase in the teachers' creativity scores after implementing the *Merdeka Curriculum* was statistically significant.

Additionally, an N-Gain analysis was conducted to measure the effectiveness of the intervention in enhancing teacher creativity. The average N-Gain score obtained was 0.78, which falls into the *high* category. Table 4 presents the pre-test and post-test scores processed based on N-Gain values.

Table 7. Pre-test and Post-test Scores Based on N-Gain

Score Type	Pre-test	Post-test	N-Gain	Category
Highest Score	75	95	0.92	High
Lowest Score	30	80	0.43	Medium
Total	4980	8955	78	Medium
Average	49.8	89.55	0.78	High

Overall, the findings of this study confirm that the implementation of the *Merdeka Curriculum* positively impacted the creativity of ECE class A teachers in Surakarta City. The increase in creativity was observed among nearly all participants, as evidenced by the N-Gain score distribution, with the majority falling into the *High* category. Although some teachers experienced greater improvements than others, the overall results suggest that the curriculum effectively promotes innovation in the teaching process.

However, despite these positive findings, several factors may have influenced the study's results. The intervention period of only three months may not have been sufficient to observe the long-term effects of the curriculum on teacher creativity. Additionally, since this study focused exclusively on ECE class A teachers in Surakarta City, the findings cannot yet be generalized to a broader population. Therefore, further research with a larger scope and extended duration is needed to explore the long-term impact of the *Merdeka Curriculum* on the creativity of ECE teachers in different regions.

This study demonstrates that implementing the *Merdeka Curriculum* significantly enhances the creativity of ECE teachers. Statistical analysis using the paired sample t-test confirms a significant difference between pre-test and post-test scores ($p < 0.001$), while the N-Gain score analysis indicates a *high* level of improvement (0.78).

These results confirm that the flexibility and innovative approach of the curriculum can be an effective strategy for enhancing teacher creativity, ultimately contributing positively to the quality of early childhood education.

Discussion

A study involving 100 early childhood education (ECE) teachers in Surakarta revealed that the implementation of the Independent Curriculum has significantly enhanced teachers' creativity. The average creativity score increased from 49.80 before implementation to 89.55 after three months, with a t-test result indicating statistical significance ($p < 0.001$). These findings support the ongoing educational reform and emphasize the importance of innovation in teachers' professional development. The curriculum's flexibility allows teachers to adapt learning materials and methods to students' needs. This adaptability fosters a more engaging and meaningful learning experience (Rasmani et al., 2023; Zakiyyah & Kuswanto, 2021) (.

The Independent Curriculum grants teachers the freedom to experiment with more dynamic and interactive teaching methods. Educators can explore various learning resources and design activities tailored to children's interests and needs (Alfaeni & Asbari, 2023; Daulay & Fauziddin, 2023). Furthermore, this curriculum fosters collaboration among teachers in designing and sharing best practices. Strengthening professional learning communities has been shown to enhance instructional effectiveness (Alimudin et al., 2023). This approach has demonstrated significant potential in transforming the paradigm of early childhood education in Indonesia.

The study also found a positive correlation between professional training and increased teacher creativity. Teachers who participated in specialized training on the Independent Curriculum showed significant improvements in generating new ideas and solving learning challenges. They also displayed greater confidence in implementing innovative methods (Rizal et al., 2022; Silalahi & Sahara, 2022). However, disparities in training access remain an issue. Some teachers lack opportunities to attend such programs, limiting the curriculum's overall impact. Policies ensuring equitable access to professional development are essential.

Despite its benefits, the study identified several challenges in implementing the Independent Curriculum. Limited resources, such as inadequate learning facilities and teaching materials, hinder effective implementation (Ratnawati et al., 2023; Sasmita & Darmansyah, 2022). Additionally, administrative support is often insufficient, creating further obstacles. Teachers' heavy workloads may also reduce their ability to design creative and innovative lessons (Wijayanti & Herawati, 2024). Addressing these challenges requires strategic efforts to sustain teacher creativity.

The study's findings align with previous research emphasizing the importance of curriculum flexibility in fostering teacher creativity. A study by Fadlillah et al. (2024) highlighted how agrarian-based learning approaches support teacher innovation. Meanwhile, research by Rohmah et al. (2024) noted that many teachers struggle to translate learning objectives into practical applications. These findings are consistent with Setyaningsih et al. (2024), who identified resource limitations as a key challenge, especially in underprivileged areas. Such challenges highlight the need for targeted policy interventions.

Additionally, research by Yafie et al. (2024) found that the effectiveness of the Independent Curriculum varies depending on a school's accreditation level. This reinforces the notion that institutional context plays a crucial role in its successful implementation. Moreover, Kartika et al. (2024) discovered that schools adopting project-based learning innovations experienced increased engagement from both teachers and students. These results align with the present study, further demonstrating that the Independent Curriculum fosters creativity in teaching.

To address these challenges, collaborative efforts between the government, educational institutions, and the community are necessary. Increased budget allocation and comprehensive training programs are critical to ensuring the curriculum's successful implementation

(Suryaningsih et al., 2023). Strengthening cooperation among stakeholders can also enhance curriculum effectiveness. Furthermore, supportive policies and adequate infrastructure are essential for optimizing curriculum adoption across early childhood education institutions. These measures can help sustain long-term educational innovation.

This study makes a significant contribution to the theory, practice, and methodology of early childhood education teacher development. It reinforces previous findings that project-based approaches enhance creativity and support instructional design. However, its limited geographic coverage and short implementation duration present research constraints. Future studies should expand to a national scale with a longer timeframe. Further investigation into the effectiveness of teacher training programs is also recommended.

Conclusion

This study confirms that the implementation of the *Kurikulum Merdeka* in early childhood education has a significant impact on enhancing the creativity of ECE teachers, particularly those teaching Class A. The pre-test and post-test analysis revealed an increase in the average score from 49.80 to 89.55 after three months of curriculum implementation. The N-Gain formula analysis resulted in an average score of 0.78, which falls within the high or effective category, indicating that *Kurikulum Merdeka* has a positive impact on improving ECE teachers' creativity. Additionally, the Paired Samples T-Test showed a significant difference between the pre-test and post-test results, with a p -value of < 0.001 , further reinforcing the curriculum's effectiveness in enhancing teacher creativity.

The findings suggest that the flexibility of *Kurikulum Merdeka* enables teachers to develop innovative teaching methods tailored to students' needs, granting them greater freedom in designing lesson materials and utilizing creative learning media. However, the study also identifies several challenges, including limited educational resources, uneven professional training, and administrative barriers that hinder optimal implementation. Therefore, ECE institution administrators and policymakers are encouraged to strengthen teacher training programs based on *Kurikulum Merdeka* and provide innovative learning resources. Additionally, a project-based learning approach in early childhood education should be reinforced to stimulate teachers' creativity. This study recommends further exploration of *Kurikulum Merdeka* implementation across various contexts, including broader geographic areas, parental involvement levels, technology integration in teaching, and the influence of the school environment on ECE teachers' creativity. Future studies with a wider scope and longer duration are needed to gain a deeper understanding of the long-term impact of *Kurikulum Merdeka* on teacher creativity and the overall quality of early childhood education.

Declarations

Author contribution statement

The contributions of each author to this study were as follows: Wahyuningsih was responsible for conceptualizing the study and conducting the analysis. Rasmani contributed to writing the manuscript and critically revising its content. Winarji played a key role in data analysis and interpretation, while Nurjanah provided technical and material support. Jumi atmoko supervised the research process, ensuring its overall direction and quality. Fitrianingtyas conducted a comprehensive review of the manuscript, and Zuhro contributed to the study's design. Each author played a vital role in the successful completion of this research.

Declaration of Interests Statement

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References

- Alfaeni, S. I., & Asbari, M. (2023). Kurikulum Merdeka: Fleksibilitas Kurikulum bagi Guru dan Siswa. *Journal of Information Systems and Management (JISMA)*.
- Alimudin, Nihwan, & Cahyo, E. D. (2023). Pelatihan Implementasi Kurikulum Merdeka Bagi Guru PAUD di Kecamatan Sekampung Lampung Timur. *Dedikasi: Jurnal Pengabdian Masyarakat*.
- Almarisi, A. (2023). Kelebihan dan Kekurangan Kurikulum Merdeka pada Pembelajaran Sejarah dalam Perspektif Historis. *MUKADIMAH: Jurnal Pendidikan, Sejarah, Dan Ilmu-Ilmu Sosial*. <https://doi.org/10.30743/mkd.v7i1.6291>
- Arviansyah, M. R., & Shagena, A. (2022). Efektivitas Dan Peran Dari Guru Dalam Kurikulum Merdeka Belajar. *Lentera*.
- Boudouaia, A., AL-Qadri, A. H., Houichi, A., & Diafi, S. (2024). A study on the effect of school culture on teachers' commitment to curriculum implementation: The mediating role of self-efficacy and job satisfaction. *Heliyon*, 10(8). <https://doi.org/10.1016/j.heliyon.2024.e29183>
- Daulay, M. I., & Fauziddin, M. (2023). Implementasi Kurikulum Merdeka Pada Jenjang PAUD. *JURNAL BUNGA RAMPAI USIA EMAS*. <https://doi.org/10.24114/jbrue.v9i2.52460>
- Fadlillah, M., Oktavianingsih, E., & Lisdayana, N. (2024). The Concept of an Independent Curriculum with an Agrarian Insight in Early Childhood: Perspectives of Indonesian Teachers. *Qualitative Report*, 29(7), 1807–1820. <https://doi.org/10.46743/2160-3715/2024.6721>
- Guilford, J. P. (1950). Creativity. *American Psychologist*, 5(9), 444–454. <https://doi.org/10.1037/h0063487>
- Guohui, Z., & Xiujin, G. (2024). Integrating Play-Based Learning in Early Childhood Physical Education: Benefits and Challenges. *Revista de Psicologia Del Deporte*, 33(4), 31–39. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85212756176&partnerID=40&md5=c936cff4661146a1b675f50a9582db9b>
- Hake, R. R. (1999). Analyzing change/gain scores. *Unpublished.[Online] URL: Http://Www.Physics.Indiana.Edu/~Sdi/AnalyzingChange-Gain.Pdf*.
- Indriyani, I., & Jannah, R. (2023). Persiapan Implementasi Kurikulum Merdeka. *Prospek*.
- Ismayati Marfuah. (2023). Problematika Guru PAUD dalam Menerapkan Kurikulum Merdeka Belajar. *Tarbiyah Jurnal: Jurnal Keguruan Dan Ilmu Pendidikan (Tarbiyah Journal: Journal of Teaching and Educational Sciences)*, 1, 11.
- Jannah, M. M., & Rasyid, H. (2023). Kurikulum Merdeka: Persepsi Guru Pendidikan Anak Usia Dini. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*. <https://doi.org/10.31004/obsesi.v7i1.3800>
- Jardine, D. W. (2023). An early childhood education. *Journal of Curriculum and Pedagogy*. <https://doi.org/10.1080/15505170.2023.2191355>
- Kartika, R. S., Sabtohadhi, J., Yuniarti, L., Halik, A., Yohanitas, W. A., Yasin, A., Sacipto, R., & Harefa, H. (2024). Fostering innovation in the perspective of the independent curriculum of Boyolali regency. *Journal of Infrastructure, Policy and Development*, 8(12). <https://doi.org/10.24294/jipd.v8i12.6709>
- Khasanah, N., Irawan, R. S., Latara, A. Z., Sulistiani, I., & Ilma, A. U. (2022). Pendampingan Pendidik Dalam Menerapkan Kurikulum Merdeka Pada PAUD Kusuma Bangsa Desa Prangat Baru. *Jurnal Pengabdian Kepada Masyarakat Nusantara (JPkMN)*.
- Khotimah, N., Sutarto, J., & Diana. (2023). Provision and Implementation of Inclusive Education in Early Childhood Centers: A Comparative Case Study of Two Semarang-Based Institutions. *Golden Age: Jurnal Ilmiah Tumbuh Kembang Anak Usia Dini*, 8(2), 99–108. <https://doi.org/10.14421/jga.2023.82-05>
- Massie, M. H., Capron Puozzo, I., & Boutet, M. (2022). Teacher Creativity: When Professional Coherence Supports Beautiful Risks. *Journal of Intelligence*. <https://doi.org/10.3390/jintelligence10030062>
- Mayar, F., Uzlal, U., Nurhamidah, N., Rahmawati, R., & Desmila, D. (2022). Pengaruh Lingkungan Sekitar Untuk Pengembangan Kreativitas Anak Usia Dini. *Jurnal Obsesi: Jurnal Pendidikan*

- Anak Usia Dini*, 6(5), 4794–4802. <https://doi.org/10.31004/obsesi.v6i5.2665>
- Milić, S., & Bjelica, D. (2022). The impact of the quality of teacher instructions on the development of creativity in preschool children. *Bastina*. <https://doi.org/10.5937/bastina32-32947>
- Nikkola, T., Reunamo, J., & Ruokonen, I. (2022). Children's creative thinking abilities and social orientations in Finnish early childhood education and care. *Early Child Development and Care*. <https://doi.org/10.1080/03004430.2020.1813122>
- Qadafi, M., Maulidya Ulfah, Miftachul Huda, & Agustiniingsih, N. (2023). Fostering Independent Learning in Early Childhood: A Case Study on Montessori Pedagogy at PAUD Montessori Futura Indonesia. *Golden Age: Jurnal Ilmiah Tumbuh Kembang Anak Usia Dini*, 8(3), 109–120. <https://doi.org/10.14421/jga.2023.83-01>
- Rasmani, U. E. E., Nurjanah, N. E., Fitrianingtyas, A., Sarifudin, A., Jumiatmoko, Wahyuningsih, S., Zuhro, N. S., Widiastuti, Y. K. W., & Winarji, B. (2023). Advertising Management of Early Childhood Education Institution: Challenges, Opportunities, and Development. In *European Journal of Educational Research*. <https://doi.org/10.12973/eu-jer.12.4.1731>
- Ratnawati, S., Irmawati, Nur'Afita, L. L., & Marpuah, D. (2023). Installation of Religious Moderation in The Society 5.0 Era to Prevent Radicalism in Early Children in Kindergarten, Pangkah District. *Child Education Journal*, 5(2), 132–143. <https://doi.org/10.33086/cej.v5i2.4579>
- Rizal, M., Najmuddin, N., Iqbal, M., Zahriyanti, Z., & Elfiadi, E. (2022). Kompetensi Guru PAUD dalam Mengimplementasikan Profil Pelajar Pancasila di Sekolah Penggerak. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*. <https://doi.org/10.31004/obsesi.v6i6.3415>
- Rohmah, Z., Hamamah, H., & Junining, E. (2024). "I Know This Is Good, but I Am Confused": English Teachers' Self-Efficacy in Implementing the Independent Curriculum. *Studies in English Language and Education*, 11(2), 820–837. <https://doi.org/10.24815/siele.v11i2.34804>
- Sasmita, E., & Darmansyah. (2022). Analisis faktor-faktor penyebab kendala guru dalam menerapkan kurikulum merdeka. *Jurnal Pendidikan Dan Konseling*.
- Setyaningsih, A., Bagea, I., Mulyadi, M., Sarip, M., Agustiwi, A., Mubarak, E. S., & Haetami, A. (2024). Acceptance of independent curriculum in North Kalimantan. *Journal of Education and Learning*, 18(3), 923–929. <https://doi.org/10.11591/edulearn.v18i3.20984>
- Shalehah, N. A. (2023). Pembelajaran Berbasis Proyek sebagai Bentuk Implementasi Kurikulum Merdeka di Satuan PAUD. *Islamic EduKids*. <https://doi.org/10.20414/iek.v5i1.7139>
- Silalahi, R. Y. B., & Sahara, S. (2022). Upaya Pengembangan SDM Guru PAUD Berbasis Kompetensi Profesional. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*. <https://doi.org/10.31004/obsesi.v6i6.2691>
- Štemberger, T., & Čotar konrad, S. (2022). Preschool teacher's beliefs about creativity and children creativeness. *Journal for the Education of Gifted Young Scientists*. <https://doi.org/10.17478/jegys.1053261>
- Suryaningsih, N. M. A., Cahaya, I. M. E., & Endah Poerwati, C. (2023). Pendampingan Implementasi Proyek Penguatan Profil Pancasila pada Anak Usia Dini Di Kecamatan Abiansema. *Sevanam: Jurnal Pengabdian Masyarakat*. <https://doi.org/10.25078/sevanam.v2i2.2338>
- Titrek, O., Yilmaz, N., & Özgüray, Ö. (2023). The Creativity Levels of Preschool Teachers. *International Journal on Lifelong Education and Leadership*. <https://doi.org/10.25233/ijlel.1217345>
- Tok, E. (2022). Pre-Service Preschool Teachers' Metacognitive Awareness and Creative Thinking Domains. *Shanlax International Journal of Education*. <https://doi.org/10.34293/education.v10i3.4675>
- Wijayanti, P. S., & Herawati, T. R. (2024). Pendampingan Pengawas Sekolah Penggerak PAUD Dalam Peningkatan Kompetensi Coaching Kepala Sekolah. *SWARNA: Jurnal Pengabdian Kepada Masyarakat*. <https://doi.org/10.55681/swarna.v3i2.1210>
- Yafie, E., Pramono, Sutama, I. W., Samawi, A., Khairuddin, K. F. B., & Asyhari, R. (2024). Development and Validation of a Mobile Application for Early Childhood Nutrition Monitoring: A Multisensor-Based Non-Contact Anthropometric System. *Golden Age: Jurnal*

- Ilmiah Tumbuh Kembang Anak Usia Dini*, 9(3), 421–433.
<https://doi.org/10.14421/jga.2024.93-05>
- Yildirim, Y., & Yilmaz, Y. (2023). Promoting creativity in early childhood education. *PLoS ONE*.
<https://doi.org/10.1371/journal.pone.0294915>
- Zakiyyah, N., & Kuswanto. (2021). Urgensi Kreativitas Guru PAUD dalam Memfasilitasi Perkembangan Anak. *Jurnal Pendidikan Tambusai*.