



## Relevance of the Early Childhood Education Study Program Curriculum to Work Needs in the 21st Century

Asep Mulyana<sup>1</sup>, Syifaузakia<sup>2✉</sup>, Ayu Vinlandari Wahyudi<sup>3</sup>, Shifwatussolihat<sup>4</sup>  
<sup>1,2,3,4</sup>UIN Siber Syekh Nurjati Cirebon, Indonesia

### ABSTRACT:

The workforce tests the skills students acquire during their studies. This study aims to analyze how the curriculum of the Early Childhood Islamic Education Study Program aligns with the competencies required in the workforce. In addition, this study evaluates the competitiveness of alumni and the level of satisfaction of the institutions that employ them. This study employs a mixed method, also known as a mixed method, along with a sequential explanatory design. Random sampling techniques selected a total of 45 alumni and 16 alumni users as samples. We collected quantitative data through surveys and obtained qualitative data through structured interviews and focus group discussions. We analyze quantitative data using descriptive statistics and interactively analyze qualitative data. The results showed that 97.78% of courses are relevant to work needs, and 98% of alumni competencies are in accordance with the demands of the workforce. However, the curriculum requires adjustments to face the challenges of the 21st century, such as technology integration, cooperative learning, application of differentiated learning, and a holistic learning approach. Additionally, the curriculum needs to adapt to current trends in early childhood Islamic education, including emotional management, smart device use, artificial intelligence, and STEAM-based learning design.

### Artikel History

Submission : August 12, 2024  
Received : October 31, 2024  
Accepted : November 01, 2024

### Keywords:

Curriculum, Early Childhood Islamic Education Study Program, Employment Needs

### Doi:

<https://doi.org/10.21009/jpud.v18i2.48975>

Creative Commons Attribution 4.0 International License.



## 1. Introduction

The world of work in the 21st century faces major challenges, especially in the era of Society 5.0, which demands mastery of technology, creativity, and adaptability (Chrismastianto dkk., 2023; Marwa dkk., 2024). According to data from the Central Statistics Agency for February 2022, Indonesia's unemployment rate stood at 5.83 percent of the country's 208.54 million working-age population, with nearly 14 percent, or around 29.1 million people, holding diplomas and bachelor's degrees (Badan Pusat Statistik, 2022; Kemnaker, 2024). This indicates a gap between higher education and the needs of the workforce, including in the field of early childhood Islamic education. This data can be a reference for universities to contribute to reducing the gap through a curriculum that is relevant to the demands of the times.

The early childhood Islamic education study program has an important role in preparing competent graduates to fill the need for early childhood education educators in Indonesia. In the even semester of the 2019/2020 academic year, there were 29,842 Raudhatul Athfal (RA) institutions in Indonesia, indicating the high demand for educators in this field (H. Nasution & Dalimunthe, 2021; Subandji dkk., 2020). However, an increase in the quality of educators who possess the pedagogical, personality, professional, and social competencies outlined in Law No. 14 of 2005 must balance the growth in the number of early childhood education institutions (Baly, 2021; Nadar dkk., 2021; Yusutria, 2019).

The college curriculum plays a strategic role in preparing graduates to meet professional needs. The Indonesian National Qualification Framework (KKNI) is designed to bridge the gap between the world of education and the world of work by aligning graduate competencies with the needs of the labor market (Ihsandi dkk., 2023; Lusiana & Agustiana, 2016). In the context of early childhood Islamic education, the curriculum must not only cover the basic competencies of early childhood education educators but also integrate technology and learning innovations that are relevant to 21st-century developments, such as the Science, Technology, Engineering, Arts, and Mathematics approach, digital literacy, and artificial intelligence-based learning (Makkasau' dkk., 2023; Novitasari dkk., 2022). In carrying out their duties, an early childhood education teacher is required to have competencies in accordance with government regulations. Law No. 14 of 2005, article 10, paragraph 1, outlines the competencies teachers must possess, including pedagogical competency, personality competency, professional competency, and social competency (Estriyanto, 2020; Riyadin, 2019). The pandemic has brought about rapid changes to the world of education, particularly for teachers. Early childhood education teachers are currently required to possess society 5.0 skills, which include digital literacy, understanding children's needs, planning learning that is appropriate for children, collaboration, creativity, personality, and the ability to adapt (Mu'minah & Suryaningsih, 2020; Ramadhan, 2023). Early Childhood Education Trends 2023 include distance and hybrid learning, a focus on emotional well-being, the use of phone and tablet apps, artificial intelligence, and programs that emphasize science, technology, engineering, arts, and mathematics. Six strategies for early childhood education teachers in the 21st century include integrated technology, cooperative learning structure, differentiated instruction, goal setting, cross-curriculum teaching, and assessment for learning (Ayubi, 2022; Wulandari & Solihat, 2023). Therefore, it is considered important to align the curriculum of the early childhood Islamic education study program to meet the work needs of this era.

Ahmad, S., and Nur, H. (2019) conducted research to examine the suitability of the early childhood education curriculum in Islamic universities, particularly in Islamic educational institutions, with the competencies needed by educators in the field. The results showed that several courses in the curriculum were not fully relevant to practical needs in the workplace. We need to revise the curriculum to incorporate more specific competencies in classroom management skills, Islamic value-based learning design, and effective communication skills. Fitriani, L., and Zulkarnain, R. (2020) conducted a study that explores the alignment between the Early Childhood Education curriculum and the qualifications and skills sought by Islamic educational institutions. The study found a competency gap, especially in specific skills such as the ability to observe child development and the application of Islamic values in the classroom. This study recommends improvements to the curriculum to make it more applicable and responsive to challenges in the world of work.

Kurnia, R., and Syafrudin, A. (2021) conducted a curriculum evaluation on the early childhood education study program based on Islamic education. The results show that aspects of project-based learning and field practice are still less than optimal in preparing graduates to meet the demands of the world of work. This study recommends the preparation of a more relevant competency-based curriculum, especially one that focuses on Islamic pedagogical

skills and classroom management. Based on previous research, this study not only examines the suitability of the curriculum to the needs of the world of work but also links it to 21st-century competency standards, such as the ability to utilize technology, cooperative learning, and the use of smart devices and artificial intelligence in early childhood Islamic education. The three previous studies, which primarily focused on the curriculum's relevance to the basic competencies of educators in Islamic educational institutions, did not extensively explore this aspect.

Not only that, this study uses a mixed method with a sequential explanatory model, which provides a two-stage approach to explore quantitative and qualitative data in depth. This approach provides a more comprehensive understanding of alumni competitiveness in the workforce compared to previous studies that mostly only use qualitative or quantitative approaches. This helps in exploring more deeply how the Early Childhood Islamic Education curriculum affects alumni competencies in the real work environment. Based on this, the early childhood Islamic education study program plans to conduct research on how the curriculum aligns with the needs of the 21st-century employment field.

## 2. Method

This study employs a combination research method, also known as a mixed method, which combines quantitative and qualitative research methods sequentially with a sequential explanatory model (Waruwu, 2023). First, we conducted quantitative research, and then we used qualitative methods in the second stage (Indrawan & Jalilah, 2021). We collected quantitative data using survey techniques and analyzed the results. We then collected qualitative data using structured interview techniques and focus group discussions and analyzed these results to bolster the quantitative data. The initial research subjects in this study included alumni from the Early Childhood Islamic Education Study Program, Faculty of Tarbiyah and Teacher Training, Syekh Nurjati State Islamic Institute of Cirebon, who graduated between 2017 and 2022, as well as alumni users from the institutions where the alumni are employed. This study employed the random sampling method, randomly selecting 19% of the 45 alumni who graduated between 2017 and 2022. While the second research subject was alumni users, the alumni user sampling method also used the random sampling method, where the sample was taken randomly, namely 35% of the 45 alumni samples, namely 16 alumni users, including principals or teachers where alumni work.

We conducted an online survey to collect quantitative data, which consisted of two parts: (1) a survey to assess the suitability of courses with job market needs, and (2) a survey to assess the suitability of learning outcomes, encompassing aspects of general knowledge, specific knowledge, general skills, and specific abilities. In addition, we included assessments of pedagogical, personality, professional, social, and 21st-century skills, as well as trends in early childhood education competencies, in the survey of alumni. We validated the survey instrument through a content validity test and consultation with three experts in early childhood Islamic education curriculum. We collected qualitative data through structured interviews and forum group discussions. We conducted interviews with alumni, alumni users, early childhood Islamic education lecturers, and curriculum experts to gain a deeper understanding of the survey findings. We conducted quantitative data analysis using descriptive statistics and SPSS software. We analyzed qualitative data using the Miles and Huberman interactive model, which comprises four stages: data collection, data reduction, data presentation, and conclusion drawing (L. M. Nasution, 2017; Thalib, 2022).

## 3. Result And Discussion

The results of this study include assessments from alumni about their learning experiences using the curriculum applicable in the early childhood Islamic education study program, assessments from alumni about the competencies they possess, and assessments from experts in early childhood education about the relevance of the early childhood Islamic education study program curriculum to job market needs.

- a. The Syekh Nurjati State Islamic Institute of Cirebon's Early Childhood Islamic Education Study Program's curriculum is deemed relevant by alumni to meet the needs of the workforce.

According to the results of the tracer study, 80.9% of alumni of the Early Childhood Islamic Education Study Program work as early childhood education teachers, 13.5% as private employees, 3.34% as elementary school teachers, and 2.2% as entrepreneurs. According to the relevance of work to knowledge, 55.1% of graduates from the Early Childhood Islamic Education Study Program hold jobs that align well with their knowledge. 30.3% choose their jobs according to their knowledge. 5.6% choose quite suitable, 5.5% choose less

suitable, and 3.4% choose not suitable. After the tracer study process was carried out, the data was further strengthened from the results of the survey that had been given to alumni and alumni users.

#### 1) Suitability of Courses with Job Market Needs

They submitted six elective courses in addition to the 56 courses they took while in college for the survey. We assessed these courses for their suitability with the job market needs of early childhood education teachers and then discussed them collectively.

The suitability of the courses in the Early Childhood Islamic Education study program at the Syekh Nurjati Cirebon State Islamic Institute, according to alumni based on the results of the Forum Group Discussion, is in accordance with the needs of the workforce when they enter the world of work as teachers. The Early Childhood Islamic Education study program, with its focus on child growth and development from various perspectives, offers more general courses to better prepare alumni for the workforce. According to a similar study from Raden Intan Lampung State Islamic University, ensuring the relevance, effectiveness, and sustainability of materials in accordance with national standards can support alumni's readiness in their roles as educators, managers, or entrepreneurs in the field of early childhood education (Wahyuni dkk., 2021).. This statement is also reflected in the results of filling out the questionnaire with data, with as much as 65% stating very appropriate, 32% appropriate, 2% less appropriate, and 1% not appropriate.

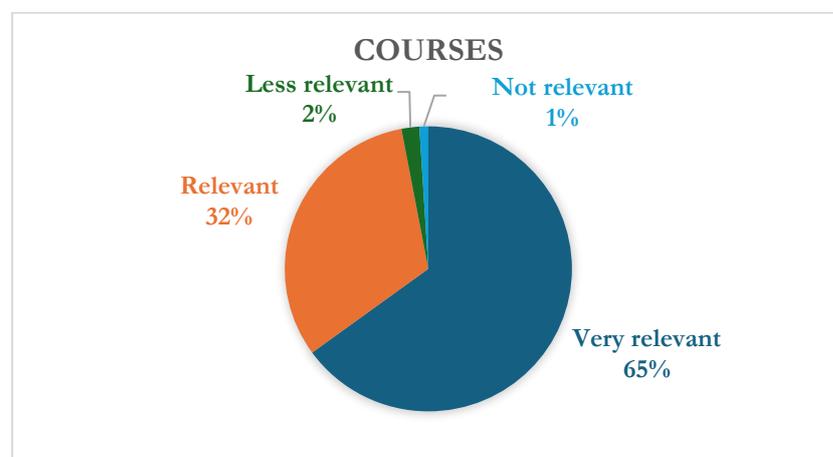
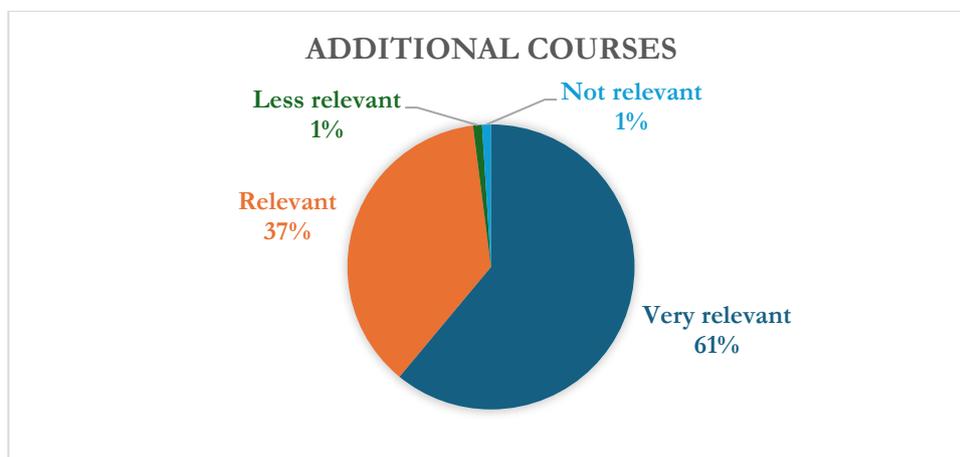


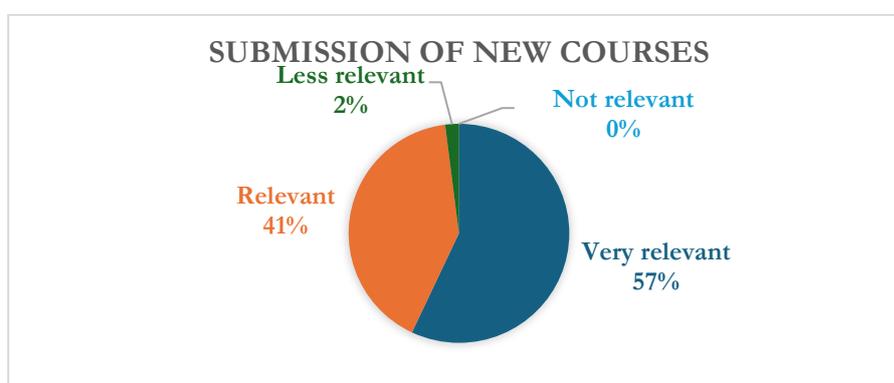
Figure 1 Course Diagram

In addition to the courses studied, researchers also submitted a relevance assessment to alumni regarding other elective courses, which produced the following data: The relevance assessment of other elective courses revealed that, out of 6 courses, 61% were deemed very appropriate, 37% were deemed appropriate, 1% were deemed less appropriate, and 1% were deemed inappropriate. Only one course, the Early Childhood Regional Language course, was found to be 1% less appropriate and not appropriate. The Forum Group Discussion with alumni substantiates the importance of Arabic and Indonesian courses for aspiring teachers in Integrated Islamic Kindergartens (TKIT), whereas English courses hold significant value for prospective international kindergarten teachers. While early childhood regional languages are less suitable in the field compared to foreign languages like English and Arabic, it is possible to combine both by teaching foreign languages using local wisdom. Harun asserted that early childhood children should not separate the introduction of foreign languages from the introduction of local culture. Conversely, we can utilize local culture as a tool, media, and even foreign language learning materials. For instance, we can train children to use English to introduce culture, customs, or traditions at home or in their village (Harun, 2018). The relevance data for the suitability of other elective courses is reflected in the diagram below:



**Figure 2 Relevance Diagram of Other Elective Courses**

Based on the results of the Forum Group Discussion, teachers are currently required to have digital content design skills that support the preparation of early childhood learning. Institutions in need benefit greatly from teachers who understand the development of digital literacy, as it enables the creation of innovative learning tools. As conveyed by Zeth Rodo Landa and his friends in their research, teachers' digital literacy affects students' interest in learning. The magnitude of the influence of teachers' digital literacy on students' interest in learning is 0.604 or 60.4% (Landa dkk., 2021). The level of relevance of new courses states that out of 4 courses, 57% are very appropriate, 41% are appropriate, 2% are less appropriate, and 0% are not appropriate. Two courses, namely Academic Writing and Digital Marketing, fall into the 2% less appropriate and not appropriate category, while the remaining two courses, Digital Content Design and Early Childhood Sign Language, fall into the appropriate and very appropriate category. The following questionnaire result diagram illustrates the percentage of relevant data:



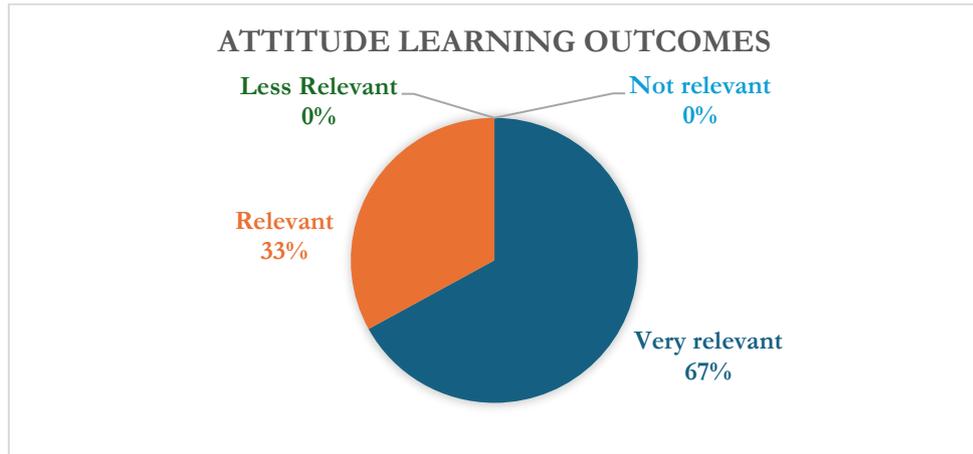
**Figure 3 A New Course Relevance Diagram**

## 2) Suitability of Attitude Learning Achievements with Job Needs

The learning achievements surveyed consisted of 14 attitude components, 6 general knowledge components, 7 specific knowledge components, 11 general skills components, and 31 specific skills components. We assessed these learning achievements for their suitability with the job needs of early childhood education teachers and then discussed them collectively.

A teacher is expected to have good ethics and morals, uphold religious values, be a good citizen, be proactive and communicative, be innovative, be transparent, and be responsible in carrying out their duties. In the future, educators and teachers can establish stringent standards for evaluating attitudes, as they are required to comprehend and adhere to the norms that govern interactions with fellow educators, students, parents, colleagues, and superiors (Jufni dkk., 2020). Based on this statement, 67.34% of the 13 components of attitude learning achievements were deemed highly appropriate, 32.66% deemed them appropriate, and 0% deemed them less appropriate or not appropriate. This indicates that the alumni of the Early Childhood

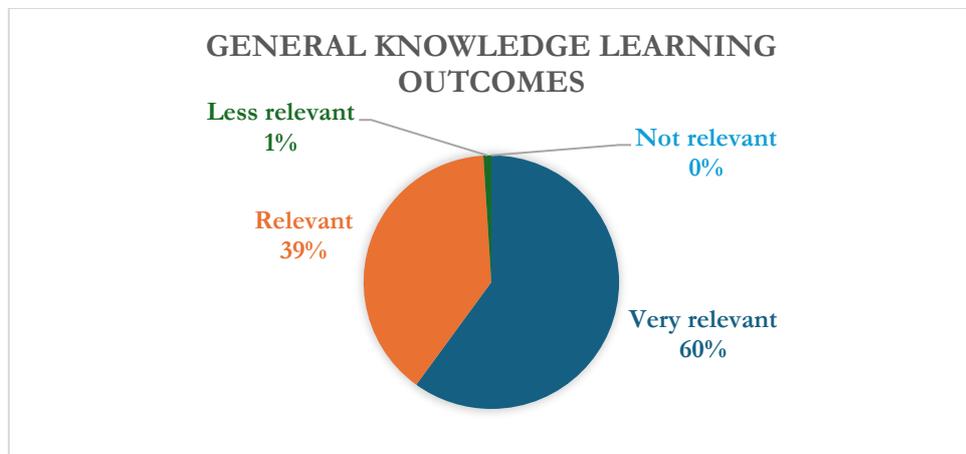
Islamic Education study program possess learning achievement attitudes that align with the Early Childhood Islamic Education curriculum.



**Figure 4 Diagram Of The Suitability Of Learning Achievements Of Attitudes**

3) Suitability of General Knowledge Learning Outcomes

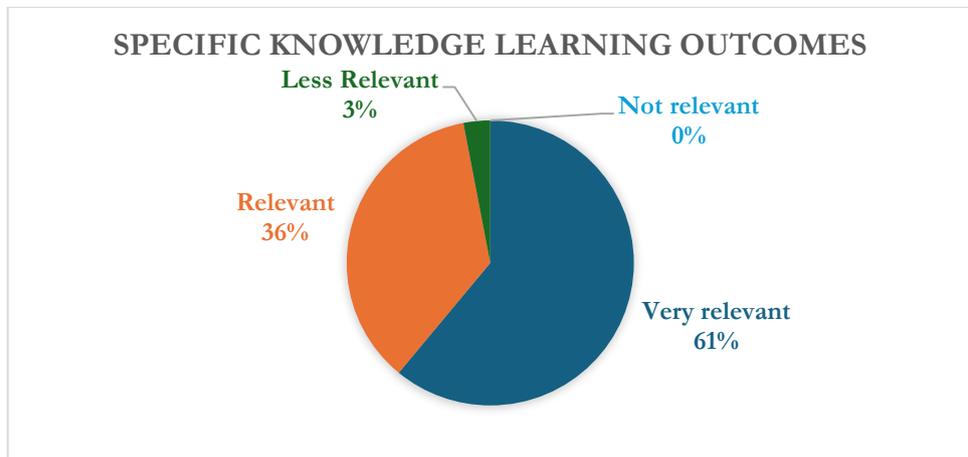
The six components of general knowledge learning outcomes indicate that 60% are very appropriate, 39% are appropriate, 1% are less appropriate, and 0% are not appropriate. This shows that alumni of the Early Childhood Islamic Education Study Program have general knowledge learning outcomes that are in accordance with the Early Childhood Islamic Education curriculum. Of course, as prospective educators, understanding knowledge has several benefits; it allows educators to enrich interesting and relevant learning materials, provide comprehensive and easily understood answers for students, motivate students to study harder, and adapt to changes in the curriculum or teaching methods that may require more understanding (Jadama, 2014).



**Figure 5 Diagram of Suitability of General Knowledge Learning Outcomes**

4) Suitability of Special Knowledge Learning Outcomes

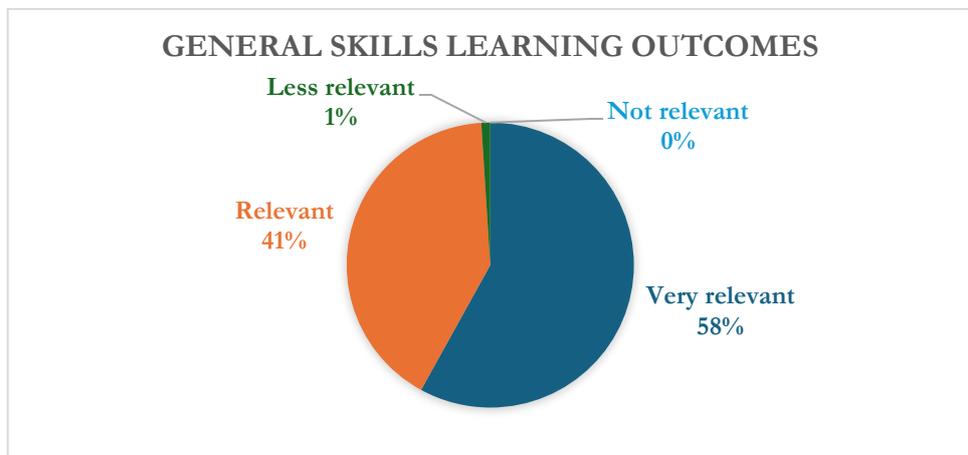
According to the seven components of special knowledge learning outcomes, 61% are considered highly appropriate, 36% are deemed appropriate, 3% are deemed less appropriate, and 0% are deemed inappropriate. This shows that alumni of the Early Childhood Islamic Education Study Program have special knowledge learning outcomes that are in accordance with the Early Childhood Islamic Education curriculum. Through the special knowledge possessed by prospective educators, it is hoped that they will be able to develop a curriculum that is in accordance with the child's developmental stage, be able to create more effective teaching strategies and optimize the abilities of each child, be able to provide good handling for every problem faced by the child, have positive interactions, have accurate assessments, be able to collaborate effectively, and provide relevant advice to parents, and through in-depth knowledge be able to improve professional skills for educators (H. K. Kim, 2011).



**Figure 6 Diagram of Suitability of Special Knowledge Learning Outcomes**

5) Suitability of General Skills Learning Outcomes

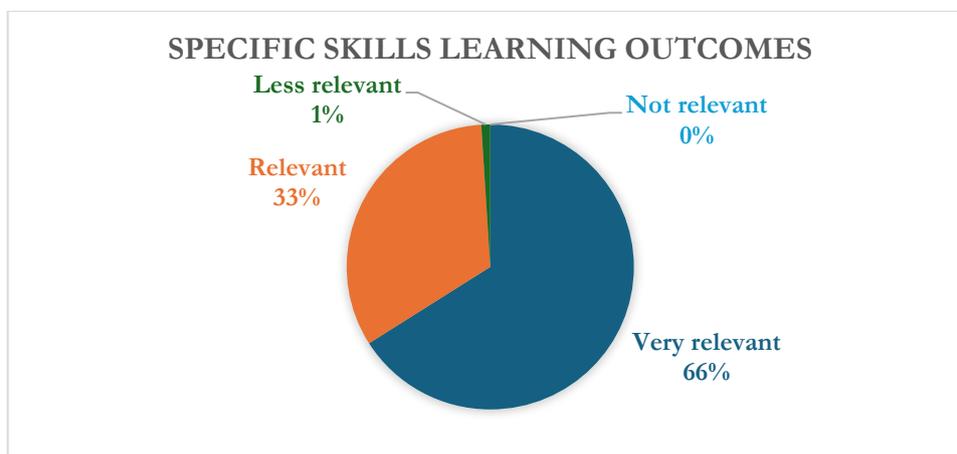
The questionnaire uses 11 components of general skills learning outcomes as references, indicating that 58% are very appropriate, 41% are appropriate, 1% are less appropriate, and 0% are not appropriate. This shows that alumni of the Early Childhood Islamic Education Study Program have general skills learning outcomes that are in accordance with the Early Childhood Islamic Education curriculum. We hope that the general skills learning outcomes will equip prospective educators with effective communication skills, time management skills for planning learning activities, the ability to foster positive relationships with children and parents, a strong sense of creativity in teaching to craft engaging lessons that align with children's interests, and the ability to collaborate effectively with colleagues and parents, all of which contribute to the development of more effective programs and activities for child development (J. Y. Kim dkk., 2018).



**Figure 7 General Skills Learning Outcomes Diagram**

6) Suitability of Special Skills Learning Outcomes

Out of the 31 components of special skills learning outcomes, 66% were deemed very appropriate, 33% were deemed appropriate, 1% were deemed less appropriate, and 0% were deemed not appropriate. This shows that alumni of the Early Childhood Islamic Education Study Program have special skills and learning outcomes that are in accordance with the Early Childhood Islamic Education curriculum. Special skills play an important role for teachers, allowing educators to meet each child's unique needs during growth more effectively. Through the special skills possessed, educators are expected to be able to apply appropriate teaching methods, have behavioral and emotional problem handling, develop creative and educational activities, implement the curriculum effectively, observation and assessment skills, professional training and development, efficient classroom management, and be able to use educational technology that supports the integration of digital tools in learning so that it can enrich the learning experience and support children's technological skills (Aziz, 2017; Sanders & Farago, 2018).



**Figure 8 Special Skills Learning Outcomes Diagram.**

Based on the overall data and findings from both the results of the Forum Group Discussion and the completion of the questionnaire, it can be seen in the following table:

**Table 1 Relevance of Study Program Courses**

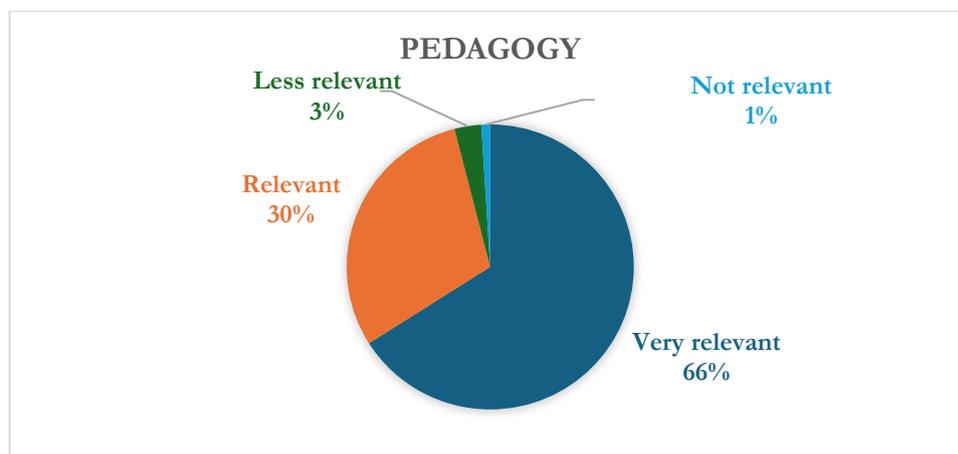
Category	Very appropriate	Appropriate	Less appropriate	Not appropriate
Courses	65%	32%	2%	1%
Additional Courses	61%	37%	1%	1%
Submission of New Courses	57%	41%	2%	0%
Learning Achievement of Attitudes	67%	33%	0%	0%
Learning Achievement of General Knowledge	60%	39%	1%	0%
Learning Achievement of Specific Knowledge	61%	36%	3%	0%
Learning Achievement of General Skills	58%	41%	1%	0%
Learning Achievement of Specific Skills	66%	33%	1%	0%

- b. The assessment of early childhood education institutions, where alumni work, was conducted to determine the relevance of the competencies possessed by alumni of the Islamic education study program for early childhood at the Syekh Nurjati State Islamic Institute of Cirebon to the job market requirements.

One of the objectives of this study is to delve deeper into the evaluation of early childhood education institutions where alumni are employed, specifically focusing on the competencies alumni possess after graduating from the Islamic education study program for early childhood at the Syekh Nurjati State Islamic Institute of Cirebon and their relevance to job market needs. The study collected data through a questionnaire survey, which included 34 items measuring pedagogical competency, 12 items measuring personality competency, 8 items measuring professional competency, and 7 items measuring social competency.

1) Pedagogical competence

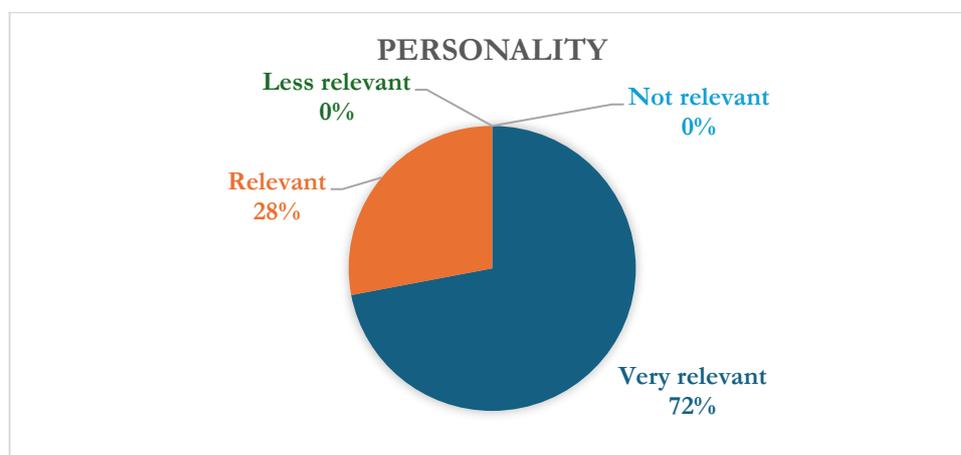
The analysis of 34 pedagogical competence items reveals that 65% of alumni's pedagogical competence is very appropriate, 30% is appropriate, 3% is less appropriate, and 1% is not appropriate. This indicates that pedagogical competence aligns well with the needs of the workforce, as evidenced by the 93% suitability figure. The results of the group discussion forum with Alu further support this. Some early childhood Islamic education alumni prepared to become class teachers when they started their careers, while others remained assistant teachers due to the school's condition and the alumni's level of pedagogical competence. The school's condition, where the number of students in one class exceeded the standard number, necessitated the appointment of assistant teachers to manage the class. From a pedagogical perspective, educators' ability to recognize each student's potential is a key component of their pedagogical skills, which is why some alumni of early childhood Islamic education became assistant teachers (Wakhanda, 2018).



**Figure 9 Pedagogical Competence Relevance Diagram**

2) Personality competency

The 12 personality competency items describe the alumni's personality competency as 75% very appropriate, 28% appropriate, 0% less appropriate, and 0% not appropriate. This indicates that the alumni's personality competency is highly relevant to the needs of the workforce, demonstrating a 100% suitability rate. The Forum Group Discussion results confirm that alumni from Early Childhood Islamic Education possess positive personalities. Furthermore, the interview with Resource Person 3 revealed that "graduates of the State Islamic Institute are enthusiastic and willing to learn." The State Islamic Institute's graduates are receptive to feedback, emphasizing the need for discipline improvements, such as consistent assessment collection. From the results of The interview results reveal that graduates of the Early Childhood Islamic Education study program at the Syekh Nurjati Cirebon State Islamic Institute exhibit a strong enthusiasm for learning and a positive attitude; however, there is a need for improvement in discipline (Lisdiyana, 2023). A teacher must possess a personality that can serve as a role model for their students. A teacher's personality competency serves as the primary indicator of their authority and respect for the teaching profession (Huda, 2018).

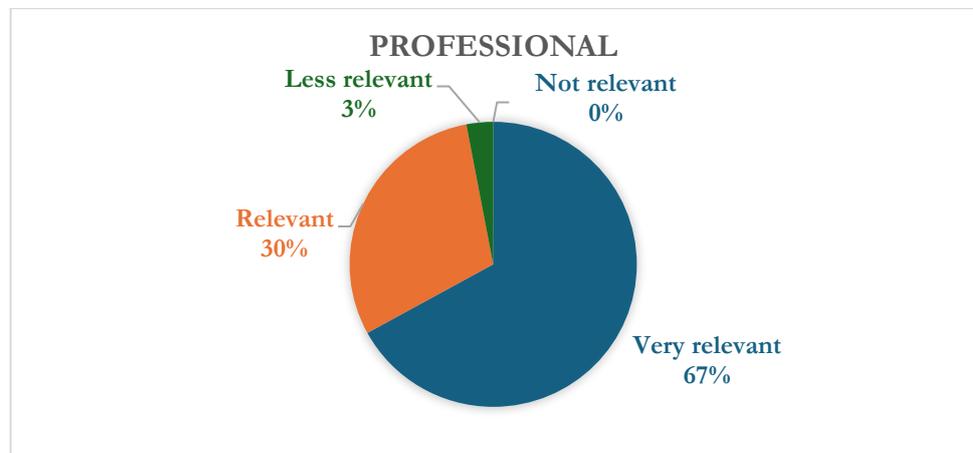


**Figure 10 Level of Relevance of Personality Competency**

3) Professional competence

Data from 8 professional competence items illustrate that the professional competence of alumni is 67% very appropriate, 30% appropriate, 3% less appropriate, and 0% not appropriate. This shows that the professional competence of alumni is 97% relevant to the needs of the job market. The forum group discussion with alumni users confirms that early childhood Islamic education alumni eagerly await their opportunity to apply to their respective institutions. Overall, alumni of the Early Childhood Islamic Education Study Program possess appropriate teacher competence, as evidenced by interviews with alumni users of Early Childhood Islamic Education. These alumni stated that they eagerly await graduates of Early Childhood Islamic education from the State Islamic Institute, as they find the students' assistance during the Introduction to School Fields very helpful. Graduates from the State Islamic Institute have the ability to effectively manage children. This demonstrates that early childhood education institutions expect graduates of the Early Childhood Islamic Education study program at the Syekh Nurjati Cirebon State Islamic

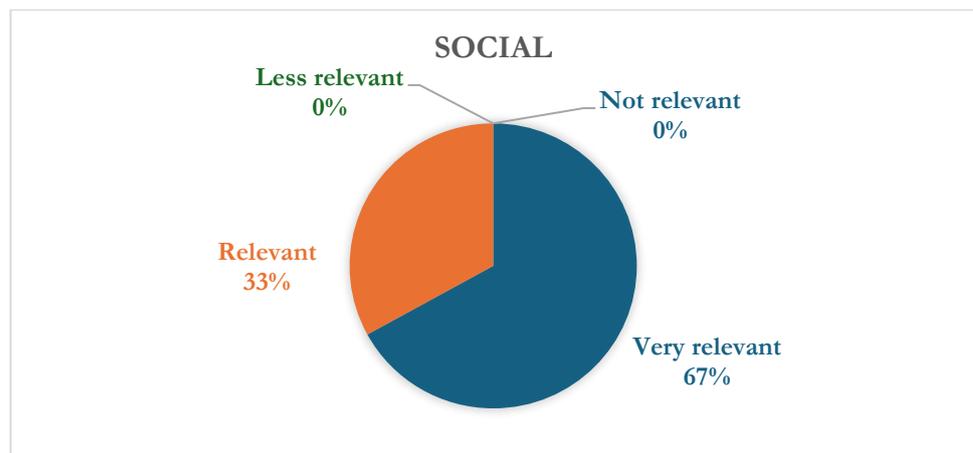
Institute" (Resource Person 1, Ningsih & Nurhafizah, 2019). This fact is inseparable from the increasing number of early childhood Islamic education institutions. Based on data from the Ministry of Education and Culture in West Java itself, there are 39,012 institutions, consisting of 16,945 kindergarten institutions, 15,554 playgroup institutions, 125 afternoon education park institutions, and 6,388 similar education unit institutions (Febrialismanto, 2017). In addition, Raudhatul Athfal institutions are increasing from year to year; data from the even semester of the 2019/2020 academic year shows that there are around 29,842 Raudhatul Athfal institutions in Indonesia (Salman & Widodo, 2020).



**Figure 11 Diagram of the Level of Relevance of Professional Competence**

4) Social competence

The alumni's social competence scores 67% very appropriate, 33% appropriate, 0% less appropriate, and 0% not appropriate across the 7 social competence items. This shows that the alumni's social competence is 100% relevant to the needs of the workforce. The group discussion forum results confirm that alumni of early childhood Islamic education can collaborate effectively and adapt to their surroundings. However, resource person 2's notes for early childhood Islamic education alumni indicate that they lack creativity and initiative, and they still require improvement in their communication with their parents. The interview results revealed that the early childhood Islamic education study program should enhance its students' social competence, specifically their communication skills (Wahyuni dkk., 2021). The teaching and learning process closely relates to social competence itself. In addition to being a requirement for educators, social competence aids in the communication that teachers establish with students during the approach process (Nadar dkk., 2021; Ashsiddiqi, 2012).

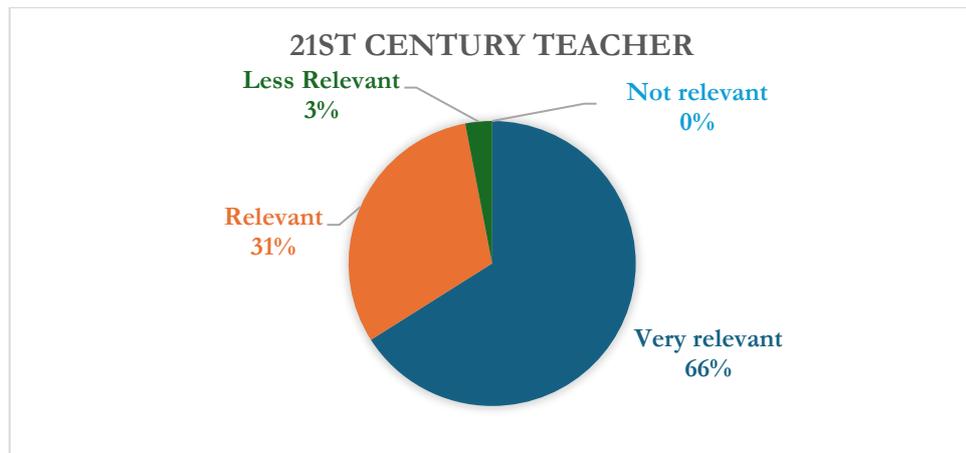


**Figure 12 Diagram of Social Competence Relevance Levels**

5) 21st-century teacher competencies

Based on 6 points of 21st century teacher competencies, it is illustrated that 66% of alumni competencies are very appropriate, 31% are appropriate, 3% are less appropriate, and 0% are not appropriate. This shows that 97% of 21st century teacher competencies are relevant to job market needs. The results of a group discussion forum with alumni users confirm that alumni of early childhood Islamic education possess the ability to operate technology, a valuable asset to the institution. Indeed, educators

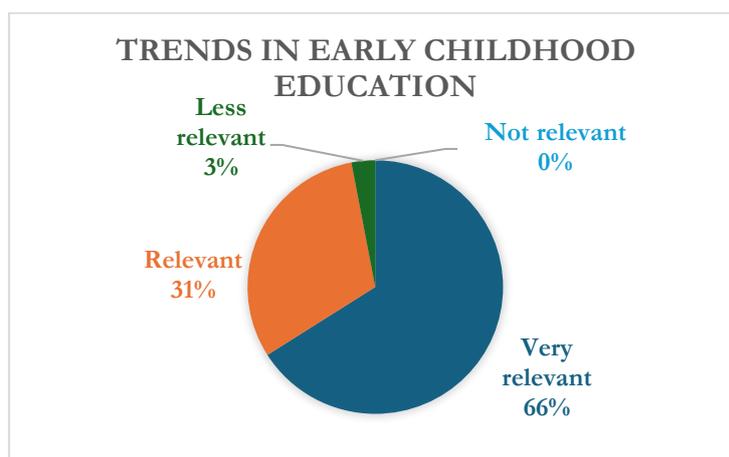
require the ability to operate technology not only to enhance learning but also as a tool to support school administration. Especially for schools located in rural areas, the majority of senior teachers have more hope for new teachers who are more literate in technological advances, because in the modern era, or what is commonly called the digital era, educators are required to understand information technology, and the education sector is one of the targets, especially for early childhood education teachers (Windarto dkk., 2019).



**Figure 13 Diagram of Relevance of 21st Century Teacher Competencies**

6) Trend Competence in Early Childhood Education

The data above, derived from five trend competency items in early childhood education, reveals that 68% of alumni possess competencies that are very appropriate, 31% are appropriate, 3% are less appropriate, and 0% are not appropriate. This shows that trend competencies in early childhood education are 97% relevant to job market needs. However, there are still 3% of trend competencies that are less relevant to job market needs. This is further supported by the results of a group discussion forum with alumni users, which revealed that alumni from early childhood Islamic education struggled to manage science, technology, engineering, arts, and mathematics-based learning due to the new curriculum, necessitating additional learning. Furthermore, the 21st-century trend, particularly in early childhood education, emphasizes the development of computational thinking skills. The goal of developing computational thinking skills is to equip the next generation with problem-solving skills. Saidin asserts that these skills offer numerous benefits, such as enhancing critical and analytical thinking, promoting computational thinking in science, technology, engineering, and mathematics education, enhancing pedagogy and curriculum, and fostering computational thinking through game-based learning (Mulyati, 2023).



**Figure 14 Diagram of Competency Relevance Level Trends in Early Childhood Education.**

The following table shows the overall results of an evaluation of early childhood education institutions where alumni work to see how relevant the skills they have gained through the Islamic education study program for early childhood are:

**Table 2 Competency Relevance**

Competency	Very Appropriate	Appropriate	Less Appropriate	Not Appropriate
Pedagogical	66%	30%	3%	1%
Personality	72%	28%	0%	0%
Professional	67%	30%	3%	0%
Social	67%	33%	0%	0%
21st Century Teacher	66%	31%	3%	0%
Trends in early childhood education	66%	31%	3%	0%

- c. The results of the assessment of early childhood education experts regarding the relevance of the curriculum of the Early Childhood Islamic Education Study Program of the Syekh Nurjati State Islamic Institute of Cirebon to the needs of the workforce.

In this study, the researcher conducted a focus group discussion activity with experts, namely Prof. Dr. Sigit Purnama, M.Pd., on Wednesday, October 18, 2023. The purpose of the activity is to assess the relevance of the Early Childhood Islamic Education Study Program's curriculum from the perspective of experts. Lecturers from the Early Childhood Islamic Education Study Program attended the activity. The results of the expert assessment stated that the curriculum of the Early Childhood Islamic Education Study Program was in accordance with the needs of the workforce. However, adjustments to teacher competencies in the 21st century are still necessary.

- 1) Be able to utilize technology
- 2) Be able to use cooperative learning structures.
- 3) Be able to implement differentiated learning according to child characteristics.
- 4) able to set learning objectives that are in accordance with children's needs
- 5) able to understand comprehensive learning
- 6) able to use assessments to design further learning

Furthermore, we need to adapt the curriculum to align with the emerging trends in early childhood education in 2023.

- 1) able to operate distance learning
- 2) being able to manage one's emotions.
- 3) being able to operate smart devices, such as cellphones, tablets, and laptops.
- 4) able to operate artificial intelligence
- 5) able to design learning based on science, technology, engineering, arts, and mathematics so that children think critically and master technology

Additionally, the early childhood Islamic education study program's curriculum needs to adapt to teacher competencies, technology-based learning, the early childhood Islamic education association's curriculum, and the needs of the independent curriculum. It also needs to encourage students to actively participate in society and provide them with the necessary training to adapt to the rapidly changing world of work. According to previous research, managers and educators must actively participate in the creation, development, and supervision of the curriculum to ensure alignment between the early childhood Islamic education study program and the workplace (Manora dkk., 2023).

#### 4. Conclusion

The alumni assessment reveals that the curriculum of the Early Childhood Islamic Education Study Program is highly relevant to the needs of the workforce, with 61.04% deemed very appropriate, 36.74% deemed appropriate, 1.79% deemed less appropriate, and 0.51% deemed not appropriate when it comes to learning outcomes. The data revealed that 62% of the students found the course materials to be very appropriate, 36% found them to be appropriate, 1% found them to be less appropriate, and 0% found them to be inappropriate. The notes also highlighted the need to adapt the course materials to the workforce's needs, maintain a balance between theory and practice, discuss issues related to early childhood education, such as managing student parents, and emphasize the need for fine arts and multilingual courses for both the TK and international TK levels. The competency assessment of alumni from the Early Childhood Islamic Education Study Program, when compared to the needs of the workforce, yields highly relevant results. We find that the relevance of pedagogical competence is 66.3% very appropriate, 29.7% appropriate, 3.3% less appropriate, and 0.7% not appropriate. Then the level of relevance of

personality competency is 72.4% very appropriate, 27.6% appropriate, 0% less appropriate, and 0% not appropriate. The level of relevance for professional competency is 67% very appropriate, 30% appropriate, 3% less appropriate, and 0% not appropriate. The level of relevance of social competency is 66.96% very appropriate, 33.04% appropriate, 0% less appropriate, and 0% not appropriate. The relevance level of 21st-century teachers' skills is 66% very appropriate, 31% appropriate, 3% less appropriate, and 0% not appropriate. According to the trend of early childhood education in 2023, the competency level is 66.3% very appropriate, 31.2% appropriate, 2.5% less appropriate, and 0% not appropriate. Based on this data, the overall level of relevance is 67.49% very appropriate, 30.42% appropriate, 2.95% less appropriate, and 0.35% not appropriate. Equipped with expert assessment results, the curriculum of early childhood Islamic education study programs is already relevant to the needs of the workforce. However, it still requires adjustments to teacher competencies in the 21st century, such as utilizing technology, using cooperative learning structures, implementing differentiated learning according to child characteristics, setting learning objectives that are in accordance with children's needs, and understanding learning as a whole. Additionally, the curriculum needs to adapt to the emerging trends in early childhood education in 2023, including remote learning, emotional management, the use of smart devices, artificial intelligence, and the development of science, technology, engineering, arts, and mathematics-based curricula.

## 5. References

- Ashsiddiqi, M. H. (2012). Teachers' Social Competence in Learning and Development. *SHOW OF DIB, XVII*(01), 61–67.
- Aziz, A. (2017). Implementation of innovations in early childhood education models at the Serama Child Care Park (TPA) of the Ministry of Health of the Republic of Indonesia. *JPUD - Journal of Early Childhood Education, 11*(2), 201–214. <https://doi.org/10.21009/jpud.112.01>
- Dudung, A. (2018). Professional Competence of Teachers. *JKKP (Journal of Family Welfare and Education), 5*(1), 9–19. <https://doi.org/10.21009/jkkp.051.02>
- Furkan, N. (2013). *Character Education Through School Culture* (C. Nasirin & Khaerani (ed.); first). Magnum Pustaka Utama.
- Hanafy, M. (2014). Curriculum Development of Islamic Religious Colleges. *Islamuna: Journal of Islamic Studies, 1*(2). <https://doi.org/10.19105/islamuna.v1i2.572>
- Aaron, C. A. (2018). Learning United Kingdom for Early Childhood versus Local Culture. *Early Horizons: Journal of Early Childhood Education, 5*(2), 63–72. <https://doi.org/10.17509/cd.v5i2.10499>
- Herlina, H., Bakar, I. P. S., Nurdiansyah, E., Hastati, S., & Marda, A. B. (2023). Implementation of the Teaching Campus Program in Strengthening Learning at SD Inpres Sugitangnga during the Covid 19 Pandemic. *Barn of Innovation: Journal of Community Service, 8*(1), 42–51. <https://doi.org/10.36312/linov.v8i1.1001>
- Huda, M. (2018). Teacher Personality Competence and Student Learning Motivation (Correlation Study on Pie Subjects). *Journal of Research, 11*(2), 237–266. <https://doi.org/10.21043/jupe.v11i2.3170>
- Indrawan, D., & Jalilah, S. R. (2021). Combination/Mixed Methods of Integration Forms in Research. *Journal of Teacher Studies and Learning, 4*(3), 735–739. <https://doi.org/10.30605/jsgp.4.3.2021.1452>
- Jadama, L. M. (2014). Impact of Subject Matter Knowledge of a Teacher in Teaching and Learning Process. *Middle Eastern & African Journal of Educational Research, 7*, 20–29.
- Jufni, M., Saputra, S., & Azwir. (2020). Teacher Code of Ethics in Improving the Quality of Muhammad's Education. *Serambi Akademika: Journal of Education, Science, and Humanities, 8*(4), 575–580. <https://doi.org/10.56687/9781847421913-007>
- Kim, H. K. (2011). Developmentally Appropriate Practice (DAP) as Defined and Interpreted by Early Childhood Preservice Teachers: Beliefs About DAP and Influences of Teacher Education and Field Experience. *SRATE Journal, 20*(2).
- Kim, J. Y., Choi, D. S., Sung, C. S., & Park, J. Y. (2018). The role of problem solving ability on innovative behavior and opportunity recognition in university students. *Journal of Open Innovation: Technology, Market, and Complexity, 4*(1), 1–13. <https://doi.org/10.1186/s40852-018-0085-4>
- Landa, Z. R., Sunaryo, T., & Tampubolon, H. (2021). The Influence of Teachers' Digital Literacy and Learning Management on Students' Learning Interest at SMA Pelita Rantepao. *Journal of Scholars: Journal of Mathematics Education, 5*(1), 718–734. <https://doi.org/10.31004/cendekia.v5i1.529>
- Lisdiyana. (2023). Teacher Personality Competencies in Early Childhood Character Formation. *Al-Miskawaih: Journal of Science Education, 2*(2), 1–9. <https://doi.org/https://doi.org/10.56436/mijose.v2i1.274>
- Manora, H., Khasanah, N. L., & Akip, M. (2023). Independent Curriculum Management for Early Childhood Islamic Education. *Bouseik: Journal of Early Childhood Islamic Education, 1*(1), 1–15. <https://doi.org/https://doi.org/10.37092/bouseik.v1i1.546>
- Mulyati, M. (2023). Trends and Development of Early Childhood Computational Thinking Skills in the 21st Century: A Theoretical Perspective. *Journal of Obsession: Journal of Early Childhood Education, 7*(4), 4155–4165. <https://doi.org/10.31004/obsesi.v7i4.4005>
- Ningsih, Sri Yunimar, & Nurhafizah. (2019). The Concept of Pedagogic Competence in Improving the Professionalism of Early Childhood Education Teachers. *Journal of Education Tambusai, 3*(2), 694–703. <https://doi.org/https://doi.org/10.31004/jptam.v3i2.270>
- Radinal, W. (2021). Competency Development of DI Educators in the Era of Disruption. *An-Nur Journal, 1*(1), 9–22.
- Romansyah, R., Rahayu, S., Muchtar, H. S., & Sulastini, R. (2022). Higher Education Curriculum Management in the Industry 4.0 Era. *Journal of Educational Vehicles, 9*(1), 25. <https://doi.org/10.25157/wa.v9i1.6866>
- Salman, I., & Widodo, A. (2020). Raudhatul Athfal Education Quality Improvement Policy in the 2015–2019 Ministry of Religion Strategic Plan Review. *MODELING: Journal of PGMI Study Program, 7*(2), 167–184.

- <http://jurnal.stitnualhikmah.ac.id/index.php/modeling/article/view/664>
- Sanders, K., & Farago, F. (2018). Developmentally Appropriate Practice in the Twenty-First Century. In *Springer International Handbooks of Education* (hal. 1379–1400). [https://doi.org/10.1007/978-94-024-0927-7\\_71](https://doi.org/10.1007/978-94-024-0927-7_71)
- Wahyuni, I. W., Raihana, Utami, D. T., Lubis, A. N., & Anriani, E. (2021). Kecerdasan Emosi dan Kompetensi Sosial Guru. *Aulad : Journal on Early Childhood*, 4(3), 172–178. <https://doi.org/10.31004/aulad.v4i3.105>
- Wahyuni, S., Khadijah, K., Budianti, Y., & Maisarah, M. (2021). Curriculum Development refers to KKNi in the PIAUD Study Program. *Al-Athfaal: Scientific Journal of Early Childhood Education*, 4(1), 14–30. <https://doi.org/10.24042/ajipauid.v4i1.8334>
- Wakhanda, ellyta lufihasna. (2018). *Management of Student Grouping in Improving the Quality of Education at Madrasah Ibtidaiyah (MI) Jetis Sukoharjo Thun Lesson 2017/2018*.
- Waruwu, M. (2023). Educational Research Approach: Qualitative Research Method, Quantitative Research Method and Mixed Method. *Tambusai Education Journal*, 7(1), 2896–2910.
- Windarto, A. P., Parlina, I., & Wanto, A. (2019). PKM: Early Childhood Education Teachers " Literate " Technology in Simalungun Regency. *Proceedings of the National Seminar on Entrepreneurship*, 1(1), 337–343.
- Yuliaritainingsih, M. S., & Setiaty, T. (2012). Pedagogic competence of early childhood education teachers in developing learning for early childhood. *Early Horizons - Journal of Early Childhood Education*, 3(1), 1–18. <https://ejournal.upi.edu/index.php/cakrawaladini/article/view/10325/6363>
- Yulmasita Bagou, D., & Suling, A. (2020). Analisis Kompetensi Profesional Guru. *Jambura Journal of Educational Management*, 1(September), 122–130. <https://doi.org/10.37411/jjem.v1i2.522>
- Yusri, N. (2021). Early Childhood Learning Strategies for the 21st Century. *Adzkiya ISSN Journal*, 5(1), 54–72.