

Volume 6 Issue 5 (2022) Pages 5018-5028 Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini ISSN: 2549-8959 (Online) 2356-1327 (Print)

What Education Should Be Provided To Early Childhood In The Millennial Era?

Heru Sriyono¹, Nur Rizkiyah², Sigit Widiyarto^{3⊠}

Pendidikan Bimbingan Konseling, Universitas Indraprasta PGRI Jakarta, Indonesia⁽¹⁾ Pendidikan Biologi Universitas Indraprasta PGRI Jakarta, Indonesia⁽²⁾ Pendidikan Ekonomi, Universitas Indraprasta PGRI Jakarta, Indonesia⁽³⁾ DOI: <u>10.31004/obsesi.v6i5.2917</u>

Abstract

Early childhood education requires good and regular management and knowledge that is adapted to the millennial era. The method used is a qualitative method with data collection techniques through observation, interviews, documentation and literature studies and triangulation techniques are used. The respondents were 8 people (teachers, school principals and parents). The study was conducted from January to June 2022. The results of the study stated that basic education that must be mastered includes moral/religious abilities, physical motor skills, arts/languages, emotional and cognitive abilities. These abilities are implemented based on good education management, and are supported by millennial century skills such as computer introduction to simple coding for students. Learning in the millennial era demands changes in educational management that are adapted to technology. Application of wireless communication technology and virtual reality for preschool education information will be realized. A complete change in the way of preschool education is needed and ultimately cultivating children who are morally, intellectually, physically and artistically qualified. **Keywords:** *children; early age; millennial era; education management*

Abstrak

Pendidikan anak usia dini membutuhkan pengelolaan dan pengetahuan yang baik dan teratur yang disesuaikan dengan era milenial. Metode yang digunakan adalah metode kualitatif dengan teknik pengambilan data melalui observasi, wawancara, dokumentasi dan studi literature dan dilakukan teknik triangulasi. Responden sebanyak 8 orang (guru, kepala sekolah dan orang tua murid). Penelitian diadakan dari bulan Januari hingga Juni 2022. Hasil penelitian menyatakan bahwa pendidikan dasar yang harus dikuasai meliputi kemampuan moral/agama, fisik motorik, seni/bahasa, emosional dan kemampuan kognitif. Kemampuan tersebut dilaksanakan berdasarkan manajemen pendidikan yang baik, dan ditopang dengan kemampuan abad milenial seperti pengenalan komputer hingga coding sederhana untuk siswa. Pembelajaran pada era milenial menuntut perubahan manajemen pendidikan yang disesuaikan dengan teknologi. Penerapan teknologi komunikasi nirkabel dan realitas virtual untuk informasi pendidikan prasekolah akan terwujud. Perubahan total dalam cara pendidikan prasekolah diperlukan dan akhirnya menumbuhkan anak-anak yang berkualitas dalam moral, intelektual, fisik, dan seni.

Kata Kunci: anak; anak usia dini; era milenial; manajemen pendidikan

Copyright (c) 2022 Heru Sriyono, et al.

Corresponding author : Email Address : sigit.widiyanto372@gmail.com (Jakarta, Indonesia) Received 22 March 2022, Accepted 7 July 2022, Published 15 July 2022

Introduction

Early childhood education is the initial gateway to further education. The improvement of the educational process in preschool educational institutions is the most important condition for promoting moral, spiritual and intellectual development (Hamidovna, 2020). Short time in early childhood is a challenge for teachers and parents at home. Timing and ways of educating early childhood have become a study of education management that continues to develop in the current millennial era. The golden age of children is very short and is an important period in the rapid growth of the child's brain (age 0 to 5 years). This phase is crucial for parents and teachers to pay attention to. children are growing so fast. The learning change process is primarily directed at optimizing personal and social competencies in line with the needs of industry 4.0 and 5.0.

The millennial era has entered the concept of society 5.0. This concept brings improvements to the previous era. The era of society 4.0 is the era of humans getting to know computers to the internet. In the era of society 5.0 is the practice of technology which is part of humans themselves. At the current concept, which has entered society 5.0, where humans create new concepts and values through technological developments and minimize the gap between humans and various problems in the future. Readiness to learn using technology in preschool students was investigated by Otterborn, A., et al in 2019 in Sweden. The results showed that the use of digital tablets can improve student literacy and collaboration. This connects the fast-growing millennial era to the current and future patterns or concepts of preschool education. Coding programming education in school children can be used to improve problem solving and cognitive skills (Çiftci, S., & Bildiren, A. 2020). At the same time, various problems that arise now and someday are challenges in themselves, especially the problem of early childhood education. The modern Technology has been used as an urgent lesson in the early childhood curriculum (Sundqvist & Nilsson, 2018). Many teachers and parents have difficulty adapting to today's times. The negative impact of technological sophistication is a separate problem for teachers and parents. The teacher should update and adapt their skills to the latest technology to increase new technology. After that the teacher can explain and describe the phenomena and the concept (Sundqvist & Nilsson, 2018). A very different era from the time when parents and teachers were still in school. This difficulty makes teachers and parents overwhelmed and looking for ways that are not appropriate in educating children.

Children are good imitators. Children always do what is exemplified by other people and their environment. The surrounding community became a place for him to learn. Various traits and behavior patterns are recorded and become a strong memory. The role of technology and social in children's education is important. Apart from being a skill and competency, it is also a supporter of education management. Children's moral and social values will continue to develop along with increasing age.

At the same time the child has not been able to judge whether what he sees and records is good or bad. Children assume that everything they do is good and can be done according to what they record in memory. In the millennial era, which is full of technological sophistication, it turns out that it has a bad impact on children. They are victims of today's technological sophistication.

The impact can be seen from the various problems that arise today. Children are not sensitive to their environment, children lack empathy for what they have done. Tolerance and courtesy are expensive things for children today. The large flow of information that is easily obtained and can be accessed by early childhood is one of the reasons why children behave badly. Other problems arise such as eye health problems, children who use cellphones for too long will experience various eye problems and decreased achievement results (Arifin & Rahmadi, 2017). Children will be less focused on learning, children will have difficulty concentrating, resulting in a decrease in learning achievement and physical and social development. In fact, if technology can be managed properly, it is not impossible that students

can adapt and even develop technology. It can be said that computer education, such as robotic coding applied to preschool children, develops children's scientific process skills (Turan & Aydoğdu, 2020). In other studies it is said that learning using robotic motor media can improve children's psychomotor skills, such as walking, running and jumping (Komaini et al., 2021).

From the various problems above, managing and educating early childhood is one part of education management. Students at school are one of the scopes of educational management. Planning the learning process that is adapted to the millennial era is an alternative solution that is integrated with children's education at home. The principles of early childhood education management include commitment, professionalism, coordination and leadership (Aziz, 2019).

Good planning, as well as curriculum development in schools is something that is possible to help manage education for early childhood in the midst of an era full of rapid and uncertain information flows. After planning, organizing all the resources owned by the school. Organizing also includes communication with parents and all concerned with education.

The next stage is the implementation of education including learning, habituation, methods and everything related to the learning process at school. In organizing, moral messages are conveyed through stories, which is one of the effective methods for conveying moral messages. At this stage the teacher's active role will determine the success of the learning objectives. At this stage, efforts are made to develop the knowledge and skills of teachers. This effort can be done through training or seminars held by the school or other parties.

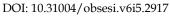
Supervision is the final stage in the management of education in schools. The principal as a manager who regulates the course of learning in schools has a broad supervisory function. Principals provide clear parameters for successful learning for teachers. Supervision can be done directly or indirectly. The principal can also coordinate with parents at home to arrange supervision of children's education at home.

The principle of education management in preschool has a flexible and flexible nature. Why is it said to be flexible and flexible? because in the millennial era it is very possible for rapid and massive changes. Changes in education management are needed. Education must be adapted to the situation and time. Education management must also adapt and keep up with changes to the millennial era. This research has its own characteristics from previous research. This study will review what education and education management systems are to face the millennial era, so that students are ready to face industry 4.0 and 5.0.

Based on the description above, several research questions can be asked, first, what education must be mastered by early childhood in the current millennial era? secondly how to apply this education to children, and thirdly how to manage early childhood education in schools? while the purpose of this study is first to formulate what education must be mastered by early childhood in the current millennial era, second to find out how to apply this education to children, and third to find out how to manage early childhood education in schools.

Methodology

A Qualitative method was used in this study. In this study the data were taken through observation, interviews and documentation. The interview guide was prepared and validated by two education practitioners. The validation process was carried out for two times. The first validator provided input on the acuity of questions about preschool technology education. The second validator suggests adding more respondents. In order for the data to be valid, a triangulation technique is used. The research was conducted in the cities of Bekasi and Jakarta and was held from January to June 2022. The respondents in this study were 3 teachers and parents in kindergarten schools and 2 early childhood education schools (PAUD). The number of respondents was 8 people (2 parents and 5 teachers and 1 principal). The research instrument consisted of questions about education for early childhood, how to practice this education in children and how to manage children's education in schools. Consists of 10 teachers and 5 parents. The stages of the research can be explained in the image figure 1.



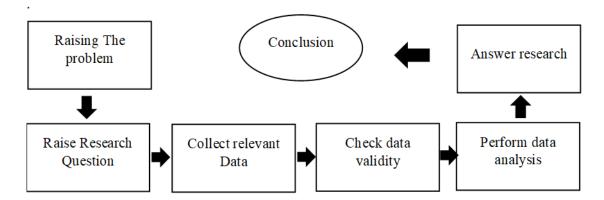


Figure 1. The Step of Research

The research stage begins with raising the problems that develop, in this study the problem focuses on early childhood education in the millennial era. Based on the issues raised, the focus narrows to issues that will be discussed. The issue raised is a common problem and becomes the attention of the general public. After raising the problem, the researchers collected data through observation, interviews and documentation. After collecting data, the researchers check data validity by triangulasi method. Data processing is the next step. Data processing includes, data selection and data reduction. After the data has been analyzed and several descriptive analyzes have been conducted, then the problem can be answered, and reveal the solution to the problem. Conclusions can be stated after answering the problem questions.

Result and Discussion

The research was held in 2 places. The first city that was used as research was the city of Bekasi. There are 2 kindergartens (TK) and 1 early childhood education (PAUD) which are used as research sites. The second place for research is the city of Jakarta. There is 1 kindergarten (TK) and 1 early childhood education (PAUD). The selection of TK and PAUD is based on the affordability of the location and time. The location of the kindergarten is not too far and is easily accessible by public and private transportation. Interviews were conducted at schools and in several other places, such as in the canteen, school yard and teacher's room. The interview results of 5 parents and early childhood teachers.

As far as you know , what did FD's mother do so that millennial children are able to face the challenges of the times in the future?

"There is a stark difference between today's children and the past... I apply flexible rules to children, in class I instill moral values, such as kissing hands before studying, helping friends when they need help and others, besides that I give assignments if they need help. able to be done by students, there are tasks in groups, group assignments are important for children, to give the nature of togetherness among children"

From the answers above, it can be said that children need full love and support from parents and people who advertise around them. Children are accustomed to learning to interact socially and can help others

Another opinion was also expressed by HF is a PAUD teachers in the city of Bekasi, with the same question.

"We together with teachers and school principals make an adaptive curriculum, and we are always developing it, so that it is adapted to the needs of today's era, for example we provide computer introduction learning to students, the aim is that they are able to compete with other human resources of higher quality." Learning adaptation to the times is needed at all times. This is evidenced by the existence of computer learning to improve the quality of learning. After being cross-checked from one of the students' parents, every year the school holds a competition for introducing computers and playing computer skills

On different days and occasions, HJ's teacher argues about the abilities that must be mastered by early childhood in the millennial era.

"Schools with an Islamic atmosphere always carry out Islamic-inspired learning. Schools hold Islamic-based learning, such as praying together, visiting orphanages, doing charity for underprivileged people, and so on..we hope that children have high empathy and concern, children will have stable emotions, not easy give up always put your trust.. "the school appoints ustadz and ustazah who give tauziah every Friday"... in addition we also pay attention to sports education, we stimulate their muscles and movements to complete children's psychomotor education, children are trained in gymnastics and compete by holding games... activities are carried out in the school yard".

In the interview above, it can be explained that moral education has been practiced in schools, with various social programs that can involve students and parents. In addition, psychomotor-based education is also important, in addition to developing kinesthetic abilities and being able to increase fitness.

The fourth teacher interviewed, is a senior teacher and has a wealth of experience teaching early childhood,

"Schools always require teachers to use teaching aids, which is an example of creative learning in kindergarten. .. for example ecosystem models for science lessons, flash cards for English, or various forms of buildings for teaching mathematics...to learn other things related to beauty and aesthetics...starting from the students themselves.. tidying their own clothes, tidying hats, and ties . According to the curriculum and the planned program, every Tuesday we hold extracurricular painting, this and help children who have talent "

On a different occasion the researcher interviewed one of the parents of students. The senior teacher taught the student. the interviews were in accordance with what had been explained by the teacher. The researcher continued the interview and documentation at the school on March 3, 2022. The interview was conducted in the teacher's room.

In your opinion, what did GH's mother do to make millennial children able to face the challenges of the times in the future?

"I am a kindergarten teacher and entrusted with extracurricular activities at school to carry out my duties as well as possible. In extracurricular activities children's language skills need to be instilled, for example English extracurricular activities that can improve students' cognitive abilities, they like to learn, because the books are good, they can make media images, play, and sing in English, very good for children, children easily remember words and sentences in English, cognitive power can be trained..."

The explanation above shows that language education also requires good media preparation. Children are taught English, even in simple sentences.

The following are the results of the principal interview at a glance about the education management that has been implemented in schools.

"... it's been almost 4 years since I've been the principal of the school. And continue to fix unfinished work. In terms of curriculum management, students, school personnel, school organizations, school administration, school finances. All of that can't be done alone, right... all of them need intense, effective coordination. The curriculum area is an important area for synergizing all settings. All fields are interrelated and interconnected. The field of students and human or personal resources requires communication with parents and teachers. A school DOI: 10.31004/obsesi.v6i5.2917

organization is like an association or an orchestra that must be in tune with the school's vision and mission, finance is also important, all activities must be financed..."

The following are the results of interviews with 2 parents who expressed their opinions about the millennial era and what provisions should be owned by age children to answer the challenges of the times.

"... I'm Ms. Y, a parent of GF students and this is Ms. R. Basically, I see children as entrusted and a mandate from God. I always give the best to children... I support all school programs, even though they need funds, it's an investment... a program I monitor and observe school so that they can be retrained at home, such as reading, studying computers, English and others..."

The explanation of the principal and 2 parents of students emphasized that good education management is one that has a plan to advance and develop aimed at its goals, the existence of organizing an action that seeks effective behavioral relationships between individuals or groups in the management of education, the implementation of (actuating) and directional control.

To clarify the results of research from interviews with 8 respondents, it can be explained in the table 1.

Table 1. Summary of data				
No	Responden	Education Concern	Application	Management of preschool
1	Parent A	Sosial interaction, moral	Giving attention, do the task colaboratif	follow the school' s rule
2	Parent B	english skill	play a game, flash card	Giving the suggestion to teachers
3	Parent C	All aspectt	Support the school`program	always pay attention of the programs
4	Parent D	All aspect	Support the school`program	always pay attention of the programs
5	Teacher A	Computer literate	Practice at school	do the programs well
6	Teacher B	Moral, psicomotoric,	love each other, pay attention	receiving the suggestion
7	Teacher C	aestetic, science and english skill	practice at school, the discipline rules	exschool program priority
8	Headmaster	curriculum management, students, school personnel, school organizations, school administration, school finances	doing the programs collaboratively	All management has correlation doing them consistently, adaptive

Next, to complement the results of the study, the researchers conducted documentation and observations when the students carried out school programs, both theory and practice. To run the student's information system capability program, schools hold computer programs in extracurricular fields, but there are schools that require computers as lessons that are studied every week. In Figure 1, it can be seen that one of the schools makes a computer extracurricular program. According to the researcher, this is the school's effort to introduce computers to children. Researchers also look at the modules and lesson plans and daily work plans (RKH) that have been made by teachers for computer extracurriculars.

In Figure 2 is the basic material from a kindergarten in Jakarta. This material is very simple, and becomes one of the early childhood computer learning. In computer extracurricular students are trained to recognize the most basic concepts of computers. Teachers plan, organize, organize, and schedule teaching and evaluating students. At this stage education management in the field of curriculum plays a role in helping computer learning objectives. Curriculum management is part of the KTSP (education unit level curriculum). At the education unit level, curriculum activities prioritize competency standards and needs that are adapted to the millennial era. Programs and curricula that are relevant to

the times are an adaptive curriculum and become a curriculum that develops according to needs. In the program of moral and religious learning activities, researchers also observe and monitor learning activities that lead to children's morals. Moral and religious education is very relevant to the millennial era. Without a moral grip, students have learning difficulties. The figure 4, activities are carried out in one of the PAUD.



Figure 2. Computer's Skill (source : school and documentation has been permitted)



Figure 4. Visiting the Nursing Home (source : school and documentation has been permitted)

Figure 3. Computer's Lesson plan



Figure 5. Training of soft motoric (source : school and documentation has been permitted)

Visiting nursing homes is one of the programs carried out by schools, but from several observations and interviews, researchers can summarize the school's patterns and tips for implementing moral and religious learning programs and methods as summarized in Figure 6.

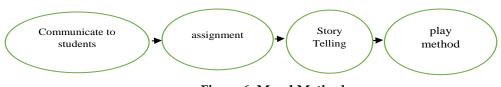


Figure 6. Moral Method

Communicating with students is a way to see their moral and religious abilities. By conversing, students are able to express the views and moral concepts that become the benchmark. Conversation has an important meaning for children's development, because it can improve communication skills with other people. By talking, a lot of knowledge can be given to children, because basically children love to ask questions. Good and pleasant social interactions can stimulate children to get used to acting such as greeting with the right hand, kissing the hand of an older person, saying good morning/afternoon/evening/evening, greeting, being polite with good speech, when talking look at the interlocutor with a polite look.

Giving assignments is one way to instill moral values in the social field. Tasks are carried out together. Interaction between students arises when working on group assignments. Values of togetherness and responsibility can be instilled.

Storytelling is a good way to instill morals and religion. On religious values, there are many stories of prophets or religious warriors that can be given. Children can listen well to the storyline which can later be a good example for them, parents are expected to be able to run this program at home. before the child goes to sleep and becomes an introduction before the child goes to sleep.

The playing method is an effort that can be done by playing a simple game, both traditional and modern. Simple games can be done together while playing. Children are taught honesty, sportsmanship and responsibility.

Psychomotor learning, paying attention to fine and gross motor functions. Fine motor skills include hand movements, while gross motor skills include foot movements such as running and jumping. The author notes several ways that are done by teachers such as class outings. This activity is carried out by way of outbound.

Fine motor activities also have an important role. Fine motor skills relate to other abilities, such as painting, drawing, typing and so on. Fine motor skills are also related to children's creative abilities, such as making crafts, decorations and the like. It can be seen in the figure 5, that Kindergarten students are making decorations by practicing fine motor skills. Through creativity and fine motor arts can be trained properly.

Discussion

Based on the description above, the researcher can summarize the results of the interviews and documentation above. Several programs and ways of educating at an early age in the 5 Kindergarten and PAUD above consist of moral and religious abilities, physical motor skills, artistic and language skills, emotional abilities and cognitive abilities. In terms of education management, in general, schools have implemented the system quite well. However, effective monitoring is needed. PAUD education management includes student management, school personal management/HR, school organizational management, school administration management, and school financial management. There are several results of school management which can be summarized in the figure 7.

In emotional and cognitive development, students are invited to collaborate and work together, they work on a social program together as an effort by the school to instill their social and emotional values. Emotional and social development has to do with nature-based learning, such as nature school programs (Johnstone et al., 2022). Children's emotional development will develop if schools can provide programs related to nature. In another study

stated that role playing can improve children's socio-emotional abilities. It was explained that children are able to cooperate with friends. The children can understand manners that relate to social culture. They are able to know the rules and show empathy (Dea & Latipah, 2017).

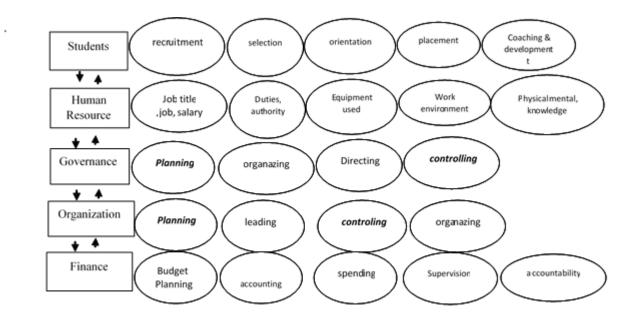


Figure 7. Education Management

For students who start learning computer introduction at school, it is a manifestation of subtitle psychomotor learning and trains their cognitive abilities. In addition, computer learning is able to bring children to know more about technology . Technology including computer programming supports high-level abilities for everyone such as creative thinking, questioning, problem solving and critical thinking which are considered within the scope of 21st century abilities (Çiftci, S., & Bildiren, A. (2020). Learning computer multimedia technology and internet technology (hybrid) is a combination of methods that has attracted the attention of educators. This method is very functional, because it can enrich teaching resources, increase learning time flexibility and improve teacher-student (Wang, X., et, all, 2019). Next teachers' planning of programming and timing in classroom activities, content, and teaching and learning strategies may define the context in which higher or lower quality interactions then develop (Nores, Friedman-Krauss, & Figueras-Daniel, 2022) . Cognitive abilities in students can also be developed by telling stories using illustrated media to improve the cognitive development of children aged 5 to 6 years (Amirah, 2019).

Games can also be a way to instill moral and religious abilities, physical motor skills, arts and language, emotional and cognitive abilities. Games that can significantly reach some of the above abilities if done with parents, in addition to friends and teachers at school are also recommended. Planned play makes a significant contribution to children's emotional, social, physical and intellectual development and can achieve the skills promoted by the Preschool Education Curriculum (Catalano & Campbell-Barr, 2021). In addition to the results of the interviews above which mention the importance of playing for children, in other studies it is said that sports activities, work in children's development, as well as the age stage of children's mental development and about their peculiarities (Uljayevna & Shavkathovna, 2021).

Children learn by constructing their knowledge and emotions in several ways. In another study, it was explained that learning was made through the understanding of moral and sosial contact that they did. The teachers prepared the classroom to facilitate students to involve the conflicts/problems experienced to make decision and sosial problems (Kusumawati & Zuchdi, 2019).

The role of parents in processing all the necessary abilities. Teachers in schools only train well and briefly. At home parents have a long time and quality time. The process of transforming children's Islamic education values carried out by teachers and parents through online communication (whatsapp) encountered obstacles, unlike face-to-face activities (Andreas Putra, Sufiani, & Jahada, 2020).

Furthermore, education management cannot be separated from all educational programs and implementations that are carried out. Educational management functions as a driving force capable of carrying out the process. In the learning process of Early Childhood Education, this cannot be separated from good education management (Suharti, 2018).

The implications of this research include the adaptation of teachers to be willing to adapt the abilities of millennials such as teaching by using technology to teach. In the face of such rapid change, teachers can promote 21st century skills to prepare students for an unknown future and ever-changing work demands.

Conclusion

The results based on research and discussion can be obtained that the ability of early childhood students needs to be developed as well as possible. carried out by parents who have time and broad reach to their children. The teacher just continues and sharpens all students' abilities. The students' abilities that are mastered are moral and religious abilities, physical motor skills, artistic and language skills, emotional abilities and cognitive abilities. For example, computer learning continues to evolve, making teachers and parents continue to learn, and providing constantly evolving materials such as coding, simple robotics to align with future needs.

Acknowledgment

The writers would like to thank the god. Special thanks for Mr Adhis that could revise the article. The writer say thank for all the teachers and headmaster who participated the research.

References

- Amirah, S. (2019). Pengaruh Kegiatan Bercerita terhadap Perkembangan Bahasa dan Kognitif Anak Usia 5-6 Tahun dengan Menggunakan Media Gambar di TK/Paud Amanah Medan Tahun Ajaran 2019/2020. Prosiding Seminar Nasional Fakultas Ilmu Sosial Universitas Negeri Medan. <u>http://digilib.unimed.ac.id/37311</u>
- Andreas Putra, A. T., Sufiani, & Jahada. (2020). Transformasi Nilai Pendidikan Islam Anak di PAUD Sultan Qaimuddin Kendari Pada Masa Pandemic Covid 19. *Murhum : Jurnal Pendidikan Anak Usia Dini*, 1(1), 79-90. <u>https://doi.org/10.37985/murhum.v1i1.8</u>
- Arifin, L. A., & Rahmadi, F. A. (2017). Hubungan tingkat kecanduan gadget dengan prestasi belajar siswa usia 10-11 tahun. *Diponegoro Medical Journal*, 6(2), 728-736.

Aziz, T. (2019). Manajemen Pendidikan Anak Usia Dini (S. Ummah, ed.). Duta Media Publishing.

- Catalano, H., & Campbell-Barr, V. (2021). The occurrence of pretend play in early childhood education in Romania an investigative study. *Early Child Development and Care*, 191(3), 349-359. <u>https://doi.org/10.1080/03004430.2019.1621306</u>
- Çiftci, S., & Bildiren, A. (2020). The effect of coding courses on the cognitive abilities and problem-solving skills of preschool children. *Computer science education*, 30(1), 3-21. <u>https://doi.org/10.1080/08993408.2019.1696169</u>
- Dea, L. F., & Latipah, E. (2017). Pengembangan Kemampuan Kognitif dan Sosial-Emosional Melalui Penerapan Media Balok dan Bermain Peran Pada Siswa TK Kuntum Mekar, Lampung. Al-Athfal: Jurnal Pendidikan Anak, 3(2), 185-196. <u>https://doi.org/10.14421/al-athfal.2017.32-06</u>

- Hamidovna, N. R. (2020). Preparation of children in schools by making technological techniques in pre-school education. *European Journal of Research and Reflection in Educational Sciences*, 8(2), 120-124.
- Johnstone, A., Martin, A., Cordovil, R., Fjørtoft, I., Iivonen, S., Jidovtseff, B., Lopes, F., Reilly, J. J., Thomson, H., Wells, V., & McCrorie, P. (2022). Nature-Based Early Childhood Education and Children's Social, Emotional and Cognitive Development: A Mixed-Methods Systematic Review. *International journal of environmental research and public health*, 19(10), 5967. <u>https://doi.org/10.3390/ijerph19105967</u>
- Komaini, A., Hidayat, H., Ganefri, G., Alnedral, A., Kiram, Y., Gusril, G., & Tri Mario, D. (2021). Motor Learning Measuring Tools: A Design and Implementation Using Sensor Technology for Preschool Education. *International Journal of Interactive Mobile Technologies (IJIM)*, 15(17), 177-191. <u>https://doi.org/10.3991/ijim.v15i17.25321</u>
- Kusumawati, I., & Zuchdi, D. (2019). Pendidikan Moral Anak Usia Dini Melalui Pendekatan Konstruktivis. *Academy of Education Journal*, 10(01), 63-75. <u>https://doi.org/10.47200/aoej.v10i01.272</u>
- Li, J. (2021). Research on the reform and innovation of preschool education informatization under the background of wireless communication and virtual reality. *Wireless Communications and Mobile Computing*, 2021. <u>https://doi.org/10.1155/2021/3176309</u>
- Nores, M., Friedman-Krauss, A., & Figueras-Daniel, A. (2022). Activity settings, content, and pedagogical strategies in preschool classrooms: Do these influence the interactions we observe? *Early Childhood Research Quarterly*, 58, 264-277. https://doi.org/10.1016/j.ecresq.2021.09.011
- Otterborn, A., Schönborn, K. & Hultén, M. (2019). Surveying preschool teachers' use of digital tablets: general and technology education related findings. *Int J Technol Des Educ* 29, 717-737. <u>https://doi.org/10.1007/s10798-018-9469-9</u>
- Suharti. (2018). Manajemen Pendidikan Anak Usia Dini (PAUD) dalam Rangka Meningkatkan Mutu Pembelajaran (Studi pada PAUD Negeri Pembina Curup dan PAUD Pertiwi Kabupaten Rejang Lebong). Tadbir: Jurnal Studi Manajemen Pendidikan, 2(1), 51-70. <u>https://doi.org/10.29240/jsmp.v2i1.397</u>
- Suhelayanti, Aziz, M. R., Sari, D. C., Safitri, M., Saputra, S., Purba, S., Revida, E., Purba, R. A., Muharlisiani, L. T., & Simarmata, J. (2020). *Manajemen Pendidikan*. Kita Menulis.
- Sundqvist, P., & Nilsson, T. (2018). Technology education in preschool: providing opportunities for children to use artifacts and to create. *International Journal of Technology and Design Education*, 28(1), 29-51. <u>https://doi.org/10.1007/s10798-016-9375-y</u>
- Trilling, B., & Fadel, C. (2009). 21st century skills: Learning for life in our times. John Wiley &
- Turan, S., & Aydoğdu, F. (2020). Effect of coding and robotic education on pre-school children's skills of scientific process. *Education and Information Technologies*, 25(5), 4353-4363. <u>https://doi.org/10.1007/s10639-020-10178-4</u>
- Uljayevna, U. F., & Shavkathovna, S. R. (2021). Development and education of preschool children. *Academicia: An International Multidisciplinary Research Journal*, 11(2), 326-329. https://doi.org/10.5958/2249-7137.2021.00358.X
- Wang, X., Sun, H., & Li, L. (2019). An Innovative Preschool Education Method Based on Computer Multimedia Technology. *International Journal of Emerging Technologies in Learning (iJET)*, 14(14), pp. 57–68. <u>https://doi.org/10.3991/ijet.v14i14.10714</u>