

Research Article

Model in Early Childhood Cognitive Development

Rubaiyah *, Wahyu, Nina Permata Sari

Master Program of Early Childhood Teacher Education, Universitas Lambung Mangkurat, 70123, Indonesia

Article history:

Submission August 2020

Revised September 2020

Accepted September 2020

**Corresponding author:*

E-mail:

rubaiyahrubaiyah8@gmail.com

ABSTRACT

This class action research was done in two cycles, with three meetings to practice fun learning models for children. Research subjects were sixteen kindergarten students in Group A, Islamic Kindergarten of Bakti 1 Banjarmasin. Fun models used in this study are Make a Match, Picture and Picture, and Talking Stick. The objective is to improve cognitive aspects based on children's ability to recognize objects around based on function. Analysis of descriptive qualitative data shows that teacher activity ≥ 24 is in the "very Active" category, student activity ≥ 82 is in the "very Active" category, and learning outcomes show excellent development. The results show that the combination of three pleasing models positively impacts the cognitive aspects of early childhood.

Keywords: Make a match, picture, talking stick

Introduction

Education is an aspect that must be lived by the community in every aspect. Education is the sole center of a process in developing society (Pedersen, Nørgaard, & Köppe, 2018). It has been explained as well back then by Marshall (1950) that education has become a society right and an individual obligation. These arguments are in line with (Nurkholis, 2013) that education is defined as a process that includes three dimensions: the individual, society or national community of the individual, and the entire content of reality. These three dimensions in both material and spiritual form play a role in determining the nature, destiny, human form, and society.

Education is an essential thing for humans to live in society. According to Hasbullah (2009), through education, human personality is sought to be fostered by the values and culture in society. A human being is developed through education according to the values in society and the prevailing culture (Darmiyati & Elisa, 2018). It is argued that education is a commodity whose purpose of catering to students with competitive

precedence for the struggle of desirable social positions (Pearl, 2001). Of course, it is one of the effects of having an education in the latter part of life.

A place for conducting education is usually called a school. Schools, as educational institutions, teach science, skills, and attitudes. They are vital institutions as schools connect students with peers and mentors. It channels youthful energy into productive pursuits, teach essential academic skills and knowledge, and give overwhelmed parents room to breathe and work (Bailey et al., 2020).

Besides, schools play an essential role in the formation of children's character because children spend enough time to learn that will shape their personalities (Ahmad, 2014). Children can learn about nationality at school as it is one of the essential aspects of community values. It is because the school can function to make sense of the past, present, and future of the cultural community (Carretero, 2018). Early childhood education is the earliest education. It is argued in society that early childhood education as early as the

How to cite:

Rubiyah. (2020). Model in early childhood cognitive development. *Journal of K6, Education, and Management*, 3 (2), 109 – 117. doi: 10.11594/jk6em.03.02.02

preschool is crucial. It is believed to be invested as in the future the educated-since-childhood children will grow up to be adults who can earn their living to reduce economic inequality (Magnuson & Duncan, 2016). However, aside from the economic aspect, young learners need the education to fulfill aspects of child development (Wijana, 2014). The child development can be achieved through education of home-based involvement, school-based involvement, and school-home conferencing (Daugherty, Dossani, Johnson, & Wright, 2014). Meanwhile, the aspects that must be developed in early childhood education are: (a) Religious and Moral Values; (b) Emotional Social; (c) Cognitive; (d) Language; and (e) Physical-Motor. In this study, the researcher examined cognitive aspects in the early childhood phase.

Early Childhood Education is an education that focused on the foundation towards growth and motor, moral and religious values, social, emotional, cognitive, language, and art. That is in line with the uniqueness and stages of early childhood development. Every child is different and has its uniqueness (Purwanti, Suriansyah, Aslamiyah, & Dalle, 2018). Furthermore, there has been overwhelming documentation that a very major proportion of the variance in adult intellectual achievement is already accounted for by the time human reaches the age of five years old (Greenberg, 1976). Thus, with each child's uniqueness, they will be adults with their unique achievements later in the future.

In the past time, the orientation of early childhood education is merely to develop academic abilities. In contrast, the development of character as one of the aspects of child development is neglected. It violates the nature of early childhood education that should aim to develop all the potential and necessary intelligence possessed by every child. School environments that provide a more appropriate developmental fit, such as more relevant tasks, less emphasis on grades and competition, or more collaboration, have been shown to enhance students' intrinsic motivation (Rathunde & Csikszentmihalyi, 2005). As in preschool, it has been recommended to include music in learning, for example, subjects like mathematics (McDonel, 2015) in order to not only getting obsessed over academic abilities only but

also enjoying childhood with art or music. On the other side, Indonesia is currently facing a severe problem that must be overcome, namely, a prolonged multidimensional crisis (Salasiah, Asniwati, & Effendi, 2018). Fortunately, these past few years, changes have happened that make more parents understand the importance of early childhood education (Safitri, Ahmad, & Saleh, 2018).

One of the most critical aspects of early childhood education is the cognitive aspect. Suryaningsih & Rimpiati (2018) say that cognitive is the ability to learn or think. Cognitive ability is to learn new skills and concepts to understand their environment and the skills to use memory and solve simple problems. Cognitive development in childhood is also linked to the health behaviors they will do in the future, presumably by the age of fifty or seventy years old (Jefferis, Manor, & Power, 2008). It is enough evidence to show that the earlier cognitive development during childhood, it can influence the way children shape their future, not only about wealth but also health.

The other focus of this research is about the importance of joyful models in early childhood education. Izzaty (2018) mentions that joyful or happiness influences students' ability to adapt to their social environment and develop their cognitive. It is in line with Zosh et al (2017) that they mention that learning through playing can bring positive, healthy development for any children. They reflect in the modern notion of childhood, which regards children as a distinct category in the life-cycle with special needs and an inherent physical, social, and structural vulnerability, who are, by definition, entitled to happiness (Çiçek, 2016). Thus, it is not encouraged to put children as young as three and four at risk of feeling pressured in the classroom environment as children develop at different rates, and they cannot be uniformed in only one standard (Hatch, 2002).

Based on preliminary observations at the Islamic Kindergarten of Bakti 1 in Banjarmasin, within the scope of development, it was revealed that fourteen out of the sixteen students still had difficulty recognizing surrounding objects based on functions. Only two students can get to know objects around by function. Therefore, learning

outcomes in achieving goals according to indicators have not been successful, because almost 80% of students have not been able to recognize objects based on functions. Consequently, present childhood conception should not be compared to the past ones using modern perspectives, but instead accepting the mentality of the time, with practices of the specific era (Endrödy-Nagy, 2016), including education practices. It can be seen that the reason of the children failing to recognize objects around by function is the use of inappropriate learning models that are less attractive to children, as the case of having the education to enable learners to express themselves in the chosen medium with both satisfaction and confidence. The relationship between the intentions and outcomes of young children's pictorial efforts should be carefully examined in the context of early childhood art education practice (Kindler, 1993).

This issue must be considered. It is because quality early care and education positively influences children's success in school and later in life (Quintero, 2012). Accordingly, if students fail to recognize objects around by function, it will have a severe impact on students' cognitive aspects. Likewise, the school has encouraged more enrollment and retention than the development of cognitive competencies (Lloyd, Mensch, & Clark, 2000).

In the end, it will impact on the quality of schools. The organization's view of quality has developed. Schools compete with each other through advancing quality. Quality progress is collective, but now it is slowly moving in a positive direction. At first, the quality was not considered necessary, but now it is the most critical thing in an organization (Asniwati, 2015). As a result, the organization must continually improve its performance (Becker & Gerhart, 1996) to keep and maintain quality. An organization's nature is to continually modify and refine the mechanism by which they achieve their purposes (Miles, Snow, Meyer, & Coleman, 1978). Schools as organizations can be pushed to improve, modify, and refine their mechanism to reach the institutions' goals. This assumption needs to be endeavored to improve cognitive development abilities in recognizing objects based on function. The cognitive development of children in kindergarten requires

a learning model that is suitable for childhood. With a suitable model, children will learn in a fun way, and there is no coercion from others so that children easily accept the material delivered by the teacher.

In this case, the researchers chose a combination of Make a Match Learning Models, Picture and Picture Learning Models, and Talking Stick Learning Models. According to Suryaningsih & Rimpiati (2018), a learning model is a plan or pattern that can be used to form a curriculum (long-term learning plan), design learning materials, and guide learning in class or other.

Therefore, in the conventional applications, every individual being a part of a group is dependent on a program and educational management, which was chosen for the group by the teacher (Kazu, Kazu, & Ozdemir, 2005). Learning can be in various ways, and each has approached the subject from different perspectives, leading to more divergence (Fiol & Lyles, 1985).

The learning model used in this study designed to support the teaching and learning process of students related to declarative knowledge and procedural knowledge that is well structured and taught with patterns of regular activities. *Make A Match* Learning Models first invented in 1994 by Lorna Curran (Huda, 2013).

While Image and Picture Method is using pictures, diagrams, tables, competencies, display pictures attached or using LCD / OHP, students examine the presentation, discussion groups to look for answers, present group results, summarize the results of the discussion, evaluation, and reflection (Huda, 2013). Moreover, Putri & Novitawati (2017) explain that Image and Picture is a learning model that uses pictures. The picture is obtained from cases or drawings that correspond to Basic Competencies. Amini (2016) mentions that "Image and Picture Learning Models" are learning models that use pictures as learning media. The learning method is a presentation technique mastered by a teacher to present subject matter to students in class both individually and in groups so that subject matter can be absorbed, understood, and utilized by students. According to Zosh et al. (2017), playing has become children's work to achieve children's growth. Playing is a fun non-serious, flexible, imaginative, and transformative activity.

Playing is an activity that is always done by children every day because for them playing is part of life (Sujiono, 2013). Early childhood cannot distinguish between playing, studying, and working. All children enjoy the game and will continue to do it wherever they have the chance.

Playing games make young learners feel happy and ready to study (Yolageldili and Arikan 2011). Games also can make young learners more creative and actively involved in the teaching and learning process (Hang, 2017). Joyful activities have a positive result in the development of children's cognitive aspects. School and parents must have a shared role in increasing the students' cognitive abilities (Poernamawijaya, Sulaiman, Suriansyah, & Dalle, 2018). The evidence using the methods by teachers in schools, coupled with principals' ability to regulate the quality of education in the school. Another factor supporting the development of the students' learning outcomes is teachers' ability to deliver learning materials that motivate and can coordinate children in the class (Metroyadi & Mardhiah, 2018).

Material and Methods

This study was a classroom action research on Kindergarten of Islamic Kindergarten of Bakti 1 Banjarmasin first semester, the academic year of 2019/2020. The research subject was 16 students consisting of eight boys and eight girls in 2 cycles consisting of cycle 1 with two meetings and cycle 2 with one meeting. Each meeting includes several stages, namely, planning, implementation, observation, and reflection (Legiman, 2015).

The data analysis was through teacher activity, student activities, and learning outcomes of students' cognitive development in recognizing surrounding objects based on function. In this study, indicators of success were that if the teacher's activity reached 79% -100% with an outstanding category, student activity obtained 81% -100% with a very active category. The cognitive development of students classically up to 82% -100% with very active categories and cognitive abilities to recognize objects around by function get a value **** with very well developed categories.

Results and Discussion

Based on the results of the study conducted 3 (three) meetings consisting of the cycle I (meeting 1 and meeting 2) and in cycle II (meeting 3). Activities are undertaken to observe teacher activities, student activities, and student learning outcomes on aspects of cognitive abilities in recognizing surrounding objects based on functions. Sixteen students were involved in the study, consisting of eight boys and eight girls.

Research on aspects of cognitive abilities in recognizing surrounding objects based on functions using a combination of models Makes A Match, Image and Picture, and Talking Stick to group A students at Islamic Kindergarten of Bakti 1 in Banjarmasin in three meetings which were declared successful.

The students knew the material through sample images that can enhance students' knowledge, indirectly in aspects of the students' cognitive abilities, could classify and recognize objects around based on function. It is in line with (Sudono, 2000). She mentioned that the reference to choose teaching methods for Group A 0-6 year involves students in learning activities, therefore at school, the students should be invited to choose the material they want to explore.

Teacher's activities have been experienced from a generation to another generation and another one. It keeps being done like that. For example, picture teaching that has been compiled and kept by a teacher can be given to other fellow teachers and the next teacher and students for many years (Kiesel, 1902). However, it is not easy to achieve. Professional development serves as a primary way to support teachers' creative experiences and enact instructional change (Hickey & Schmidt, 2019).

In consequence, many activities have been done to raise competence among school pupils as well as teachers like what happened in Belgium, France, Germany, and Italy that were having intercultural learning with various programs (Briga, 2019). It is to facilitate students' proactive participation in an increasingly global opportunities of equal chance with everyone else (Bañados, 2006). In a part of this section, the teacher's activities are discussed more as part of the research results.

Teacher's activities

The teacher's activity at the first meeting got 12, and the second meeting got a score of 18, and the third meeting increased to get a score of 21. Based on observations of the teacher's activity shows that each meeting, the teacher continued to increase her learning activities by continuing to make improvements from every aspect that was still lacking. The increase occurred because the teacher was reflecting and correcting mistakes and trying to manage to learn. Furthermore, the teacher can master the class to understand activities that can provide understanding to children about cognitive aspects in recognizing surrounding objects based on the function in teaching so that each meeting's results can be improved. Teaching carried out by teachers has achieved excellent criteria. Learning activities are per established indicators, and in their implementation, the teacher's activities are successful.

Teacher activity in developing students' cognitive abilities in recognizing surrounding objects based on functions using fun learning models such as Make A Match, Image And Picture, and Talking Stick proved to be increased. It was evident from the teacher's activities during three meetings that continued to increase from meeting 1 to 3. Meeting 1 got a score of 12. At the second meeting got a score of 18 in the excellent category. In the second cycle of meeting 3, getting 21 was obtained in the excellent category. In connection with increasing teacher activity by applying the teacher's first Make A Match model, the teacher prepares several cards containing several concepts or topics appropriate for the picture review session, and each child gets one card to pair with. The teacher guides the child in pairing the cards (Aqib, 2013).

Students' activities

Nowadays, the teaching and learning process results are no longer assessed only by the amount of cognitive information gained by students, but also by the broader competencies developed (Moree & Vávrová, 2019). In a later year, letting students training in living up to their responsibility in the school organization is perhaps the best possible preparation for living up to their responsibility as members of society (Bjornson, 1916). Active students will have activities in society and

like to have social activity (Barwick, 2010). Students that interacted with the metacognitive scaffolding exhibited significantly higher achievements than those that did not use it (López-Vargas, Ibáñez-Ibáñez, & Racines-Prada, 2017). Meanwhile, cognitive tools can be implemented as well through a computer (Zahide, 2005). However, developing cognitive abilities can be done so early in students' life using various methods as it is explained in this section below.

Student activities in developing cognitive abilities in recognizing surrounding objects based on functions using fun learning models such as Make a Match, Image and Picture, and Talking Stick have increased. The activity carried out is to recognize objects around the function. The activity at this meeting the students paired/matched the pot with its function to cook vegetables, the picture of the pan with its function to fry fish, and the picture of the kettle with its function to boil water. At this meeting 1, the category obtained was not good because students only received an average of 62% based on the Indicators assessed in children's activities.

At the second meeting, the activities paired plates with their function as a place to eat, bowls as a place for soup, and glasses with their function as a container for drinking water. It experienced a slight increase in the category obtained quite well from the average of about 80% based on indicators assessed on student activities. In the second cycle, the third meeting of pairing spoons as a tool to take rice, forks with its function as a tool to make noodles and knives with its function as a cutting tool obtained by the category is quite good but increased in number by about 89%.

Based on indicators that are assessed about student activities. Increasing student activity continuously from the average obtained and its category in the development of students' cognitive abilities using the learning model Make a Match, Image and Picture, and Talking Stick by recognizing surrounding objects based on functions in group A Islamic Kindergarten of Bakti 1 Banjarmasin.

Student activities have increased and can achieve the desired indicators of success. Student activities are declared successful if they can obtain classical activity students achieve the criteria of a score of "very active" $\geq 80\%$. So, it concluded

that the activities of students participating in learning using the model Make A Match, Image And Picture, and Talking Stick on the activities to recognize objects around based on function.

At the first meeting, activity pairing/matching objects/equipment in the house obtained classical completeness of 12.5%, or as many as two people out of 16 number of children or one pair of students who managed to achieve the highest points compared to other students' pairs.

At the second meeting, activities pairing/matching objects with their partners, i.e., school supplies obtained 50% classical completeness or as many as eight people out of 16 students or four pairs of students who won the highest points compared to other pairs of students.

At the third meeting, the pairing/matching of pictures of objects according to their function was 75% classical completeness or as many as 12 students out of 16 students or six pairs of students who won the highest points compared to other pairs of students. At the fourth meeting, activities

pairing / matching numbers by the number of pictures about school equipment obtained classical completeness 87.5%, or as many as 14 students out of 16 students. This result showed that it had reached the expected indicator. At the first meeting, completeness reached 56% of students who succeeded. While at the second meeting, completeness reached 75% of students who succeeded. Furthermore, at the third meeting, completeness reached 87.50% of students who succeeded. We can say that the learning outcomes at the third meeting reach the expected success indicator, which reaches $\geq 80\%$ of children get ≥ 3 . It concludes that the use of a fun learning model, Make A Match, Image and Picture, and Talking Stick in recognizing surrounding objects based on functions is declared successful. Increasing the value of the results of the abilities obtained by students, because students can master the learning material taught by the teacher, so the results of student abilities at each meeting tend to increase.

Table 1. Comparison of observations of teacher activities, students' activities and students' learning outcomes

	Cycle I		Cycle II
	Meeting 1	Meeting 2	Meeting 3
Teacher's Activities	50%	71%	87.50%
Students' Activities	62%	80%	89%
Learning Outcomes	56%	75%	87.50%

Conclusion and Recommendation

The teacher's activity in developing cognitive abilities about recognizing surrounding objects based on functions using a fun learning model Make A Match, Picture And Picture, and Talking Stick in group A children in Islamic Kindergarten of Bakti 1 Banjarmasin with outstanding results. Student activities in developing cognitive abilities about recognizing surrounding objects based on functions using those learning models are fun. Make A Match, Image and Picture, and Talking Stick in group Children in Islamic Kindergarten of Bakti 1 Banjarmasin have increased in each cycle with very active criteria. Fun learning models such as Make a Match, Image and Picture, and Talking Stick can develop children's cognitive abilities in recognizing surrounding objects based on functions in group A children of Islamic Kindergarten of Bakti 1 Banjarmasin. It has improved with very well developed criteria. This study only focuses

on identifying objects around by function. A more enjoyable learning model can be used in subsequent studies to measure cognitive aspects or other aspects of early childhood students.

Acknowledgment

Thanks to the head of the program, secretariat and lecturers of the Master Program in Early Childhood Education at University of Lambung Mangkurat, Banjarmasin, who provided input and suggestions for writing this article. We must express our appreciation to the Principal of the Islamic Kindergarten of Bakti 1 Banjarmasin and the teachers for helping in this research. May Allah Subhanahu Wa Taala bless us all. Amen.

References

- Ahmad, K.I. (2014). Penerapan Pendidikan Karakter, Pendekatan Sesosifit (Spiritual, Emosional, Sosial, Intelektual, Fitrah) melalui Layanan Mimbingan dan Konseling.

- Amini, S.R. (2016). Upaya Mengembangkan Bahasa dalam Mengani Pembendaharaan Kata Mengenai Kata Sifat melalui Model Examples non Examples pada Kelompok A TK Khairiyah Martapura. *JEA*, 2(2), 75–85.
- Aqib, Z. (2013). *Model-Model, Media, dan Strategi Pembelajaran Kontekstual (Inovatif) (Cetakan Pe)*. Bandung: Yrama Widya.
- Asniwati. (2015). Pengembangan Manajemen Terpadu untuk Penyelenggaraan Pendidikan pada Sekolah Dasar di Kota Banjarmasin. *SEMNAS PS2DMP ULM*, 9–16.
- Bailey, J, et al. (2020). *A Blueprint for Back to School*. America: American Enterprise Institute.
- Bañados, E. (2006). A Blended-learning Pedagogical Model for Teaching and Learning EFL Successfully Through an Online Interactive Multimedia Environment. *CALICO Journal*, 23(3), 533-550.
- Barwick, R. (2010). Student Activities. In Rickard M. & Caton J. (Eds.), *Geology at ANU (1959-2009): Fifty years of history and reminiscences*, 141-160. ANU Press.
- Becker, B., & Gerhart, B. (1996). The Impact of Human Resource Management on Organizational Performance: Progress and Prospects. *The Academy of Management Journal*, 39(4), 779-801.
- Bjornson, J. (1916). Student Activities in High Schools." *The Journal of Education*, 83(23), 619-621.
- Briga, E. (2019). Intercultural Learning for Pupils and Teachers: A Good Practice Case Study from an Erasmus Project." In In Kowalczyk-Walêdziak M., Korzeniecka-Bondar A., Danilewicz W., & Lauwers G. (Eds.), *Rethinking Teacher Education for the 21st Century: Trends, Challenges and New Directions*, 329-339. Opladen; Berlin; Toronto:: Verlag Barbara Budrich.
- Carretero, M. (2018). Imagining the Nation throughout School History Master Narratives. In In Demantowsky M. (Ed.), *Public History and School: International Perspectives*, 97-108. Berlin/Boston: De Gruyter.
- Çiçek, N. (2016). The Interplay between Modernization and the Reconstruction of Childhood: Romantic Interpretations of the Child in Early Republican Era Popular Magazines, 1924–1950. In In Fortna B. (Ed.), *Childhood in the Late Ottoman Empire and After*, 21-47. Leiden; Boston: Brill.
- Darmiyati., & S. Elisa. (2018). Meningkatkan Hasil Belajar Matematika Materi Operasi Perkalian dan Pembagian Pecahan Melalui Model Demonstrasi Kombinasi dengan Problem Based Learning dan Pair Checks Siswa Kelas V Sekolah Dasar. *J-Instech : Journal of Instructional Technology /Jurnal Teknologi Pendidikan*, 1(1), 10–18.
- Daugherty, L. R., Dossani, E., Johnson, Wright, C. (2014). Families, Powered On: Improving Family Engagement in Early Childhood Education Through Technology." In *Families, Powered On: Improving Family Engagement in Early Childhood Education Through Technology*, 1-8. RAND Corporation.
- Endrödy-Nagy, O. (2016). Paintings and Illuminated Manuscripts as Sources of the History of Childhood: Conceptions of Childhood in the Renaissance. In In Benedek A. & Veszelszki Á (Eds.), *In the Beginning was the Image: The Omnipresence of Pictures: Time, Truth, Tradition*, 91-100. Frankfurt am Main: Peter Lang AG.
- Fiol, C., & Lyles, M. (1985). Organizational Learning. *The Academy of Management Review*, 10(4), 803-813.
- Greenberg, M. (1976). Research in music in early childhood education: A survey with recommendations. *Bulletin of the Council for Research in Music Education*, (45), 1-20.
- Gülin, Y., & Arikan, A. (2011). Effectiveness of using games in teaching grammar to young learners. *Elementary Education Online*, 10(1), 219-229.
- Hang, S. (2017). *Using games to teach young children english language*. Master Thesis, Brussel : Vrije Universiteit Brussel.
- Hasbullah. (2009). *Dasar-dasar Ilmu Pendidikan*. Rajagrafindo Persada.
- Hatch, J. (2002). Accountability Shovedown: Resisting the Standards Movement in Early Childhood Education." *The Phi Delta Kappan*, 83(6), 457-462.
- Hickey, M., & Schmidt, C. (2019). The Effect of Professional Development on Music Teachers' Improvisation and Composition Activities. *Bulletin of the Council for Research in Music Education*, (222), 27-43.
- Huda, M. (2013). Model-Model Pengajaran dan Pembelajaran: Isu-Isu Metodis dan Paradigmatis. Yogyakarta: Pustaka Pelajar.
- Izzaty, R. E. (2018). Happiness in Early Childhood." *Psychological Research and Intervention*, 1(2), 64–77.
- Jefferis, B, Manor, O., & Power, C. (2008). Cognitive development in childhood and drinking behaviour over two decades in adulthood. *Journal of Epidemiology and Community Health*, 62(6), 506-512.
- Katherine, M., & Duncan, G. J. (2016). Can Early Childhood Interventions Decrease Inequality of Economic Opportunity?. *RSF: The Russell Sage Foundation Journal of the Social Sciences*, 2(2), 123-141.
- Kazu, Ibrahim, Y., Kazu, H., & Ozdemir, O. (2005). The Effects of Mastery Learning Model on the Success of the Students Who Attended "Usage of Basic Information Technologies" Course. *Journal of Educational Technology & Society*, 8(4), 233-243.
- Kiesel, T. (1902). Picture Teaching. *American Annals of the Deaf*, 47(5), 403-439.
- Kindler, A. (1993). Research in developmental psychology: implications for early childhood art education practice. *Visual Arts Research*, 19(1), 16-19.
- Legiman. (2015). *Penelitian Tindak Kelas (PTK)*. 1–15.

- Lloyd, C., Mensch, B., & Clark, W. (2000). The Effects of Primary School Quality on School Dropout among Kenyan Girls and Boys. *Comparative Education Review*, 44(2), 113-147.
- López-Vargas, O, Ibáñez-Ibáñez, J., & Racines-Prada, O. (2017). Students' Metacognition and Cognitive Style and Their Effect on Cognitive Load and Learning Achievement. *Journal of Educational Technology & Society*, 20(3),145-157.
- Marshall, T. H. (1950). *Citizenship and social class*. Cambridge, UK: Cambridge University Press, 1950.
- McDonel, J. (2015). Exploring Learning Connections Between Music and Mathematics in Early Childhood. *Bulletin of the Council for Research in Music Education*, (203), 45-62.
- Metroyadi & Mardhiah, A. (2018). Efforts to Develop Children Fine Motor Skills Through Sticking Picture Properly by Using Combination of Explicit Instruction Model and Assignment Media Utilizing Natural Materials. *Journal of K6, Education and Management*, 1(2), 12-18.
- Miles, R., Snow, C., Meyer, A., & Coleman, H. (1978). Organizational Strategy, Structure, and Process. *The Academy of Management Review*, 3(3), 546-562.
- Moree, D., & Vávrová, T. (2019). Educational Activities in Civil Society. In *Veugelers W. (Ed.), Education for Democratic Intercultural Citizenship*, 107-123. Leiden, Boston: Brill.
- Nurkholis. (2013). Pendidikan dalam Upaya Memajukan Teknologi. *Jurnal Kependidikan* 1(1), 24-44.
- Pearl, A. (2001). Yet another effort to link education and culture. *The American Journal of Psychology*, 114(3), 487-491.
- Pedersen, A, Nørgaard, R., & Köppe, C. (2018). Patterns of Inclusion: Fostering Digital Citizenship through Hybrid Education. *Journal of Educational Technology & Society*, 21(1), 225-236.
- Poernamawijaya, L.W., Sulaiman, S., Suriasyah, A., & Dalle, J. (2018). Contribution on Supervision of Supervisor, Principals Motivation, Kindergarten Teacher Performance to Improving the Kindergarten Quality in West Banjarmasin, Indonesia.
- Purwanti, R. Y., Suriasyah, A., Aslamiyah, A., & Dalle, J. (2018). Introducing Language Aspect (English) to Early Childhood through the Combination of Picture and Picture Model, Talking Stick Model, Flashcard Media, and Movement and Song Method in B1 group at Matahariku Bilingual Kindergarten Landasan Ulin Tengah, Banjar." (Semantic Scholar website).
- Putri, O. M., Novitawati. (2017). Mengembangkan kemampuan anak usia dini dalam memahami perilaku mulia (jujur, penolong) menggunakan kombinasi metode bercerita , metode tanya jawab dan model examples non examples. *J-PPras*, 1(1), 29-34.
- Quintero, E. (2012). Early childhood collaborations: learning from migrant families and children. *Counterpoints*, 411, 168-189.
- Rathunde, K., & Csikszentmihalyi, M. (2005). Middle School Students' Motivation and Quality of Experience: A Comparison of Montessori and Traditional School Environments. *American Journal of Education*, 111(3), 341-371.
- Safitri, M.E., Ahmad, K. I. & Saleh, M. (2018). Development of Child Independence Through Model Picture and Picture, Examples Non Examples Model and Practical Method Directly Activities of Learning Practical Life in Group B Kasih Ibu Kindergarten, Banjarmasin, Indonesia. *European Journal of Education Studies*, 5(7), 64-80.
- Salasiah, Asniwati., & Effendi, R. (2018). Instilling Character Values in Early Childhood in the Perspective of Curriculum and Parenting (Multi-Site Study in PAUD Islam Sabilal Muhtadin and PAUD Mawaddah, Banjarmasin, Indonesia)." *European Journal of Education Studies*, 5(7), 36-48.
- Sudono, A. (2000). *Sumber Belajar dan Alat Permainan untuk Pendidikan Usia Dini (Edisi Pert)*. Jakarta: Gramedia Widiasarana Indonesia.
- Sujiono, Y.N. (2013). *Konsep Dasar Pendidikan Anak Usia Dini (Edisi Pert)*. Jakarta: Rineka Cipta.
- Suryaningsih, N.M.A., & Rimpiati, N. L. (2018). Implementation of Game-Based Thematic Science Approach in Developing Early Childhood Cognitive Capability." *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*, 2(2), 194-201.
- Wijana, W. D. (2014). Konsep-Konsep Dasar Pendidikan Anak Usia Dini. *Kurikulum PAUD*, 40.
- Yildirim, Z. (2005). Hypermedia as a cognitive tool: Student teachers' experiences in learning by doing. *ournal of Educational Technology & Society*, 8(2), 107-117.
- Zosh, J.M., et al. (2017). Learning Through Play : A Review of the Evidence (White Paper).