

THE IMPORTANCE OF EARLY CHILDHOOD EDUCATION IN THE DIGITAL TRANSFORMATION ERA

Palembang University

Ayu Paramitasari
Ayu.paramitha90@gmail.com

Herunimas J. Rompas
rompasheru@gmail.com

I. INTRODUCTION

Education is an activity that is carried out by two or more people in terms of providing and receiving information that is considered useful. Based on Ahmadi and Uhbiyati (2007), education is essentially an activity that is conscious and deliberate full of responsibility interactions carried out by adults to children that arise from both of them so the children would reach their maturity they aspired. If we think clearly, education is really important nowadays, especially for children at an early age. Education activity does not just apply to adolescents and adults. The development of advanced technologies requires more attention to early childhood education for children.

Early childhood education services for children aged 3-5 years. What we know as playgroups, child care, and kindergartens includes early childhood education. Although they are different but have the same goal to prepare children whose names are ready to enter primary school. One of the importance of early childhood education is to make it easier for children when it is time for them to enter elementary school. Based on U.U. RI Number 20 of 2003 Article 1 education interpreted as conscious effort and planned to materialize learning atmosphere and process learning for students actively developing potential himself to have strong religious spirituality, control self, personality, intelligence, morals, noble, as well as skill needed himself, society, nation, and state. Article 28 about (PAUD) children's education early age stated that early childhood education programs held before level basic education, can be organized through the line formal, non-formal, and education or informal.

Nowadays, the incident where many parents fail in educating their children is a fact that cannot be avoided. The focus on education for their children from an early age is still considered minimal, making the emotional and character development of their children ineffective. It is supported by busy parents on their work, making them give everything to the activities of their children to the maid at home. Very unfortunate that early childhood needs require attention and support from parents in gold through periods of their early childhood.

The problems mentioned above are one of the impacts of technological development and the information that led to the changing pattern of early childhood education that we are witnessing now. Thus the need for more tips and special attention to the patterns and behavior of parents in educating their children from an early age. In general, the purpose of early childhood education is to develop various potentials children from an early age in preparation to live and be able to adjust

themselves to the environment. Children's education can also be interpreted as an effort to optimize the extraordinary potentials of the child can be framed in education, integrated coaching, as well as accompaniment. Especially that child early age is still in its infancy golden. Therefore it is necessary to have good cooperation between parents, teachers, and a good environment so that it can optimize children's education at an early age without any pressure also under targeted supervision.

II. EARLY CHILDHOOD EDUCATION

Early childhood education is important in determining what children will become in the future. According to Sholikhah, Wahano, Kurniawati (2019) at an early age needs efforts thorough development includes aspects of parenting, health, education, and protection. One of those attempts can be done in order potential development is with an educational program structured, namely units or PAUD program in Indonesia or ECCE program in the foreign country. Based on Unesco, Early childhood care and education (ECCE), is the "holistic development of a child's social, emotional, cognitive and physical needs to build a solid and broad foundation for lifelong learning and wellbeing." We know these experiences shape young learners' minds, attitudes, and often behaviors. (Lietbag & Walton:2018).

Ministerial regulation Education and the Culture Republic of Indonesia number 137 years 2014 chapter 1 article 1 point 11 states that the unit or PAUD program is a service PAUD which is implemented at an educational institution in the form of Kindergarten (TK) / Raudataul Athfal (RA) / Bustanul Athfal (BA), Playgroup (KB), Garden Child Care (TPA). Many options support early childhood development education, both formal and semi-formal. children can learn as well as play. Education does not always keep children indoors but also with the environment and friends outside the room.

Moreover, Lietbag & Walton (2018) state many early childhood education programs help develop social and emotional learning, engage students in place-based education, and start to develop core academic and readiness skills, while others fail to meet those marks. High-quality early learning programs are also often out of reach to families due to cost or access. In line with that Lietbag & Walton make some program for Early Care Childhood Education (ECCE), there are:

1. ECCE promotes brain development and has positive long-term economic benefits.
2. Developing 21st Century Skills in early learners helps prepare them for success in school and life.
3. ECCE can make a positive difference in the lives of young children.
4. Age-appropriate use of technology can enhance learning.

III. The Factors Affecting Early Childhood Education

Education at an early age is very important, especially for children's involvement in understanding social life. Children grow, learn, and understand according to the conditions of the environment in which they live and socialize. It is undeniable that the lives of parents and the way they educate are the basic attitudes of the children themselves. Irma, Nisa, Sururiyah (2019) state that Family is the foundation of education first for children. Continuation of strengthening education is realized through early childhood education including Kindergarten (TK).

Family is the closest person, especially the presence of parents, it is very important for a child's growth, the first teacher of a child is their parents. Akilasri (2015) states family environment has a role as the main thing in determining the social and emotional development of children early age in the future and for the next life will they live in, and the environment this family is the first child receive education from parents or close relatives. Their parents are educators for their parenting patterns, attitudes, as well as the current situation and conditions surrounding parents can have a huge impact great for social development and children's emotions. In addition to the involvement of parents, early childhood education also requires the involvement of formal education such as PAUD, Kindergarten, Playgroup, and TPA. One aspect that can be used to determine the good or bad quality of an educational institution (school) is the school's relationship with people old that can be seen through the involvement of parents in children's education at school (Wortham, 2011 p. 49).

Based on Stella Maris International School (2019), Child development must be considered from an early age. What their receive, see, and feel more or less will affect growth and development, and time. There are at least four factors that have the most influence on child development, namely environmental factors, biological factors, interpersonal relationships, and the environment and early experiences. Of the four supporting factors, the following is an explanation of the indicators that can be considered:

1. Environmental factors

- a. Inside the house, make sure the children have space to play and explore, the population density is not too severe, and there are green spaces such as parks where children can play.
- b. In the environment around the house, make sure children are protected from the threat of chemical pollution contamination, such as factory smoke or factory waste. Humidity conditions of housing also contribute to poor health.
- c. The economic side of the family is also an influential factor in child development. Families who experience financial pressure or high debt burden will make children feel inferior and not confident.

- d. The educational background of parents and family will determine how the child is educated. The higher the education of parents and families, the higher the possibility that children will be educated well.
- e. The nutritional intake consumed by children is also one of the supporting factors for child growth and development. Some city governments even have programs that provide special subsidies for food.

From these environmental factors, it can be concluded that the conduciveness in the home, the environment around the house, the family economy, the educational background of parents, and the nutritional intake of children must be considered to obtain good child development.

2. Biological Factors

- a. Biologically, the sexes of boys and girls are different in the process of growth and development. If your child is a girl, do your culture and customs respect women's equality and rights? You should also think about the same question if your child is a boy.
- b. Children who are born with a healthy birth weight will certainly be treated differently from children who are born differently from normal conditions, whether they are too small, large, or even disabled. Maternal health after childbirth is also a concern. Some mothers experience mild pain after giving birth, so usually, the child will be cared for by parents or other families.
- c. The mental health of children can be seen from how warm the environment is in caring for them. Some mothers usually also experience mental illness after giving birth. Mothers will suffer from anxiety, depression, or other mood disorders which of course will disrupt the child's education process.

3. Interpersonal relations

- a. The interpersonal relationship between you and your child is very important because they will learn many things through this. Eye contact smiles, and other imitations will further illustrate their way of communicating.
- b. Parenting style
- c. Does the child experience a protective parenting style or do they tend to be indifferent? Is there a childcare program? Are parental rights and responsibilities supported by the workplace?
- d. Social networking
- e. Does the family have a large family and social network that can influence dominantly? For example, the family joins a religious group, a cultural group, a certain activity group.
- f. Is there community support for self-development that includes the whole family? Does the child have friends and is not being bullied? Does the local community

foster a sense of belonging to all families regardless of cultural, sexual, or religious orientation?

IV. THE EARLY CHILDHOOD EDUCATION IN THE DIGITAL TRANSFORMATION ERA

The rate of development of the digital world and technology has an impact on the mindset of education, especially at an early age. It is the duty of parents and teachers as educators to think and explore their roles in determining what education patterns are right in the current digital transformation era. A conducive environment is also important in educating children. In this case, we will use Piaget's theory about intellectual cognitive development which is related to the previous statement. According to Piaget in Ibda (2015), children are born with several sensorimotor schemes, which provide a framework for children's early interactions with their environment. This proves that the environment and conditions that occur around the child have an important effect on the child's development.

On the other hand, according to Lazarus (2010) cited in Lefa (2014), Piaget explains at the second stage of his theory, children use objects and symbols to represent something that exists in a concrete form for example child play with a car as if it is a real car. Furthermore, during this stage the child's language, thinking, imagination and problem solving develop faster as a child can be able to work with images and symbols. The child can recognize the properties of the object even if they might be changed around and look different. The child at this stage finds it too difficult not to accept the evidence in their eyes. Children's vocabulary increases and their sentences progress from one and two-word phrases to complete full sentences. Children can take in other points of view, and take into account more than one perspective.

Most parents forget what Piaget trying to says above. Especially with the ease with which gadgets and technology can be owned by children today, adding to the long list of problems that can arise as a result of their neglect of awareness and attention to the child's development. There are many cases where parents, because of expressing love for their children, have introduced gadgets and technology that they shouldn't have at that age. They should be aware of how dangerous this can be for their child's education and development at an early age. According to research by Hands et al (2011) it can be concluded that most unhealthy characteristics are established in early childhood which means that physical activity, screen time, and weight status of a child at age 6 can predict the outcome at 14. The results presented in the study highlighted the importance of intervention as most kids in the present generation are already glued to their screens and overweight.

Khadijah (2016) says that several ways can be applied in educating early childhood based on an understanding of Piaget's theory :

- 1). Focus on children's thought processes, not just outcomes. Apart from checking the accuracy of children's answers, the teacher must understand the process children used to

arrive at these answers. Appropriate learning experiences are based on the level of cognitive functioning of children at this time, and only when the teachers appreciate the methods of the child to arrive at certain conclusions they are in a position to provide such an experience.

2). Recognition of the important role of active development initiated by children themselves in learning activities. In a classroom Piaget, presentation of knowledge has become not stressed, and children are encouraged to discover for themselves through spontaneous interactions with the environment. Therefore, Instead of didactic teaching, the teacher provides various types of activities that allow children to act directly in the physical world.

3). Do not emphasize practices aimed at making children like adults in their thinking. Piaget referred to the question “How can we accelerate development?”. Among the many countries he visited, psychologists and educators in the United States seemed most interested in what techniques could be used to accelerate children's progress through these stages. Piaget's based education accepts the strong belief that premature teaching can be worse than no teaching at all because it results in a superficial acceptance of adult formulas instead of correct cognitive understanding.

4). Acceptance of each person's differences in development progress. Piaget's theory assumes that all children have the same developmental sequence but at different speeds. Therefore, teachers must make special efforts to plan activities in the classroom for each individual and a small group of children rather than for the entire group of that class. In addition, because of differences in their respective expected, assessment of educational progress of the children should be done from a child's developmental journey in advance, instead of corner normative standards provided by the performance of friends of the same age. (Slavin, p. 57-58:2008).

V. CONCLUSION

Early childhood education is an important issue to be discussed and addressed by parents and teachers as educators. Formal education for children is taking place in institutions such as PAUD, Playgroup (KB) Daycare Park Children (TPA), and Kindergarten (TK). But in addition to formal education, children's education Early childhood can also be held informally, namely, education carried out by parents to his son. Indeed, informal education with formal education experienced by children will go hand in hand (Amini:2015). However, now early childhood education patterns must change according to the changing times where technology continues to develop rapidly. It is time for parents and teachers to work together to create a conducive learning

environment and provide the right method without having to be dragged into the current era of technology. With this, it will support development at an early age to be more optimal and efficient.

Based on the results of the Indonesian Polling study in collaboration with the Indonesian Internet Service Providers Association (APJII) (Kompas.com:2019), the number of internet users in Indonesia grew by 10.12 percent. According to the Secretary-General of APJII, Henri Kasyfi, this survey involved 5,900 samples with a margin of error of 1.28 percent. This field data was taken during the period March to April 14, 2019.

As a result, the total population of 264 million people in Indonesia, there are 171.17 million people or around 64.8 percent who are already connected to the internet. This figure increased from 2017 when the internet penetration rate in Indonesia was recorded at 54.86 percent. Kasyfi (Kompas.com:2019) states from year to year our numbers continue to rise. Choosing children's education in the digital era is indeed more difficult than it used to be. In the digital era where everyone has become literate with technology or gadgets, including children who grow up with technological sophistication that makes it easy to access information anytime and anywhere.

The importance of early childhood education in the digital era needs to be realized by parents because they can fortify children from the negative effects of technology. Technological developments have a negative impact, including children who prefer to have fun with a one-way pattern, prefer to play alone using their gadgets rather than playing with their friends, the development of social interactions is hampered, the pleasure gained from gadget addiction can also make children avoid responsibility. their responsibilities and duties. Addiction to playing gadgets can also affect a child's visual response. The games in the gadget are usually in the form of fast-moving visual stimuli. Children will get used to the rhythm of paying attention to fast-moving visual stimuli. As a result, when listening to the teacher's explanation in the classroom with the form of visual stimulation that is not as fast as the visual movement in the game, it will be easy to feel bored. Of course, gadgets don't always have a bad impact. The use of gadgets can also have a good impact, such as making it easier for children to find information or knowledge.

By being given an education from an early age, children can use gadgets to find topics that match the subject matter at school, in addition to facilitating communication with parents and other family members. While digital technology can be used to help children learn and develop, it is up to parents to monitor what kind of information is accessible. Parents face many challenges in educating, raising, and nurturing their children in today's digital era.

References

- Ahmadi, A., & Uhbiyati, N. (2007). *Ilmu Pendidikan*. Jakarta: Rineka Cipta.
- Alghamdi, Y. 2016. Negative effects of technology on children of today. doi:10.13140/RG.2.2.35724.62089.
- Amini, M. (2015). Profil keterlibatan orang tua dalam pendidikan anak usia TK. *Jurnal Ilmiah VISI PPTK PAUDNI* - Vol. 10, No.1
- Akilasari, Y. (2015). Faktor keluarga, sekolah dan teman sebaya pendukung kemampuan sosial anak usia dini. Retrieved from: <http://jurnal.fkip.unila.ac.id/index.php/PAUD/article/view/10428>
- Crain, W. (2011). *Theories of development: Concepts and applications* (6th edition). New York, NY: Prentice-Hall.
- Direktorat Pendidikan Anak Usia Dini 2002. *Acuan Menu Pembelajaran pada Taman Penitipan Anak*. Jakarta: Direktorat Pendidikan Anak Usia Dini Ditjen PLSP. Depdiknas
- Depdiknas. 2001. *Program Kegiatan Belajar (Kurikulum) Taman Penitipan Anak*. Jakarta: Depdiknas
- Depdiknas. 2001. *Pedoman Penyelenggaraan Pendidikan pada Kelompok Bermain*. Jakarta: Direktorat Pendidikan Anak Usia Dini. Ditjen PLSP Depdiknas.
- Depdiknas. 2002. *Handout Penyelenggaraan Pendidikan Anak Usia Dini*. Balai Pengembangan Pendidikan Luar Sekolah Pemuda (BPPLSP) regional II. Jayagiri.
- Slavin, R. E. (2008). *Psikologi Pendidikan Teoridan Praktik* (8th edition) (M. Samosir, Trans.). Jakarta: PT. Indeks.
- Hands, B. P., Chivers, P. T., Parker, H. E., Beilin, L., Kendall, G., & Larkin, D. 2011. The associations between physical activity, screen time and weight from 6 to 14 yrs: The Raine Study. *Journal of Science and Medicine in Sport*, 14(5), 397-403. doi:10.1016/j.jsams.2011.03.011. Retrieved from <http://www.jsams.org>.
- Hornby, G. (2011). *Parental involvement in childhood education: Building effective 71 school-family partnership*. New York: Springer Sciences Business Media.
- Ibda, F. 2015. Perkembangan kognitif: teori Jean Piaget. *Intelektualita*, 3(1), 29.
- Irma, C.N., Nisa, K., Sururiyah, S.K. (2019). Keterlibatan orang tua dalam pendidikan anak usia dini di TK Masyithoh 1 Purworejo. *Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini*. DOI: 10.31004/obsesi.v3i1.152
- Khadijah. 2016. *Pengembangan kognitif anak usia dini*. Medan, Indonesia: Perdana Publishing (Kelompok Penerbit Perdana Mulya Sarana).
- Kompas.com. (2019). APJII: Jumlah pengguna internet di Indonesia tembus 171 juta jiwa. Retrieved from: <https://tekno.kompas.com/read/2019/05/16/03260037/apjii-jumlah-pengguna-internet-di-indonesia-tembus-171-juta-jiwa>.
- Lazarus, S. 2010. *Educational psychology: in the social context* (4th edition). Cape Town: Oxford University Press.

- Lefa, B. 2014. The Piaget theory of cognitive development: an educational implication. *Educational Psychology*, 1(1), 4-6.
- Lietbag. E., & Walton.J. (2018). Early Childhood: What We Know, and What's Possible . Retrieved: <https://www.gettingsmart.com/2018/01/early-learning-what-we-know-and-where-we-are-headed/>
- Slavin, Robert E. 2008. Cooperative Learning: Teori, Riset dan Praktik. Bandung: Nusa Media
- Wortham, S. C.(2013). *Early childhood curriculum: Developmental bases for learning and teaching*. New Jersey: Pearson Education, Inc.
- Undang-Undang Republik Indonesia, No. 20, Tahun 2003, Tentang sistem pendidikan nasional.