



Operational Cost Requirements Analysis in Early Childhood Education

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ABSTRACT: The government is attempting to obtain the access of Early Childhood Education programs providing educational assistance. Unfortunately, the government has spent funds to calculate the unit costs that should not occur in the real world of education. In consequence, the aims of this study are to (1) calculate the amount of operational unit costs for Early Childhood Education programs, and (2) enumerate variations and projections of the amount of the operational unit costs in Early Childhood Education programs by region category. This study uses quantitative data with population of all Early Childhood Education institutions in Indonesia. The unit of analysis of this research is Early Childhood Education institutions consisting of kindergarten, Playgroup, Daycare, and ECCD units. The findings are that the highest operating unit cost is in TPA because there is a full day of service. Next is a Kindergarten institution because at this institution already has a special curriculum to prepare the child proceed to the level of basic education. Then the unit cost is the highest area in the eastern region. Recommendation in determining the amount of financial assistance it is necessary to consider the amount of operational unit costs so that the purpose of providing financial assistance is to improve access and quality can be achieved.

Keywords: *Early Childhood Education, Operational Unit Cost, Fund Aid*

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1 INTRODUCTION

Indonesia continues to show economic growth despite the recent global financial crisis and is currently classified as a low to middle income country (Denboba, Hasan, & Wodon, 2015). Such economic growth should provide the Indonesian people with better living conditions. However, the poverty rate still sits at 12.2% and with a population of more than 225 million this is equal to more than 27 million people living below the poverty line (Lovchinov, Mädge, & Christensen, 1984). Nakajima et al., (2016) provide evidence of the effectiveness of early childhood education in rural Indonesia. This document a substantial difference in school readiness between children aged 6 to 9 years. The analysis considers not only the sequence of services registered by children, but also the age at which they registered and the length of time they registered, and analyzes the cost effectiveness of various early education channels in Indonesia to show that providing access to play groups and kindergartens to children at an age appropriate to development can optimize public investment in early childhood education. The phenomenon of the high cost in education is a problem faced by almost all levels society, especially in schools which run by the private sector. The high cost of education also occurs at the level of Early Childhood Education. Lately, there has been a lot of discussion about the high cost of sending children to school in Early Childhood Education.

Hasan et al., (2019) studied the sustainability of early childhood education centers established under large-scale, donor-funded projects in rural Indonesia. Analysis of quantitative and qualitative data shows that 86 percent of education centers continue to provide preschool services three years after project funding ends. The centers balance the reduction in funding by introducing student fees. This study estimates a series of logistic regression models to predict central sustainability. Centers that increase their share of expenditure on teacher salaries during the project are significantly more likely to remain open. Often this is made possible by centers that change the mix of additional services they are provided. Centers that provide high-quality care, have more complementary services in the area, and have more parental involvement are significantly more likely to be maintained after donor funding ends. In contrast, centers with more substitute services in the area tend to survive.

Given the low level of public knowledge about the importance of Early Childhood Education and the low quality of management and the lack of infrastructure and many assumptions from the community that Early Childhood Education can only be achieved by economically capable people causing a lack of motivation to involve their children in the Children's Education program Early age. The results of Firdaus and Ansori's (2019) research revealed that the management process still did not meet the standards required by the government as an organizing program for Similar Early Childhood Education (SPS) programs. Therefore, managers must be able to define and find ways to achieve all the goals set through the implementation of effective Early Childhood Education management functions. Brinkman et al (2017) report the quality of early childhood education in rural Indonesia. The results found that centers established under the Indonesian Early Childhood Education and Development Project provide higher quality services than other types of preschool, as measured by comprehensive preschool quality instruments based on direct observation of classrooms in sessions. The findings also show that policies that only focus on hiring teachers based on experience and training will not be enough to improve children's learning. Instead, policies must address the quality of professional development activities for teachers.

Early childhood education and care (ECEC) has witnessed a dual trend of growth in international research along with global interest in the social welfare function of ECEC services. Global interest in ECEC quality is well illustrated by a report from an international organization that identifies ECEC services as contributing to the social welfare agenda to support the work of parents and provide early intervention to reduce the consequences of poverty (Campbell-Barr, 2019). Awareness of the importance of Early Childhood Education has been growing as a collective awareness between the community and the government. The fact in the real world shows that almost all of Early Childhood Education institutions and its kind are carried out on community initiatives and non-governmental organizations.

The policy of the Directorate General of Early Childhood Education and community education institutions is to escalate the quality of Early Childhood Education services through the availability of Early Childhood Education Units that are easily accessible, educators who are in accordance with the expected competencies, enhancing the quality of community participation in Early Childhood Education, and supports Early Childhood Education implementation from the Central, Regional, and the community. One indicator of the success of early childhood education program implementation especially for ages 3-6 years can be measured by the Gross Enrollment Participation Rate of Early Childhood Education program. Based on Figure 1 below, the rate of Gross Enrollment Participation Rate movement tends to diminish from 2015 at 35.18 to 2017 at 33.84 and has increased in 2018 to 37.92 and has decreased again at 36.93 in 2019.

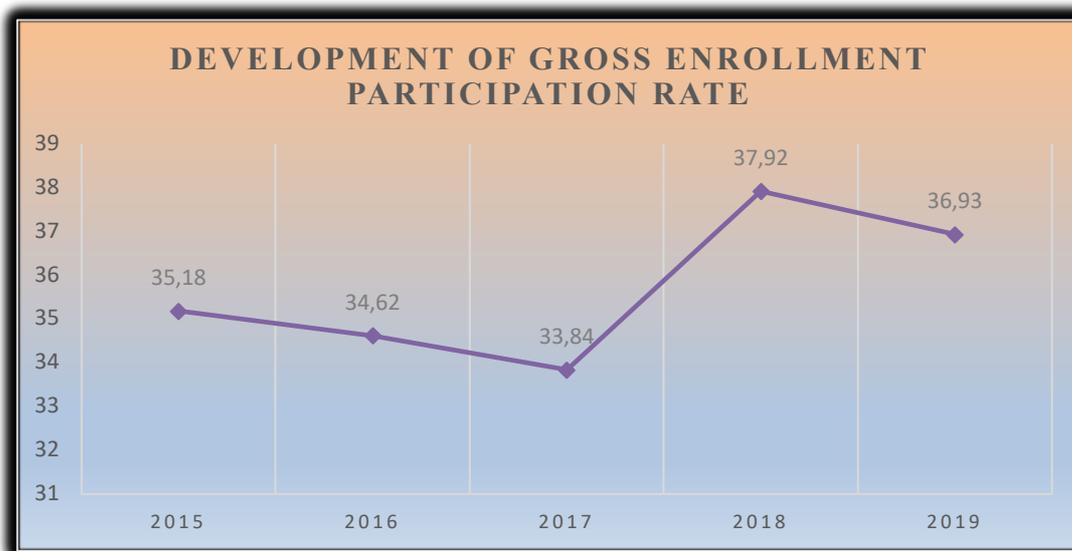


Figure 1. The development of Gross Enrollment Participation Rate for Early Childhood Education in 2015-2019 (Source: Central Bureau of Statistics in 2020 development of Gross Enrollment Participation Rate)

In order to escalate and expand quality of Early Childhood Education services, the government is allocating Early Childhood Education Operational Assistance Funds. The benefit of *BOP* is to reduce the cost of education for underprivileged children, so that they get higher quality Early Childhood Education services. The *BOP* program is aimed at children aged 0-6 years, with priority children from underprivileged families, special needs, and special services. *BOP* is given to children through Early Childhood Education institutions to support the operational learning process and to advocate personal costs for Early Childhood Education children.

The Ministry of Education and Culture has allocated budget IDR 4.47 trillion for operational assistance in the provision of early childhood education (*BOP* in Early Childhood Education in 2019). This number is up 10 percent compared to 2018 which amounted to IDR 4.07 trillion. Director General community education institutions Harris Iskandar of Early Childhood Education said that the assistance would be given to 7,459,167 children with a nominal value of IDR 600.000 per child. *BOP* Early Childhood Education is a government program to assist operational costs. The target of this program is Early Childhood Education institutions listed in the Early Childhood Education principal data and community education. *BOP* for Early Childhood Education has been regulated in Minister of Education and Culture Regulation Number 2 in 2018 concerning Technical Guidelines for the Use of Non-Physical Specific Allocation Funds for Operational Assistance for the Implementation of Early Childhood Education in 2018. According to these regulations, as much as 50 percent of *BOP* for Early Childhood Education funds must be used for learning and playing activities, such as buying paper, markers, crayons, and organizing family education or parenting activities. As much as 35 percent for supporting activities, among others, purchasing mild medicines, and increasing the transport costs of educators. While the remaining 15 percent for other activities, such as maintenance of facilities and infrastructure, pay for telephone, electricity, and the internet.

In providing assistance in the provision of Early Childhood Education, it is necessary to pay attention to the amount of funds to be provided, so that it can be used to finance Early Childhood Education operations throughout Indonesia. There are still many complaints in the community about the high cost of sending their children to Early Childhood Education proves that the amount of *BOP* funds given by the Government of IDR 600,000 / student / year is still insufficient. So, this is the right time for the Government to provide financial assistance based on the calculation of unit costs that actually occur in the field. Therefore, the research objectives are to (1) calculate the amount of operational unit cost (*BSOP*) for Early Childhood Education implementation, and (2) calculate the variation and projection of the amount of operational unit cost for Early Childhood Education implementation by region category.

2 THEORITICAL STUDY

2.1 *Early Childhood Education*

Early childhood is a child between the ages of birth and eight years, using the term "Early Childhood Care and Education (ECCE) refers to various processes and mechanisms that sustain and support development in the early years life, which includes education, physical, social and emotional care, intellectual stimulation, health care and nutrition including family and community support that needs to promote the development of children's health (UNESCO, 2013). The area of early childhood education and care is actually an absolute responsibility of parents, which nowadays is shifting to educational institutions that specifically serve the educational needs of early childhood due to the lack of parental time at home.

Chandrawaty, Ndari, Mujtaba, & Ananto, (2019) childhood period is viewed as a moment of a playing time, having fun, and without coercion. Children who outdoor activity are physic beneficial, especially in developing their motoric skills. Preschool is a broad term for pre-elementary school programs targeted towards young children. Parents, educators, journalists, researchers, and policymakers alike are increasingly interested in preschool as a means of investing in the future and, as Lamy (2014) puts it, untangling the "complicated knots" of chronic poverty. Early childhood programs aim to support all aspects of a child's development and have been identified as particularly beneficial for children with known disadvantages such as low income, ethnic minority, risk of maltreatment; (Belsky, J., Steinberg, L., & Draper, 1991; Heckman, Moon, Pinto, Savelyev, & Yavitz, 2010; Howard & Melhuish, 2017).

Keith's (2018) research explores the importance of high-quality early childhood education in the development of later secondary education, measures quality in early childhood education programs, and examines how teacher education contributes to the quality of early childhood education programs. The research found that early childhood education was positively associated with an increase in the percentage of eighth grade country proficiency in mathematics and writing summative assessment scores. The results also showed that teachers with a bachelor's degree did not significantly increase mathematics scores and initial student literacy as a whole compared to teacher students who did not have a college degree.

Law number 20 of 2003 concerning the National Education System (SISDIKNAS, 2003) states that early childhood education is an effort to foster children from birth until the age of six carried out through the provision of educational stimuli, to assist in physical and spiritual growth and development so that children have readiness to enter further education. Early childhood education is directed to facilitate the development of children in a healthy and optimal manner in accordance with the values, norms, and expectations of the community. Suyadi, (2017) states that children are individual and social beings who have the right to get education according to their needs and abilities. With the education provided, it is expected that children can grow and develop intelligently based on their potential, with the result that one day they are able to be quality children of the nation.

It deals with the various definitions described above, it can be concluded that early childhood education is a conscious effort created by parents, the community, and the government to provide

founding, guidance and stimulus for early childhood in accordance with the phase of child development so that it can grow optimally related to the potential possessed and have mental and physical readiness in entering further education. The implementation of this education must be done carefully, by providing all aspects of appropriate education so that the direction of learning can be justified with reference to the context of early childhood.

2.2 *Education Funding*

There has been a focus on policies relating to early childhood education and care in developed countries and especially in Europe. In the UK, there have been changes in policy along with increased investment. However, West, Roberts, and Noden (2010) believes that these changes may not be sufficient to meet the objectives in terms of quality or high-quality, affordable and accessible government policy objectives in early childhood education and care. There is a big problem that seems to hamper the achievement of these goals; this is related to the level of government funding and the regulatory context. There is also a difference between providers in terms of their own goals and underlying values which means that quality can vary and access to certain types of providers is restricted. These factors appear to conflict with the provision of universal quality education and early childhood care.

Pidarta, (2013) in his book explained that economic factors are enough factors that determine the success of education, because with an adequate economy, 1) facilities and infrastructure, media, learning tools, and others can be fulfilled, 2) teaching and learning processes can be carried out more intensively, because educators can focus without looking for additional work outside, and 3) the motivation and enthusiasm of the education personnel work increases, so they are also ready to improve the profession. The function of the education economy is to support the smooth running of the education process and as learning material for shaping economic people. Each educational institution must be able to seek educational funding to cover the needs of education services by searching from various sources other than the Government or foundations. The more funds obtained, the education will be held optimally, so that educational goals will be more easily achieved.

Education funds need to be managed professionally, their implementation is closely monitored, and accounted for legal evidence. All use of funds in every activity needs to be done efficiently and effectively. The concept of production must be held by educational institutions, for example the efforts to increase education efficiency including the use of funds, the process of activities, and the results of activities. Both of them must be done as well as possible so that there are no obstacles in achieving the agreed education goals. The function of economic production will be properly applied, if there is a guarantee that students work immediately after graduation. Education funding is an activity related to the receipt of financial income obtained by schools from the State budget, Local government budget and community or parent funds and is used to finance every education program designed (Akdon, 2015). Funding is the main element that is very important in the administration of education. The cost of education must be managed optimally to improve quality as expected. (Azhari & Kurniady, 2016).

West & Noden, (2019) argue that the transformation of public funding is associated with changes in government objectives with regard to the distribution of funds to providers. Focus on changes in public funding for early childhood education, shifting the balance between central and local governments, and changes in funding objectives. To understand the transformation of public funding that has taken place, by identifying three types of policy changes. The first level change involves adjusting the level or setting of basic policy instruments (or mechanisms). The second change involves the instrument itself changing due to dissatisfaction with past experience; however, the overall policy objectives remain the same. Third order changes involve changes in the level / arrangement of instruments, the instrument itself, and the hierarchy of objectives. Early childhood education and care funding between 1996 and 2017 illustrates various types of changes in funding goals, which peaked in 2017 with the introduction of the transformational Early National Funding Formula Year, third-order change.

2.3 *Early Childhood Education Cost*

Institute of Medicine (2009) explained, there are five steps to measuring cost accurately; 1) specify dimensions of quality; 2) identify resources requirements to meet goals for each dimension; 3) assess market and show cost for each resources; 4) aggregate for total and obtain average and marginal cost; 5) allocate cost burden among government support, private support, and client cost. A comprehensive list of the aspect of the program that contribute to its quality might include the time children spend in the program (e.g., hours per day, days per week, weeks per year), the personal ratios, the range of services supplied, facilities and materials, and so forth. Factors Affecting Child Care Budgets in New York City Each are 1) licensing standards (the number children exceeds the staff : child ratio); 2) child care is extremely labor intensive (personal costs will be the largest expense, frequently averaging at least 80% of total expenses); 3) the basic child care dilemma; 4) Important program objectives, identify key program, objectives before attempting to draw up a budget.

Some preschool studies use cost effectiveness analysis and involve cost-benefit analysis, which shows positive social returns for early children's intervention (Heckman et al., 2010). Cost-benefit analysis converts all policy and program inputs and outputs into monetary terms to answer the question of whether social benefits exceed social costs, as measured in monetary value (Aos & Pennucci, 2013). A particular program can be assessed in connection with social returns on investment. Cost effectiveness analysis of the results is not converted to monetary value but is instead reported in measures of student learning outcomes or other relevant results (Hollands et al., 2014). Cost effectiveness analysis is basically comparative because the costs of improving learning outcomes, for example, must be compared with some relative alternatives in order to have meaning (by H. M. Levin, McEwan, Belfield, Bowden, & Shand, 2017).

One of the strengths of cost effectiveness analysis is that it uses standardized methods which are, to some extent (Harris, 2009; H. Levin, 2001)(Harris, 2009; Levin, 2001). Cost effectiveness studies often use the standard deviation (SD) of student achievement, or effect size, to measure results. Review a series of educational intervention studies that include estimated effect sizes and information about costs. Informative ratios enable researchers to make comparisons of the cost effectiveness of interventions that are evaluated throughout the study. Although the prevalence of cost-benefit studies shows that preschool is a healthy social investment as a whole, there is no other research that uses cost effectiveness analysis to evaluate interventions designed to improve the efficiency of educational institutions.

2.4 *Previous Research*

In conducting this research based on several previous studies, including (Chrystiana and Alip (2014) aims to find out the cost components and operational unit costs of kindergarten educations in Depok, Sleman, Yogyakarta. This research was a descriptive qualitative study, data were collected purposively from three kindergartens in Depok, Sleman, Yogyakarta, in accordance to the amount of tuition fee and kindergarten program (half-day/full day). Two kindergartens (A and B) are the half day with tuition fee under IDR 400,000, while C is full day with tuition fee over than IDR 400,000. The data were collected through in-depth interviews and questionnaires. The results of the study show that cost components consist of: (1) the operational cost component for personnel in the form of salaries and (2) the operational cost component for non-personnel in the forms cost of: (a) educational process, (b) institutional, (c) school administration, (d) school committee, and (e) light maintenance and repair. The operational unit cost of the half-day kindergarten is IDR 1,270,038/year /student and IDR 1,454,389/year/student, while that of the full-day kindergarten is IDR 10,466,134/year/ student. The operational unit cost will increase in line with (1) period time and (2) the teacher-student ratio.

The subsequent research conducted by Tedjawati (2013) aims to describe the funding for early childhood education and the amount of funding from each source. This study used qualitative approach through case studies in eight districts or cities. Research methods used in the research are descriptive quantitative. The study results show that: First, early childhood education funding generally comes from the central government and the regions. However, it is still not sufficient

enough for the operational costs of early childhood education. During this time, local governments still prioritize compulsory education programs. Funds coming from the public and agency or business or industry are still limited and depend on the economic capability and willingness of agencies or business or industry. Funds coming from the providers are not sufficient, it is actually highly dependent on parents' income. Second, assistance from the government and donations from community institutions compasses of money, educator incentives, and educational toys, books, medicine, and health checking for students.

3 METHODS

This research on education funding uses quantitative approach. The sample selection method used is Random Sampling. The unit of analysis of this research is Early Childhood Education institutions consisting of Kindergarten, Playgroup as formal education and Day care, and also ECCD units (SPS). The population of this research is all Early Childhood Education institutions in Indonesia. The sample of this study is people who returned the online questionnaire sent. One of the main criteria of the sample is that it must be able to represent the population both in proportion and characteristic. After the questionnaire was filled out by Early Childhood Education institutions in each region, sampling was carried out at stages from the regional, provincial to district or city levels. Indonesia is divided into 6 regions, such as (1) Java; (2) Sumatra region; (3) Sulawesi region; (4) Kalimantan region; and (5) the Bali-Nusa Tenggara region, and (6) Maluku region.

3.1 Procedure

The research instrument was structured questionnaire that was developed related to questions and research objectives. The questionnaire component to determine the amount of operational funding for Early Childhood Education implementation comes from The Minister of Education and Culture Regulation 4 of 2019 on Technical Guidelines for the Use of Non-Physical. The data collection techniques by submitting an online questionnaire link (google form) that contains a wide range of components expenditure expenses to the implementation of ECE so that the institution can directly fill the cost of real expenses according to the components already provided in the online questionnaire. Furthermore, if the questionnaire is completed by the institution of the ECE then sent back that accompanied by the attachment of a scanned financial report of the institution in 2019. The Data obtained is sourced from the real financial statements at each institution, then clarified with the financial statements attached to match the currency suitability of the budget and the nominal cost included in the online questionnaire (equality of perception). If the data has been appropriately stated, then the next process is to calculate the cost of each institution. Calculations use Excel software by using the average function. Furthermore, after the data is completed, then presented according to the research purpose of the related (1) the cost of operational unit (BSO) of the implementation of ECE, and (2) variation and projection of the cost of operational unit of ECE implementation according to region category.

3.2 Participant

According to the results of the online cookies collected, there were several respondents including 577 Kindergartens, 434 Playgroups, 63 ECCD units (SPS), and 32 Daycares (graph 1). Based on graph 1, the highest Kindergarten accreditation status is B with 266 Kindergartens, most of Playgroup accreditation is not accredited with 255 playgroups, most SPS accreditation is not accredited with 30 ECCD units (SPS), and most of Day care parks accreditation is not accredited with the number 17 of them.

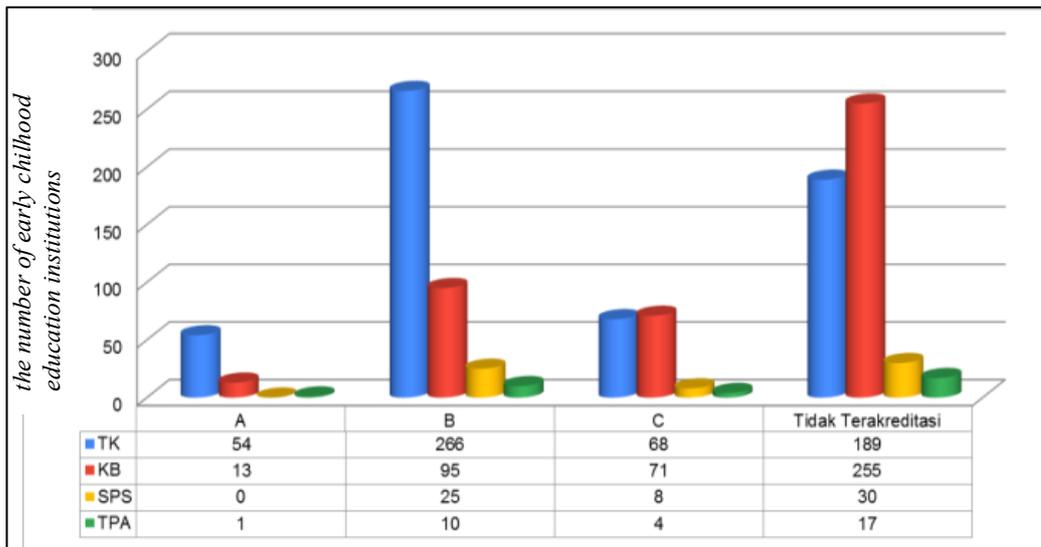


Figure 2. Profile of Respondents (Source: results of data processing)

4 RESULT AND DISCUSSION

Equitable education includes two important aspects, they are equality and equity. Equality or equality implies equal opportunity to obtain education, while equity means fairness in obtaining equal educational opportunities among various groups in society. Coleman in Mujahidun (2016) in his book *Equality of Educational Opportunity*, that the concept of justice includes passive equality, which means justice that emphasizes equality in getting the opportunity to register at school, while active equality means equality in providing opportunities for students to get the highest learning outcomes. In this understanding, equality in education is comprehensive, encompassing several things, such as equality of access, equality of survival, equality of output, and equality of results. Thus, suggestions for equity indicators will become increasingly complicated and difficult for certain regions that are not supported by the education budget.

Considering the importance of equitable access to education, especially Early Childhood Education, this study provides a solution in determining the amount of operational costs of Early Childhood Education implementation that can be used as a reference for the Government in providing financial assistance to institutions so that there is no higher burden of Early Childhood Education costs to parents so that all early childhood children in Indonesia can get education in this stage.

Accreditation is very important especially for institutions because it can help to know how far he has met the quality criteria set by the government or the national education standards as minimum standards of quality; as a reference for all parties in the institution to conduct an evaluation of the institution's performance (institution's performance) and short-term and long-term planning; as a basis for making improvements and improving the quality of education in the future as part of sustainable quality improvement; and as a form of compliance with regulations established by the government and as part of public accountability. Considering the importance of accreditation for Early Childhood Education which actually has an important role in realizing the golden generation of the nation, institutions and the government should synergize each other to carry out the accreditation process of the institution so that education standards are enshrined in *Permendikbud* Number 13 of 2018 concerning School or Madrasah National Accreditation Board and Agency National Accreditation of Early Childhood Education and Non-Formal Education.

Application for accreditation of Early Childhood Education institutions from the Government has not been running optimally. This is evidenced by the profile of the institutions that are sampled in this research which concludes that there are still many Early Childhood Education institutions that have not been accredited. According to Bijanto (2018) some Early Childhood Education institutions and Non-Formal Education. have not considered how important accreditation is. Early

Childhood Education and Non-Formal Education accreditation is considered not to have a social effect. This condition is clearly different from the social influence of accreditation for primary and secondary education units and universities. Though there should be no reason for Early Childhood Education and Non-Formal Education to avoid the accreditation process.

4.1 Early Childhood Education Operational Unit Costs

Education costs are costs that must be incurred to finance activities related to education. Afmansyah (2019) mentions the costs in education include direct costs and indirect costs. Direct costs are all expenses that directly support the implementation of education. Direct costs consist of costs incurred for the implementation of teaching and learning process in the form of the purchase of learning tools, learning facilities, transportation costs, teacher salaries incurred by the government, parents, and students themselves. Indirect costs are expenditures that do not directly support the education process but allow the education process to occur in schools, for example student living costs, transportation costs of students to school, snack costs, and opportunity costs. There are several ways in estimating the cost of education, mentioning these ways include: (1) estimating costs on the basis of sources of funding, and (2) estimating costs on the basis of reports from educational institutions.

Based on the results of data processing, the operational unit cost for 1 year for Kindergarten is IDR 1,812,336, for Playgroup Rp1,009,309, for ECCD units (SPS) IDR 1,050,063, and for Day Care Park IDR 2,081,054. The highest Kindergarten and Playgroup operational components are used for other supporting activities (Kindergarten by 24% and Playgroup by 19%), for the highest ECCD units' costs are used for thematic learning materials (20%), and for the highest Day Care costs are used to provide transport for educators (19%).

Table 1. Early Children Education Operational Unit Costs in 2019 (Source: Data processing results)

PAUD OPERATIONAL COMPONENTS	2019			
	TK	KB	SPS	TPA
Thematic Learning Materials	326,220	161,489	210,013	374,590
Provision of Educational Learning Tools	199,357	121,117	105,006	249,726
Provision Of Teaching Tools For Educators	144,987	121,117	94,506	145,674
Supplying Additional Food	126,864	60,559	73,504	124,863
Purchasing Of Early Detection Equipment Tools Development, Purchase Of Light Drugs And P3k Contents	36,247	30,279	21,001	62,432
Meeting Activities With Parents	90,617	50,465	63,004	145,674
Giving Educational Transport For Teachers	126,864	100,931	115,507	395,400
Provision Of Administration Book	72,493	40,372	31,502	62,432
Other Supporting Activities	434,961	191,769	178,511	166,484
Infrastructure Treatment	126,864	60,559	52,503	124,863
Supporting The Provision Of Paud Publication Tools	54,370	30,279	52,503	83,242
Electrical, Water. Telephone Subscription	72,493	40,372	52,503	145,674
Operational Costs Need 1 Year	1,812,336	1,009,309	1,050,063	2,081,054

4.2 Projected Unit Costs for Early Childhood Education Operations

Based on the calculation of the unit costs of Early Childhood Education in 2019, then projections from 2020 to 2021 are calculated using the inflation rate for the previous 10 years. Based on the calculation, the ideal operational unit cost for Kindergarten in 2020 was IDR 1,935,009 and in 2021 it was IDR 2,057,963, for KB in 2020 it was IDR 1,077,627 and in 2021 it was IDR 1,150,569 , for SPS in 2020 amounting to IDR 1,121,139 and in 2021 amounting to IDR 1,197,027, and for TPA in 2020 amounting to IDR 2,221,916 and in 2021 amounting to IDR 1,372,313.

Table 2. Projected Unit Costs for Early Childhood Education in 2020-2021 (Source: Data processing results)

PAUD OPERATIONAL COMPONENTS	2020				2021			
	TK	KB	SPS	TPA	TK	KB	SPS	TPA
Thematic Learning Materials	348,302	172,420	224,228	399,945	370,433	184,091	239,405	427,016
Provision of Educational Learning Tools	212,851	129,315	112,114	266,630	226,376	138,068	119,703	284,678
Provision Of Teaching Tools For Educators	154,801	129,315	100,903	155,534	164,637	138,068	107,732	166,062
Supplying Additional Food	135,451	64,658	78,480	133,315	144,057	69,034	83,792	142,339
Purchasing Of Early Detection Equipment Tools Development, Purchase Of Light Drugs And P3k Contents	38,700	32,329	22,423	66,657	41,159	34,517	23,941	71,169
Meeting Activities With Parents	96,750	53,881	67,268	155,534	102,898	57,528	71,822	166,062
Giving Educational Transport For Teachers	135,451	107,763	123,325	422,164	144,057	115,057	131,673	450,739
Provision Of Administration Book	77,400	43,105	33,634	66,657	82,319	46,023	35,911	71,169
Other Supporting Activities	464,402	204,749	190,594	177,753	493,911	218,608	203,495	189,785
Infrastructure Treatment	135,451	64,658	56,057	133,315	144,057	69,034	59,851	142,339
Supporting The Provision Of Paud Publication Tools	58,050	32,329	56,057	88,877	61,739	34,517	59,851	94,893
Electrical, Water, Telephone Subscription	77,400	43,105	56,057	155,534	82,319	46,023	59,851	166,062
Operational Costs Need 1 Year	1,935,009	1,077,627	1,121,139	2,221,916	2,057,963	1,150,569	1,197,027	2,372,313

In this study also calculated variations in institutional operating unit costs by region, such as the territory of Western Indonesia, Central Indonesia, and Eastern Indonesia. The western part of Indonesia consists of the Special Capital Provinces of Jakarta, West Java, Central Java, East Java, Banten, Special Region of Yogyakarta, Nangroe Aceh Darussalam, West Sumatra, North Sumatra, Riau Islands, Jambi, Riau, South Sumatra, Bangka Belitung, Lampung, Bengkulu, Central Kalimantan and West Kalimantan. The central part of Indonesia consists of the provinces of Bali, North Kalimantan, East Kalimantan, South Kalimantan, Central Sulawesi, West Sulawesi, South Sulawesi, North Sulawesi, Southeast Sulawesi and Gorontalo. Eastern Indonesia consists of the provinces of North Maluku, Maluku, West Papua and Papua.

Table 3. Projected Unit Costs for Early Childhood Education Operations by Region, in 2020 (Source: Data processing results)

PAUD OPERATIONAL COMPONENTS	TK			KB			SPS			TPA		
	Western Indonesia	Central Indonesia	Eastern Indonesia	Western Indonesia	Central Indonesia	Eastern Indonesia	Western Indonesia	Central Indonesia	Eastern Indonesia	Western Indonesia	Central Indonesia	Eastern Indonesia
Thematic Learning Materials	355,593	364,347	526,684	176,030	180,363	260,725	228,922	234,557	339,066	408,317	418,369	604,777
Provision of Educational Learning Tools	217,307	222,656	321,863	132,022	135,272	195,544	114,461	117,279	169,533	272,211	278,913	403,184
Provision Of Teaching Tools For Educators	158,041	161,932	234,082	132,022	135,272	195,544	103,015	105,551	152,580	158,790	162,699	235,191
Supplying Additional Food	138,286	141,690	204,822	66,011	67,636	97,772	80,123	82,095	118,673	136,106	139,456	201,592
Purchasing Of Early Detection Equipment Tools Development, Purchase Of Light Drugs And P3k Contents	39,510	40,483	58,520	33,006	33,818	48,886	22,892	23,456	33,907	68,053	69,728	100,796
Meeting Activities With Parents	98,776	101,207	146,301	55,009	56,363	81,477	68,677	70,367	101,720	158,790	162,699	235,191
Giving Educational Transport For Teachers	138,286	141,690	204,822	110,019	112,727	162,953	125,907	129,007	186,486	431,001	441,612	638,375
Provision Of Administration Book	79,021	80,966	117,041	44,007	45,091	65,181	34,338	35,184	50,860	68,053	69,728	100,796
Other Supporting Activities	474,124	485,796	702,246	209,035	214,181	309,611	194,583	199,374	288,206	181,474	185,942	268,790
Infrastructure Treatment	138,286	141,690	204,822	66,011	67,636	97,772	57,230	58,639	84,767	136,106	139,456	201,592
Supporting The Provision Of Paud Publication Tools	59,265	60,724	87,781	33,006	33,818	48,886	57,230	58,639	84,767	90,737	92,971	134,395
Electrical, Water, Telephone Subscription	79,021	80,966	117,041	44,007	45,091	65,181	57,230	58,639	84,767	158,790	162,699	235,191
Operational Costs Need 1 Year	1,975,515	2,024,149	2,926,024	1,100,185	1,127,270	1,629,534	1,144,609	1,172,787	1,695,331	2,268,428	2,324,272	3,359,870

According to the results of calculations and projections, the operational unit cost for 2020 for Kindergarten in the western region is IDR 1,975,515, the middle area is IDR 2,024,149, and the

eastern area is IDR 2,926,024. Furthermore, for Playgroup in the western region is IDR 1,100,185, the middle area is IDR 1,127,270, and the eastern area is IDR 1,629,534 For ECCD units in the western region is IDR 1,144,609, the middle area is IDR 1,172,787, and the eastern area is IDR 1,695,331. Besides that, for day care Park in the western region is IDR 2,268,428, in the middle area is IDR 2,324,272, and the eastern region is IDR 3,359,870.

The results of these calculations correspond to some previous research such as Chrystiana & Alip, 2014; Tedjawati, (2013) and some educational funding concepts, namely about the difference in the operational costs of each institution. This is due to variations of activities organized by each institution. More and more program activities are organized by each institution then the greater the operational costs required. Addressing this, it is advisable that the Government be able to participate in supporting the implementation of teaching and learning activities in each institution by increasing the level of operational funding assistance given to the agencies according to the type of Institutions. The current condition of the amount of IDR 600,000 per student per year for all institutions is felt very less for institutions such as TPA or even Kindergartens that have different activity characteristics.

5 CONCLUSION

The conclusions of this study are (1) the operational unit cost for 1 year for kindergarten is IDR 1,812,336, for Playgroup is IDR 1,009,309, for ECCD units is IDR 1,050,063, and for Day Care is IDR 2,081,054, and (2) the amount of operational unit costs in 2020 for Kindergarten in the western region is IDR 1,975,515, the middle area is IDR 2,024,149, and the eastern area is IDR 2,926,024. Furthermore, for Playgroup in the western region is IDR 1,100,185, the middle area is IDR 1,127,270, and the eastern area amounting to IDR 1,629,534 For SPS in the western region is IDR 1,144,609, the middle area is IDR 1,172,787, and the eastern area is IDR 1,695,331, for Day Care in the western region is IDR 2,268,428, the middle area is IDR 2,324,272, and the eastern region is IDR 3,359,870.

The conclusion is that the highest operating unit cost is in TPA because there is a full day of service. Next is a Kindergarten institution because at this institution already has a special curriculum to prepare the child proceed to the level of basic education. Then the unit cost is the highest area in the eastern region. This is because the cost of life in eastern Indonesia compared with other regions so it can affect the operational cost of PAUD institutions in the eastern region. It deals with the results of these conclusions, several policy recommendations are given including: (1) in determining the amount of financial assistance it is necessary to consider the amount of operational unit costs so that the purpose of providing financial assistance is to improve access and quality can be achieved, (2) subsequent research in order to calculate Early Childhood Education investment costs.

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