

An Analysis Of Early Childhood Mental And Character Education In Rural Areas In Indonesia

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Abstract

This study was based on the imbalance between early childhood education (ECE) in most areas in the West Part of Indonesia and the East Part of Indonesia. ECE in most places in the East Part of Indonesia shows low quality of ECE compared to the West Part of Indonesia. We aim to investigate the condition of rural and underdeveloped areas with the lowest GDP in two regions in the East part of Indonesia, Sula and Taliabu in North Moluccas Province. Secondary Data Analysis (SDA) draws from several government reports and non-governmental organizations (NGOs) on Early Childhood Education in Sula and Taliabu, which include the data on Teacher's Academic qualifications, School Facilitation, and teacher-student ratio. We compared this data with published government regulations and recent studies regarding the Teachers' Academic Qualification, School Facilitation, and teacher-student ratio standard with the field data in Sula and Taliabu Islands. Findings and recommendations are presented. Results show that most teachers in Sula and Taliabu in North Moluccas Province are High School Graduates. Most schools only have one classroom, no library, a high teacher-student ratio, and poor internet access. These conditions are not only far from the standard of quality of ECE in Indonesia set by government rules and regulations but also not conducive to teaching and learning activities.

Keywords: *Early Childhood Education, Teacher's Academic Qualification, School Facilitation, rural area*

Introduction

Early Childhood Education (ECE) in Indonesia is offered to children between zero to six years old. The government regulated this in Regulation of the Minister of Education, Culture, Research, and Technology Number 7 of 2022 concerning Content Standards in Early Childhood Education, Basic Education Levels, and Secondary Education Levels¹ Besides, this regulation implies the basis of ECE in Indonesia revoking Ministerial Regulation Number 137 of 2014, Ministerial Regulation Number 21 of 2016, and Ministerial Regulation Number 34 of 2018 about ECE. Furthermore, this regulation shows the government's awareness of the importance of ECE in shaping nations' futures. It aims to standardize education in all parts of Indonesia so that all children can have the same quality of ECE offered by formal or informal Institutions.

However, until 2021 the data of ECE in Indonesia shows the opposite. The data published by the Minister of Education and Culture showed the imbalance between the West Part of Indonesia and the East Part of Indonesia as well as in urban and rural areas in Indonesia². Regarding the number of ECE schools available in each region, Indonesia sets regulations about 'One village, One ECE School' known as "*Satu Desa Satu PAUD*." This regulation aims to ensure that all children in Indonesia have access to ECE schools, including children in isolated areas. Moreover, the efforts to realize the mission of 'One village, One ECE School' have had good results from 2018 to 2020, but the number of schools decreased dramatically from 2020 to 2021.³ Ironically, the declining number of schools available in Indonesia was accompanied by the increasing number

¹ Sekolah Kita, "Profil, Peta Lokasi, Dan Perbandingan Sekolah Tingkat Paud, Dasar, Menengah, Dan Pendidikan Masyarakat Di 514 Kab/Kota," 2022, <https://sekolah.data.kemdikbud.go.id/index.php/Chome/pencarian/>.

² STATISTIK KEMENDIKBUD, "STATISTIK PAUD PENDIDIKAN ANAK USIA DINI 2019/2020," Tangerang: Pusat Data dan Teknologi Informasi Kementerian Pendidikan dan Kebudayaan., 2021.

³ T Navarro-Cruz, G., & Luschei, "No TitleQuality Preschool as Defined by Latina Mothers: A Qualitative Study Using a Funds of Knowledge Framework," *Journal of Research in Childhood Education* 34, no. 1 (2020): 6-27.

of preschool students. Therefore, preschool students increased gradually from 2018 to 2021^{4,5,6}.

From the facts above, a question arises regarding the availability of ECE Teachers in Indonesia. How was the ratio of ECE teachers and preschool students if the increase in the number of students accompanied a decrease in the number of schools? Given the ideal ratio of teachers and students in ECE regulated in the Regulation of the Minister of Education, Culture, Research and Technology Number 137 of 2014, where the teacher-student ratio was 1:4 to 1:15. Even so, this regulation was revoked by Ministerial Regulation Number 7 of 2022 and no ideal percentage of teachers and students in ECE mentioned in the law. The asynchronous number of schools and students leads us to the fact that the western part of Indonesia has a better teacher-student ratio than other areas, and the eastern part of Indonesia has the highest teacher-student ratio.

Specifically, the teacher-student ratio in ECE overall in Indonesia was 1:9 in 2021, while most of the western part of Indonesia, such as the Java area, has a ratio of around 1:9 or less. Furthermore, West Java, Central Java, East Java, and Banten have a 1:9 teacher-student ratio, DKI Jakarta has a 1:6, and DI Yogyakarta has a 1:7 teacher-student ratio. Whereas in the east part of Indonesia, such as Papua, West Papua, and Maluku, have a 1:11 teacher-student ratio, and North Maluku has the highest teacher-student ratio, which is 1: 12.⁷ Therefore, we investigate the condition of rural and underdeveloped areas with the lowest GDP according to Article 1 Presidential Regulation of the Republic of Indonesia Number 63 of 2020 concerning Designation of Disadvantaged Regions for 2020-2024 in North Maluku, which are Sula and Taliabu.

⁴ STATISTIK KEMENDIKBUD, "STATISTIK PAUD PENDIDIKAN ANAK USIA DINI 2019/2020."

⁵ STATISTIK KEMENDIKBUD.

⁶ STATISTIK KEMENDIKBUD.

⁷ STATISTIK KEMENDIKBUD.

Literature Review

Teacher-Student Ratio

Even though the ideal ratio of teachers and students has been revoked by Ministerial Regulation Number 7 of 2022, no perfect ratio of teachers and students in ECE is mentioned in the regulation. Teacher-student ratio affects the quality of teaching and learning activities in the classroom. investigated class size, physical, academic and teacher-student ratio to private and public ECE schools in Pakistan.⁸ The study found that private schools performed better than public schools where the teacher-students ratio was better in private schools compared to public schools. Moreover,⁹ did meta analysis on the effect of teacher-student ratio on the quality of ECE and found from a total 31 studies some of the studies found an effect even though it is a low effect of teacher-student ratio on the quality of ECE.

Therefore, the ideal ratio of teachers and students in ECE regulated in the Regulation of the Minister of Education, Culture, Research and Technology Number 137 of 2014 where the teacher-student's ratio was 1:4 to 1:15 still relevant and supported by recent studies to be the standardize teacher-student ratio in ECE in Indonesia.

Teacher Academic Qualification

Teacher academic qualification plays an important role in ECE schools. Therefore, previous government regulation for Early Childhood Teacher was set as a standardized quality for formal or informal ECE schools around all parts of Indonesia. Moreover, in Ministry of Education and Culture of Indonesia Regulation No

⁸ B. S. Younas, A., SairaTaj, S. K., Hussain, S., Makhdum, F. N., & Khan, "Classroom Quality In Terms Of Structural And Process Dimensions At Early Childhood Education Level In Pakistan," *Journal of Positive School Psychology*, no. 79-94 (2023).

⁹ Jens. Dalgaard, Nina T., Bondebjerg, Anja, Klokke, Rasmus, Viinholt, Bjørn C. A., & Dietrichson, "Adult/Child Ratio and Group Size in Early Childhood Education or Care to Promote the Development of Children Aged 0-5 Years: A Systematic Review," *Campbell Systematic Review* 18, no. 2 (2022): e1239-n/a, <https://doi.org/https://doi.org/10.1002/cl2.1239>.

137 of 2014 about National Standard of Early Childhood Education Chapter VII Standards of Educators and Education Personnel Article 25 stated that ECE Teacher Academic Qualifications are a Diploma (D-IV) or Bachelor degree (S1) in the field of early, psychology or other relevant major obtained from accredited university. Besides, ECE teachers are obligated to have a Teacher Professional Education certificate for ECE from an accredited university as well.

Even though, this regulation has been revoked by Ministerial Regulation Number 7 of 2022 and no standard academic qualification for ECE teachers, many studies across countries found the quality of early childhood education is heavily reliant on teacher academic qualification¹⁰; Boyd and Garvis, 2021; ¹¹; Rucker et.al., (2022). Moreover, a study conducted in Kenya found a positive correlation between teacher qualification and promotion rates of preschool students. Teachers who are competent and qualified can enhance school and learning effectiveness and increase the interest of preschool students to attend the particular ECE school¹². Furthermore, Boyd and Garvis (2021) compared some teacher qualifications across different countries and regions to have an international perspective and standards for teacher academic qualification. This found that teachers need to have solid knowledge about child development, pedagogy and any subject matter that can be achieved by qualified academic training and practical experience.

School Facilitation

Standardized school facilitation is also set in the Ministry of Education and Culture of Indonesia Regulation No 137 of 2014 and has been revoked by Ministerial Regulation Number 7 of 2022 and no Facilities and Infrastructure Standards mentioned. In the previous

¹⁰ J. N. Kamwitha, A., Khatete, I., Riechi, A., & Muasya, "Eacher Professional Qualification in Early Childhood Education and Its Influence on Promotion Rates in Public Primary Schools in Embu County, Kenya," *Journal of Education and Learning* 11, no. 5 (2022): 159–72.

¹¹ C. Nutbrown, "Early Childhood Educators' Qualifications: A Framework for Change," *International Journal of Early Years Education* 29, no. 3 (2021): 236–49.

¹² Kamwitha, A., Khatete, I., Riechi, A., & Muasya, "Eacher Professional Qualification in Early Childhood Education and Its Influence on Promotion Rates in Public Primary Schools in Embu County, Kenya."

regulation of Ministry of Education and Culture of Indonesia No 137 of 2014 about National Standard of Early Childhood Education Chapter VIII about Facilities and Infrastructure Standards, school facilitations are measured in detail to standardize ECE across all regions in Indonesia. It emphasizes each school to have proper classroom size, hygiene and health facilities and safe room and spaces for children's educational activities such as educational game tools as well as indoor and outdoor play facilities.

These standard facilities for ECE are vital as a children's stimulus for their cognitive and physiological development.¹³ investigates the relationship between physical facilities and Internal Efficiency using Pearson product moment correlation and found positive correlation with $r = .653$, $n = .37$, $p < .05$. This means that school facilities and infrastructure contribute significantly with the efficiency in ECE schools because it allows children to utilize and maximize the play and learn activities. Furthermore, after Covid-19 pandemic, the need for technology in schools' facilitation to online learning is essential for learning activities in ECE.

Methodology

The purpose of this study was to investigate the condition of rural and underdeveloped areas with the lowest GDP in two regencies in the East part of Indonesia which are Sula and Taliabu in North Moluccas Province and compare the condition with the standard of quality of ECE in Indonesia set by government rules and regulation. The study is a qualitative interpretive investigation with human understanding of a social phenomenon at its center. Secondary Data Analysis (SDA) draws from government reports and non-governmental organizations (NGOs) on Early Childhood Education in Sula and Taliabu, which include the data on Teacher's Academic Qualification, School Facilitation and teacher-students ratio. We compared this data with published government rules and regulations as well as recent studies about the standard of Teachers

¹³ Kamwitha, A., Khatete, I., Riechi, A., & Muasya.

Academic Qualification, School Facilitation and teacher-students ratio. Three research question emerged in this study are ; what are the teachers' academic qualifications in early childhood education in Eastern Indonesia? how school facilities really support the quality of early childhood education in Eastern Indonesia? And the ratio of the number of teachers and students in Eastern Indonesia.

Findings

Teacher-Student Ratio

Field data collaborated with the non-governmental organizations (NGOs) North Maluku Association of Indonesian Early Childhood Education and Education Personnel or known as *Himpunan Pendidikan dan Tenaga Kependidikan Anak Usia Dini Indonesia* (HIMPAUDI) in North Maluku along with data from the Education officials in each district found that the Teacher-Student Ratio in Sula and Taliabu were 1:30 to 1:124. Taliabu have teacher-student's ratios of 1:40 to 1:124 and Sula have teacher-student's ratios of 1:30 to 1:45. Moreover, most ECE schools in Sula and Taliabu only have 1 to 3 teachers. The data were summarized in the table 1.1

Table 1.1 Availability of Number of ECE Teachers in Sula and Taliabu

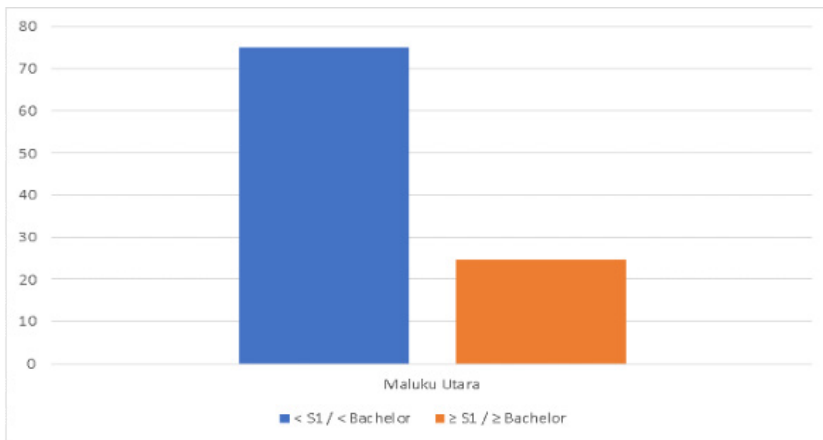
Region	Number of ECE Teachers	Percentage
Sula	1	38%
	2	28%
	>3	34%
Taliabu	< 2	59%
	>3	41%

Source: HIMPAUDI in North Moluccas (2022)

It can be seen that the number of teachers in each school in Sula I and Taliabu is very minimal. Furthermore, around 66% of the 148 schools in Sula only had 1 to 2 teachers and only 34% schools had 3 and above teachers. Meanwhile, PAUD schools, both at the TK, KB and SPS levels in the Taliabu Archipelago, had 3 and above teachers, only around 36 PAUD schools out of 89 PAUD schools or around 41% of PAUD schools and 59% had 2 and below teachers. This situation concludes that although the ratio of teachers and students in Indonesia as a whole shows an ideal number, this figure is not evenly distributed throughout Indonesia, especially in rural areas in eastern Indonesia.

Teacher Academic Qualification

Chart 2.1 Percentage of Early Childhood Teachers according to Educational Level in North Maluku

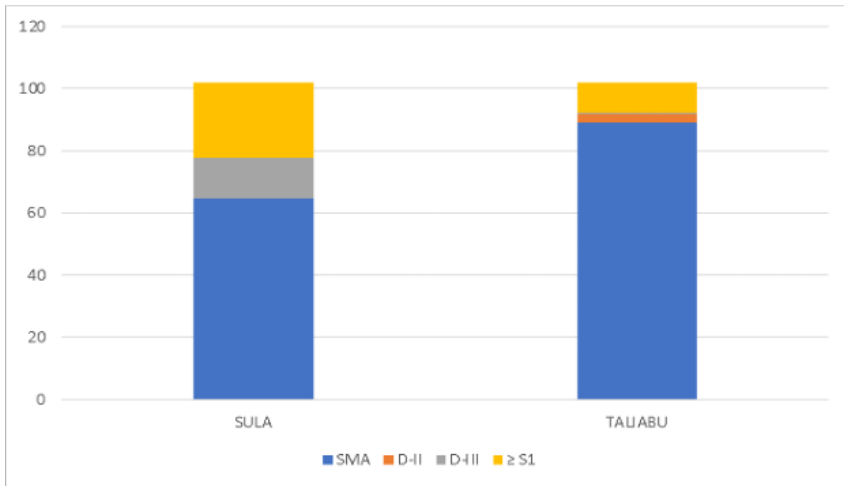


Source: *Statistik PAUD (2021) Number of Educators and Education Personnel According to the Highest Diploma in Each Province.*

The chart 2.1 shows the percentage of Early Childhood Teachers in North Maluku according to the educational certificates. Whereas, the chart 2.2 shows the percentage of Early Childhood Teachers according to the educational certificate specifically in the underdeveloped areas in North Maluku which are Sula and Taliabu. It can be seen that the percentage of teachers who gained bachelor

degrees are less than teachers who had lower degrees. In overall North Maluku, the number of Early Childhood Teachers (ECT) with diplomas below bachelor degree reached 2,944 out of 3,920 ECT which is around 75.1%, extreme above the number of ECT with bachelor degree which was only 24.9%.

Chart 2.2 Percentage of Number of Early Childhood Teachers according to Educational Level in Sula and Taliabu



Source: Government officials of Sula and Government officials of Taliabu, Educators and Education Personnel Data for North Maluku Province for 2022 District/City: Sula Islands and Educator and Education Personnel Data for 2021 District/City: Taliabu Island.

Conditions that are more apprehensive can be seen from the latest data owned by each district, where the percentage of teachers with a high school background in the two regencies, namely the Sula Island and Taliabu Island was above 50%. Furthermore, around 64.8% ECT in Sula graduated with a high school diploma while only 24.3% graduated with a bachelor degree and others graduated in between. Also, an extreme gap can be seen in Taliabu Island in which around 89.1% ECT had a high school diploma and only 9.8% had bachelor degree and others graduated in between.

School Facilitations

Furthermore, we need to look at the facilities and infrastructure that support the active learning process within the ECE school itself. Field data from the table shows that almost all schools in Sula and Taliabu areas have very minimal school facilities. About 82% of schools in Taliabu only have 1 classroom with a varying number of students ranging from 13 to 124 students. Then, around 79.7% of schools in Sula which were recorded only had 1 classroom with 11 to 70 students.

Table 3.1 Availability of Number of Classroom in each ECE Schools in Sula and Taliabu

Region	Classroom	ECE School	Percentage
Sula	1	118	79,7%
	> 1	30	20,3%
Taliabu	1	73	82%
	> 1	16	18%

Source: HIMPAUDI in North Moluccas (2022)

Table 3.2 Availability of School Facilitations in each ECE Schools in Sula and Taliabu

Region	Library	Lab Room	ECE School	Percentage
Sula	Available	Available	0	0%
	None	None	148	100%
Taliabu	Available	Available	0	0%
	None	None	89	100%

Source: HIMPAUDI in North Moluccas (2022)

Table 3.3 Availability of Internet Access in each ECE Schools in Sula and Taliabu

Region	Internet Access	ECE School	Percentage
Sula	Telkomsel FLASH	7	4.5%
	Telkomsel Speedy	1	0.5%
	None	145	95%
Taliabu	Telkomsel FLASH	11	13%
	None	72	87%

Source: *Sekolah Kita*, Published Data from Ministry of Education and Culture (2022)

From the data above, we can conclude that the school facilities and internet access did not meet the standard of government regulation and the standard of ECE that are supported by many academic studies. Most schools in Sula and Taliabu only have 1 room and minimum access to the internet. Additionally, all the schools did not have libraries and lab rooms.

Discussion

From the data above, we can conclude that the condition of ECE in Indonesia, especially in remote places in eastern Indonesia was impoverished and far from the standards set in the previous ministerial regulations. In this case, we measure the condition and quality of ECE in the 3T areas from several factors, namely teachers' academic qualifications, school facilitations and group size or teacher student ratio. Additionally, for a more in-depth explanation, we will discuss the result by each research questions in this study;

What are teachers' academic qualifications in early childhood education in Sula dan Taliabu?

Teachers' academic qualifications in North Maluku, especially Sula and Taliabu were extremely far from the standards and quality set out in previous Ministry of Education and Culture of Indonesia Regulation No 137 of 2014. Although this regulation had been replaced and abolished, there is no regulation against this standard and provides sufficient detail about Teachers' qualifications like the previous Ministerial Regulation No 137 of 2014. Also, this standard supported by recent studies as important measurement for good quality of ECE¹⁴; ¹⁵; ¹⁶; Also, in order to improve the quality of teaching, it is necessary to have criteria for teachers to teach ECE with previous types of work with children¹⁷, namely in-service qualifications regulated in childcare licensing policies by 29 states¹⁸. Experience is not a qualification that can be promoted in the same way as the acquisition of other qualifications. EC workforce experience is rarely learned; however, several K-12 studies show a positive relationship between teacher experience and children's reading skills¹⁹. Certification, including certificates, credentials, licenses, and permits, is provided from institutions, both public and private, and indicates a qualified teacher²⁰. The range of choices

¹⁴ Kamwitha, A., Khatete, I., Riechi, A., & Muasya.

¹⁵ S. (Eds.). Boyd, W., & Garvis, *International Perspectives on Early Childhood Teacher Education in the 21st Century* (Springer., 2021).

¹⁶ Nutbrown, "Early Childhood Educators' Qualifications: A Framework for Change."

¹⁷ B. Rucker, L., Zajicek, A., & Kerr, "How Policy Can Help Prepare Early Childhood Teachers: The Alignment between State Childcare Licensing Policy and Teacher Qualification Attainment," *Journal of Early Childhood Teacher Education*, 2022, 1–24.

¹⁸ S. Boyd, W., Wong, S., Fenech, M., Mahony, L., Warren, J., Lee, I. F., & Cheeseman, "Employers' Perspectives of How Well Prepared Early Childhood Teacher Graduates Are to Work in Early Childhood Education and Care Services," *Australasian Journal of Early Childhood*, 45, no. 3 (2020): 215–27.

¹⁹ M. Croninger, R. G., Rice, J. K., Rathbun, A., & Nishio, "Teacher Qualifications and Early Learning: Effects of Certification, Degree, and Experience on First-Grade Student Achievement," *Economics of Education Review* 26, no. 3 (2007): 312–24.

²⁰ O Early, D. M., Bryant, D. M., Pianta, R. C., Clifford, R. M., Burchinal, M. R., Ritchie, S., Barbarin, "Are Teachers' Education, Major, and Credentials Related to Classroom Quality and Children's Academic Gains in Pre-Kindergarten?," *Early Childhood Research Quarterly* 21, no. 2 (2006): 174–95.

that constitute “certification” makes it difficult to relate certification, even Early Childhood Development needs special attention in improving quality, as we know that the eastern part of Indonesia is still not on par with early childhood education in Java. In the future there needs to be improvements that must provide innovation in providing quality from an early age. also investigated the challenges in creating a framework for preschool teacher qualifications that can be acknowledged internationally.²¹ The result of the framework suggested that preschool teachers should possess a minimum level of academic and practical qualification for ECE which focus on child development, early childhood pedagogy, and subject matter knowledge. This framework needs to be established to enhance the quality of early childhood education globally.

Thus, we considered this regulation still relevant to measure the quality of ECE across all parts of Indonesia and still applicable as the standard for enhancing ECE effectiveness. In addition, various theories also emphasize that early childhood development was rapid and vital for the first physical and cognitive development that happened in human beings which is why Early Childhood years are also known as the “Golden Age” period. Psychology theory about Early Childhood such as Howard²² stated that there are 9 different multiple intelligences that are unique in every person, these intelligences need to be noticed by parents and teachers so that the children can have right attention and learning experience. Therefore, the field results obtained in this study indicate a concerning situation if the low academic qualification were not accompanied by training support from the government or the private sector. Government should prepare at least one bachelor degree related to ECE with adequate practical training for ECE in each school. This preparation can be in many forms such as scholarship, training or temporary qualified teachers from other regions until the school has at least one of the qualified teachers. The importance of facilities can affect the

²¹ Nutbrown, “Early Childhood Educators’ Qualifications: A Framework for Change.”

²² H. E. Gardner, *Intelligence Reframed: Multiple Intelligences for the 21st Century*, 2000.

improvement of learning outcomes in students, Rahady explained that it is known that;²³ explained it is known that; 1) Learning space management can improve the quality of learning in physical education and health education, this is because schools apply different steps in learning space management; 2) In the management of learning opportunities there are obstacles to improve the quality of learning, the planning of educational infrastructure facilities is hampered by an insufficient budget so that it cannot meet the needs of the school, and when using learning facilities due to lack of maintenance, many learning facilities are damaged so that they cannot be used when there are obstacles to control their management. . from schools? This is because schools do not have a special room to store these learning facilities; 3) The management of learning opportunities is about improving the quality of learning through several methods, among others: By planning learning opportunities, teachers try to modify learning opportunities so that the teaching and learning process can continue and students' interest in learning is stimulated.

How school facilities really support the quality of early childhood education in Sula dan Taliabu?

School facilities also play a role in the stimulation of children who are developing very rapidly at this time. However, from the data obtained, the ECE school facilities in Sula and Taliabu are very minimal for the development of children's teaching and learning. This is not only the case in Sula and Taliabu, various recent studies show that the same conditions occur in rural areas of Indonesia and eastern Indonesia. Many challenges such as the internet and school facilities are faced in ECE especially in rural areas in Indonesia. highlights the lack of access to online learning and limited resources for early childhood education in Indonesia, particularly in rural areas.²⁴ This

²³ Dihadi Rahadi Sahid and Elly Resli Rachlan, "Pengelolaan Fasilitas Pembelajaran Guru Dalam Meningkatkan Mutu Pembelajaran Pendidikan Jasmani Di Sekolah Menengah Kejuruan (SMK)," *Indonesian Journal of Education Management & Administration Review* 3, no. 1 (2019): 24–39.

²⁴ D. Wahyuni, "Early Childhood Education During the Covid-19 Pandemic in Indonesia.," in . . . *In 5th International Conference on Early Childhood Education (ICECE 2020)* (Atlantis Press, 2021), 172-176).

lack of adequate class facilities, including internet access, computers, and other necessary equipment, has affected the quality of teaching and learning for young children in Indonesia.

Beside that, found disparities between urban and rural areas in terms of access to adequate class facilities, which has resulted in unequal opportunities for young children to receive a quality education.²⁵ Therefore, almost all of the studies suggest government and institutions to provide support and resources to schools and educators to ensure the quality of teaching and learning in ECE ²⁶ ; Masruroh and Munastiwi, 202;The minimal school facilities in almost the majority of schools in Sula and Taliabu should be of particular concern to the world and the Indonesian government itself.²⁷ This is because all children in Indonesia should have equal facilities and equal standard of education. Also, UNESCO, UNICEF, UNDP and the World Bank mission in the World Forum on Education for All which was held in Dakar, Senegal. This forum produced Goal One, Article 31 which emphasizes the obligation of the Government, through the relevant ministries, to formulate early childhood care and education policies in the context of the Education for All (EFA) plan.²⁸ which later became a joint mission to provide good educational facilities for young children throughout the world including Indonesia.

What is the ratio of the number of teachers and students in Sula dan Taliabu?

Although the meta-analysis study done by Dalgaard et al., (2022)²⁹ found a low relationship between the ratio of the number of teachers and students and effectiveness in teaching and learning. The

²⁵ E Masruroh, L., & Munastiwi, "Portrait Analysis of Early Childhood Education in Cities and Villages: The COVID-19 Pandemic Era," *JPPM (Jurnal Pendidikan Dan Pemberdayaan Masyarakat)* 8, no. 1 (2021): 58-66.

²⁶ M. Amini, "Student Digital Literacy in Online Learning Before and After the Covid Pandemic," in *In 5th International Open and Distance Learning Conference Proceedings Book*, 2023, 487.

²⁷ Wahyuni, "Early Childhood Education During the Covid-19 Pandemic in Indonesia."

²⁸ E. Vargas-Barón, "Policies on Early Childhood Care and Education," *Their Evolution and Some Impacts.*, 2015.

²⁹ J. Jackson, "Qualifications, Quality, and Habitus: Using Bourdieu to Investigate Inequality in Policies for Early Childhood Educators," *British Journal of Sociology of Education* 43, no. 5 (2022): 737-53.

ratios shown in Sula Island and Taliabu Island were shocking. The largest ratio was 1: 124 in Taliabu Island where Taliabu has teacher-student's ratios of 1:40 to 1:124 and Sula has teacher-student's ratios of 1:30 to 1:45.

There were possibilities in remote areas where all children might not participate in the class at the same time or at the same day. However, this figure is still apprehensive to Early childhood Students who need enough attention and proper teaching and learning activities for their physical and cognitive development. In Addition, this situation were difficult for early childhood teachers with low educational background and less teaching aids and facilities. Moreover, many countries in the world have invested significantly to prepare early childhood teachers for their work in ECE settings. The quality of the ECE program is closely aligned to the EC workforce³⁰with the quality of the interactions between children and teachers a marked predictor of children's learning outcomes³¹ as higher teacher qualifications are significantly correlated with higher quality in ECE³².

Hence, this student-teacher quality of interaction was clearly problematic if we try to analyze the field data above. In Indonesia, various strategies have been developed to improve access and quality of ECE which in the Regulation of the Minister of Education and Culture, Republic of Indonesia, Number 137 of 2014. Unfortunately, this regulation was not implemented completely and has been abolished by other regulations with no specific and standardized ECE in some important measurements. In article 1 there are 14 points, one of which is 2 of these points explained³³ 1. National Early

³⁰ L. Dalli, C., Barbour, N., Cameron, C., & Miller, "Closing Comments: Future Directions for Early Childhood Policy. In L. Miller, C. Cameron, C. Dalli & N. Barbour (Eds)," *The Sage Handbook of Early Childhood Policy*. Los Angeles: Sage Publications, 2018.

³¹ M. R. Sabol, T. J., Soliday Hong, S. L., Pianta, R. C., & Burchinal, "Can Rating Pre-K Programs Predict Children's Learning?," *Science* 341, no. 6148 (2013): 845-46.

³² S. Manning, M., Wong, G. T., Fleming, C. M., & Garvis, "Is Teacher Qualification Associated with the Quality of the Early Childhood Education and Care Environment? A Meta-Analytic Review," *Review of Educational Research* 89, no. 3 (2019): 370-415.

³³ Menteri Pendidikan, D A N Kebudayaan, and Republik Indonesia, "Standar Nasional Pendidikan Anak Usia Dini," 2014.

Childhood Education Standards hereinafter referred to as PAUD Standards are criteria for the management and implementation of PAUD in all jurisdictions of the Republic of Indonesia. 2. Standards for Early Childhood Developmental Achievement Levels hereinafter referred to as STPPA are criteria on the abilities achieved by children in all aspects of development and growth, including aspects of religious and moral values, physical-motor, cognitive, language, social-emotional, and art.

Conclusion and Implication

ECE in Eastern Indonesia had serious problems impede the educational process such as the absence of adequate facilities to support the progress of the teaching and learning process, the quality of interaction and the teacher academic qualification. This study recommends the government to evaluate current ministerial regulation which revoked the Regulation of the Minister of Education and Culture, Republic of Indonesia, Number 137 of 2014. This is because there is a need for standardized ECE as well as clear measurement of the quality of ECE in all parts of Indonesia. Moreover, the government should take serious action about the retarded quality and condition of ECE in East Part of Indonesia Especially Sula and Taliabu Island by generating some action such as training, scholarship or exchange teacher program that can enhance teacher network and knowledge about ECE.

We considered some limitations of these studies where the data collected are secondary and no deep interviews are conducted to have greater perspective about teacher perspectives. Therefore, there is a need for upcoming studies emphasizing on the condition and recommendation for ECE in rural areas in Indonesia based on primary data. It is also important that learning space management can improve the quality of learning physical education and health education, this is because schools apply different steps in learning space management, this is in accordance with the role of law no 137 of 2014, namely PAUD Standards are criteria for the management and implementation of PAUD in all jurisdictions of the Republic of Indonesia.

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