



The Impact Of Teacher Ratio On Student Learning Achievement At RA Yaspi Muneng 2

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Abstrak

Pendidikan anak usia dini menjadi pondasi utama bagi anak agar dapat berkembang dimasa yang akan datang. Interaksi optimal dengan lingkungan belajar sangat diperlukan untuk menunjang tumbuh kembang secara menyeluruh. Salah satu faktor krusial dalam mendukung proses tersebut adalah rasio antara pendidik dan siswa. Karena di RA Yaspi Muneng 2 rasio pendidik dan siswa belum sesuai dengan ketentuan pendidik. Penelitian ini bertujuan untuk mengetahui dampak rasio pendidik terhadap prestasi belajar siswa di RA Yaspi Muneng 2. Pendekatan penelitian yang digunakan adalah kualitatif deskriptif dengan metode studi kasus. Teknik pengumpulan data dilakukan melalui observasi kelas, wawancara mendalam dengan pendidik dan orang tua siswa, serta dokumentasi capaian pembelajaran siswa. Hasil penelitian menunjukkan bahwa satu orang guru yang membimbing dua kelompok usia dalam satu ruang kelas mengalami kesulitan dalam memberikan perhatian individual, keterbatasan dalam evaluasi perkembangan siswa, dan tantangan administratif. Hasil wawancara dengan orang tua siswa juga menunjukkan bahwa perkembangan siswa berbeda dengan saudaranya yang berada pada sekolah yang berbeda, disebutkan bahwa karena terbatasnya jumlah pendidik. Rasio pendidik yang tidak ideal berdampak signifikan terhadap efektivitas pembelajaran dan prestasi belajar siswa.

Abstract

Early childhood education is the main foundation for children to develop in the future. Optimal interaction with the learning environment is essential to support overall growth and development. One crucial factor in supporting this process is the ratio between educators and students. This study aims to investigate the impact of the teacher-student ratio on student academic performance at RA Yaspi Muneng 2. The research approach used is qualitative descriptive with a case study method. Data collection techniques include classroom observation, in-depth interviews with teachers and parents, and documentation of student learning outcomes. The

	<p>research findings indicate that a single teacher guiding two age groups in one classroom faces difficulties in providing individual attention, limitations in evaluating student progress, and administrative challenges. Interviews with parents also revealed that students' development differs from that of their siblings attending different schools, with parents citing the limited number of educators as a contributing factor. An unfavorable teacher-student ratio significantly impacts the effectiveness of learning and student academic performance.</p> <p></p> <p>Jurnal Indria (Jurnal Ilmiah Pendidikan Prasekolah dan Sekolah Awal) is licensed under a Creative Commons Attribution 4.0 International License.</p>
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INTRODUCTION

Early childhood education (ECE) is a crucial phase in establishing the fundamental basis of cognitive, social, emotional, and motor development in students. Early childhood education serves as the primary foundation for children to grow in the future. During the Golden Age, optimal interaction with the learning environment is essential to support holistic growth and development. One crucial factor in supporting this process is the ratio between educators and students. This ratio affects the intensity of attention and interaction that teachers can provide to each student (Nafiah & Islakhudin, 2020).

According to the Regulation of the Minister of Education and Culture of the Republic of Indonesia Number 137 of 2014 concerning the National Standards for Early Childhood Education, there is a specific discussion regarding the ratio of educators to student achievement. This regulation focuses more on the general standards for the management and implementation of Early Childhood Education (PAUD), which includes standards for child development achievement levels, content standards, process standards, assessment standards, educator and education personnel standards, facility and infrastructure standards, management standards, and financing standards. Nevertheless, this regulation establishes criteria for educator and education personnel standards, including the academic qualifications and competencies required for PAUD educators (PAUD teachers, assistant teachers, and junior assistant teachers). (Haryani & Qalbi, 2021).

According to the Directorate for the Development of Early Childhood Education (PAUD) (2015), the ideal ratio of teachers to students is 1:15. When the number of students exceeds this ratio, educators' attention becomes divided, the teaching process is not optimal, and student development is difficult to monitor. Sari (2025) emphasizes that the lack of interaction due to an unbalanced ratio will decrease the effectiveness of learning. Research conducted by Hadi, S (2020) shows that the ideal educator to student ratio (1:20–1:25) allows educators to provide more individual attention, increases student participation in class, and positively impacts academic performance. One factor that often attracts attention is the ratio of educators to students, which is the comparison of the number of educators to the number of students in a classroom or educational institution. This ratio is believed to have a direct impact on the effectiveness of the learning process, the quality of interactions between educators and students, and ultimately, student learning achievements.

The disproportionate ratio of educators can lead to various impacts on the learning process and students' achievement. In the context of early childhood education (PAUD), individual attention and intensive interaction between educators and students are crucial components in supporting the overall development of children. When educators have to divide their attention among many students, there is a potential for neglect. The learning needs of each individual become greater, which hampers the achievement of developmental indicators in children, both in cognitive, social-emotional, and motor aspects. Moreover, the imbalance in the educator ratio can hinder students' learning achievements during educational activities, as well as reduce motivation and active participation in class activities. This will certainly affect students' learning achievement, which is one of the most important aspects of the learning process. Learning achievement serves as an evaluation tool for educators, parents, and even the students themselves. (Banamtuan et al., 2022)

Students' learning achievements are directly influenced by how optimally educators can provide guidance, stimulation, and developmental assessment. The significantly lower condition of educators compared to that of students will certainly impact the execution of teachers' evaluations of students. The lack of specific and personal feedback can also lead to under-stimulation of children's development. Therefore, the non-ideal ratio of educators poses a serious challenge in ensuring the

quality of early childhood education that is oriented towards the holistic development of students. (Journal of Learning Achievement)

RA Yaspi Muneng 2 faces challenges due to a shortage of educators, as RA Yaspi Muneng 2 has only one educator handling two groups of students in one classroom. This results in a lack of attention to students, which can affect the learning process and outcomes for students. In practice, the inadequate ratio of educators' attention to students ultimately influences the learning process and results. The low educator-to-student ratio increases the workload for educators, which can potentially result in a decline in the quality of educational services provided. This research aims to explain this condition and its impact on student learning achievements based on observations and interviews with educators and parents.

Based on this background, this study is conducted to determine the impact of the teacher-student ratio on the learning achievement of students at RA Yaspi Muneng 2. The results of this research are expected to contribute to early childhood education institutions in determining the ideal number of teachers to improve the quality of education and the development of students. This research is expected to provide an empirical picture of how the comparison of the number of teachers and students at RA Yaspi Muneng 2 affects children's learning outcomes, as well as its implications for the development of policies and educational practices in the institution. The results of this study are expected to be valuable input for the management of RA, parents, and policymakers in efforts to improve the quality of early childhood education in Indonesia.

This research also has urgency because there has not been a similar in-depth study conducted in the environment of RA Yaspi Muneng 2. Therefore, the following research questions are developed: (1). What is the teacher-to-student ratio at RA Yaspi Muneng 2? (2) What is the level of student learning achievement at RA Yaspi Muneng 2 under the current teaching conditions? (3) Is there a relationship between the teacher ratio and the increase or decrease in learning achievement of students at RA Yaspi Muneng 2?

METHODS

This research uses a qualitative descriptive approach aimed at understanding in depth the influence of the teacher-student ratio on student learning achievement at RA Yaspi Muneng 2, which is located in Muneng Village, Pakis District, Magelang Regency.

The research design used is a case study, which is an approach that allows researchers to explore in depth a specific case in the context of real life (Doi et al., 2024). Case studies are chosen because the phenomena studied are contextual, unique, and inseparable from the environment in which the case occurs.

The subjects in this study consist of one educator who also serves as the principal, 25 students as observation objects, and 25 parents of students who are indirectly involved in the learning process. The selection of subjects was carried out using purposive sampling, which is a technique for selecting information based on specific criteria deemed capable of providing relevant and in-depth information regarding the topic being researched (Suriani et al., 2023).

The data collection techniques used were classroom observations, interviews with educators and parents, and documentation. Semi-structured interviews were conducted with educators at RA Yaspi Muneng 2, covering questions about the educators' experiences in handling a large number of students, the teaching strategies used, challenges in providing individual attention to students, and teachers' observations of students' learning outcomes. Classroom observations were carried out to directly see the learning situation, the interactions between educators and students, and how teachers divided their attention in non-ideal ratio conditions. This observation took place over several meetings using an observation sheet that covered aspects of interaction, student responses, and learning strategies. Additionally, documentation techniques were employed by examining various documents related to the number of students and educators, as well as student learning outcomes. These documents were analyzed to identify patterns of learning achievements and their relevance to the caregiving workload of educators.

The data analysis in this study was conducted thematically using the stages from Miles and Huberman (1994), which includes three main stages. The first stage is data reduction, which is the process of selecting, focusing, simplifying, and abstracting the raw data obtained from observations, interviews, and documentation. Irrelevant data is filtered so that only important information directly related to the research focus remains. The second stage is data presentation, which involves organizing the reduced data into descriptive narrative form and thematic matrices to facilitate the researcher in identifying patterns and relationships among findings. The final stage is drawing conclusions and

verification, which is done continuously throughout the research process. At this stage, the researcher formulates the meaning of the presented data, seeks regularities, cause-and-effect relationships, and constructs generalizations relevant to the research objectives. (Qomaruddin & Sadiyah, 2024)

The triangulation of methods and sources is used to ensure the validity and credibility of the data. Method triangulation is conducted by comparing and integrating the results obtained from three main data collection techniques, namely interviews, observations, and documentation. This step aims to examine the consistency of the information gathered from various perspectives, thereby enhancing the validity of all data. Meanwhile, source triangulation is performed by comparing the information provided by various informants, such as educators, learning documents, and observations of students. In addition, member checking is also carried out, which involves requesting direct confirmation from informants regarding the initial findings. This confirmation is crucial to ensure that the interpretation aligns with the reality experienced by the informants and to avoid misunderstanding. This approach is expected to provide a clear picture of the extent to which the ratio of educators influences the learning outcomes of early childhood children at RA Yaspi Muneng 2, Pakis District, Magelang Regency.

RESULT AND DISCUSSION

RA Yaspi Muneng 2 conducts learning activities for two age groups, namely Group A which consists of 13 students and Group B with 12 students. All learning activities are handled by one educator, Mrs. I, who also serves as the principal and manages administration. This heavy workload implies limitations on the intensity of interaction between the educator and students. The learning process takes place in one classroom with schedule and material adjustments between groups. The physical limitations of the learning space also often cause difficulties in dividing materials between groups, such as Group A students being involved in Group B materials. Another facility that hinders the smooth learning process is the toilet facility for children, so students must be accompanied by a teacher when going to the bathroom. This also disrupts the educator's focus in assisting the learning process.

The dual role carried out by Mrs. I requires her to attend external activities such as official meetings or institutional coordination, which results in reduced effective

learning time. In some cases, students have to be sent home early so that educators can fulfill external obligations. This situation disrupts the continuity of learning and decreases the effectiveness of curriculum implementation. This phenomenon indirectly reveals an imbalance in the distribution of responsibilities that affects the quality of the learning process.

Based on the results of the interviews with Mrs. I and the parents, it is known that the limited number of educators also affects student achievement. From the parents' perspective, they also realize the limitations of educators that impact the lack of two-way communication between educators and parents regarding children's development. In fact, parental involvement in early childhood education is very important in supporting learning success. With the limitations of teaching staff, the time and opportunity to build a close collaboration between schools and families becomes hindered, thus potentially reducing student learning achievements.

The following are the results of interviews with educators and parents supported by observational data:

Table 1. Results of the Interviews

No	Domain	Indicator	Interview Results	Observation	Conclusion
1	Cognitive Domain	Knowledge	Students recognize basic concepts of colors and numbers	Children understand some simple materials	Students can name colors and objects, though not yet consistently. Basic knowledge has been formed but requires repeated reinforcement
		Comprehension	Some students have difficulty understanding activity instructions	Children sometimes feel confused with the teacher's directions	Students' comprehension is not yet optimal, likely due to limited guidance
		Application	Students are able to apply simple habits	Children begin to practice independence values at home	Students gradually begin to apply simple learning habits
		Analysis	Most students are not yet able to express logical reasons	Children have difficulty explaining the	Analytical skills are not yet well-developed and

				consequences of an action	need more intensive guidance
		Evaluation	Students are not yet able to evaluate their actions	Children cannot yet distinguish between right and wrong	Self-evaluation has not yet developed; requires gradual and personal approaches
2	Affective Domain	Attitude	Students show good behavior but are sometimes difficult to manage	Children are beginning to learn responsibility	Social attitudes develop with consistent guidance from teachers
		Interest	Students are enthusiastic during learning with real objects	Children are excited to go to school every morning	Learning interest is quite high when learning methods are engaging
		Motivation	Students get bored quickly if the method is too repetitive	Children are easily distracted	Motivation needs to be improved through an individual approach
		Learning Values	Students begin to understand honesty and responsibility	Children start to realize the importance of completing tasks	Learning values are developing but not yet consistent
3	Psychomotor Domain	Physical Skills	Students are able to draw and cut according to their developmental stage	Children can wear shoes and eat independently	Motor skills develop according to age, showing good adaptation
		Practical Skills	Students are trained to wash hands, use spoons, and cut	Children coordinate hand movements well at home	Habituation of simple practices supports children's developmental progress

Various limitations can be identified through the students' developmental achievements, where learning outcomes indicate that some students are still able to reach age-appropriate developmental indicators. This can be seen from their ability to complete tasks, participate in group activities, and demonstrate independence in classroom routines. Based on the identification of learning outcomes and interviews with parents, it

was found that there are differences in learning readiness between graduates of RA Yaspi Muneng 2 and students from other schools with a more ideal teacher-to-student ratio. Parents reported that their children required more time to adapt when entering elementary school, particularly in cognitive aspects and basic learning skills. These findings further reinforce that the limited number of teachers affects the long-term optimization of students' academic achievement.

The study shows that the teacher–student ratio at RA Yaspi Muneng 2 is not ideal, with one teacher responsible for 25 students across two age groups, which has direct implications for the effectiveness of the learning process. In terms of students' learning achievements, the findings highlight the development of the cognitive domain in early childhood education. According to Astuti (2022), cognitive development in early childhood progresses gradually and is strongly influenced by consistent, age-appropriate stimulation. At this stage, children's ability to comprehend and analyze is not yet fully developed; therefore, systematic approaches and concrete learning experiences are required to support them. Similarly, Susanto (2019) emphasizes that cognitive stimulation in early childhood must be grounded in real-life experiences that engage all of the child's senses, as this period is fundamental for building basic thinking structures. Furthermore, Setiyawati (2021) points out that active teacher involvement and play-based learning methods contribute significantly to developing children's logical and evaluative thinking skills, thereby enhancing their academic performance.

In the affective domain, field findings reveal that children's social attitudes develop gradually with routine activities and teacher guidance. This aligns with Rahmanisari (2021), who notes that the development of social behavior in early childhood is greatly influenced by consistent teacher–child interaction and the reinforcement of positive habits within play and learning contexts.

With regard to the psychomotor domain, the study confirms that children's motor skills improve optimally when provided with repeated stimulation relevant to daily life. This is consistent with the findings of Retnasari (2023), who stresses that independent exercises, such as using eating utensils or dressing oneself, accelerate hand–eye coordination and foster self-confidence. Thus, practical, hands-on learning strategies supported by both home and school environments are highly effective in promoting psychomotor development in early childhood.

These findings are also consistent with Ibrahim et al. (2024), who argue that the teacher's workload increases when class sizes are too large, limiting opportunities for stimulation and interaction. They also support the research of Hayati Pahlevi (2017), which highlights that an imbalanced teacher–student ratio reduces the effectiveness of learning and hinders children's developmental outcomes. Therefore, intervention from the foundation and local government is urgently needed to recruit additional teachers, improve learning facilities, and balance teacher workloads to ensure the provision of quality education at RA Yaspi Muneng 2

The findings of this study provide clear evidence that the ratio between teachers and students has a significant correlation with students' academic achievement. Specifically, the study shows that when the teacher–student ratio is smaller—meaning one teacher supervises fewer students—there is a positive tendency toward improved learning outcomes. This is logical, as teachers have more time and capacity to provide individual attention, closely monitor each child's learning progress, and adapt teaching methods to their specific needs. More intensive personal interaction facilitates deeper understanding of the material, fosters independence, and enables the early identification of learning difficulties, thus allowing timely interventions (Haryani & Qalbi, 2021).

Conversely, a larger teacher–student ratio, where one teacher is responsible for too many students, often leads to reduced quality of interaction and supervision. Teachers may feel overwhelmed, resulting in uneven attention and fewer opportunities to provide personalized feedback. Such conditions can hinder effective teaching and learning, reduce students' active participation, and ultimately have a negative impact on their academic achievement. It is important to note that this impact does not stand alone other factors such as teacher qualifications, supporting facilities, and parental involvement also play a role. Nevertheless, the results of this study confirm that an optimal teacher–student ratio is one of the key pillars in creating a conducive learning environment that supports students' academic performance at RA Yaspi Muneng 2 (Nurkolis et al., 2023).

Several parents reported that their children experienced difficulties in understanding the material and were slow to respond to instructions, despite being active at home. Parents also compared their children's outcomes with those of students from other schools that had more than one teacher, showing notable differences. These findings reinforce the assumption that limited interaction and individual attention directly affect

students' developmental achievements. Therefore, a disproportionate teacher–student ratio becomes a significant factor in the decline of learning quality and student outcomes at RA Yaspi Muneng 2 (Yuwono, 2019).

Based on interviews with teachers and parents, it can be concluded that indicators of learning achievement consist of three aspects: cognitive, affective, and psychomotor. These three aspects are dynamic and continuously shaped by students' active engagement in developing their abilities. To achieve higher levels of development, learning must be carried out consistently through structured processes (Disma et al., 2023). The results of students' activities related to these three aspects are compiled into semester learning reports, presented in the form of scores and descriptive feedback, and delivered to parents or guardians.

CONCLUSION

Based on the findings of the study conducted at RA Yaspi Muneng 2, Pakis Subdistrict, Magelang Regency, it can be concluded that an imbalanced teacher student ratio where one teacher is responsible for two classes simultaneously has a significant impact on the effectiveness of learning and individual attention to students. Teachers face a dual workload as educators, school administrators, and administrative staff, which ultimately reduces the optimization of student interaction and learning guidance. Nonetheless, teachers strive to overcome these limitations through strategies such as contextual, environment-based learning, daily student progress recording, and separating activities by age. However, constraints related to classroom space, time, and staffing remain obstacles to achieving optimal learning outcomes. Therefore, it is necessary to increase the number of teachers and improve facilities to better support the quality of early childhood education at the institution

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