



Readiness of Inclusive Elementary Schools for the Implementation of Adaptive Physical Education Learning

Reynna Oktaviane*, Gita Febria Friskawati, Diky Hadyansah

STKIP Pasundan, Indonesia

*Correspondence: E-mail: reynnaoktaviane1015@gmail.com

ABSTRACT

This study aimed to analyze the readiness of inclusive elementary schools for the implementation of adaptive physical education learning. This study was conducted in an elementary school and employed a qualitative descriptive method with interviews and documentations for collecting data. Participants of this study consisted of the principal and physical education teachers. Data were analyzed using content analysis techniques to obtain an in-depth picture of the school readiness. The results of the study indicated that the school had a basic understanding of the concept of inclusive education and demonstrated an open attitude towards the implementation of learning for students with special needs. Physical education teachers had also attempted to adapt learning methods according to student characteristics. However, the school readiness was still not optimal, especially in the aspects of teacher competency that still required further training, limited facilities and supporting infrastructure, and the suboptimal learning planning such as the preparation of Rencana Pembelajaran Individual (RPI) as the process of preparing individual learning plans for children with special needs. In addition, learning evaluations still tended to be the same as for regular students. Thus, the readiness of inclusive schools in implementing adaptive physical education learning is in the sufficient category, but still requires improvements in the aspects of teacher competency, facilities, and learning planning and evaluation so that the implementation of inclusive education can be more optimal and meet the needs of students with special needs.

ARTICLE INFO

Article History:

Submitted/Received April 2026

First Revised April 2026

Accepted May 2026

Publication Date May 2026

Keyword:

Adaptive Physical Education, Inclusive Education, School Readiness, Special Needs Children

INTRODUCTION

Inclusive education is a form of educational service provided to children with special needs. Currently, inclusive programs are implemented in several public schools in Indonesia, but in practice, imbalances still occur (Maghfiroh et al., 2022). Inclusive education means that schools are obliged to support all children, regardless of physical condition, intelligence, emotions, language skills, social abilities, or other conditions (Maghfiroh et al., 2022). The implementation of inclusive education emphasizes that all students are accepted without discriminations, thus creating a form of educational equality (Harefa et al., 2023). To expand access to education for children with special needs who cannot attend special schools (SLB), the Ministry of Education and Culture developed the Inclusive School program as a more open educational alternative. Inclusive Schools are regular schools (non-SLB) that provide educational services for students with special needs. Through this scheme, children with special needs learn alongside other students in a single classroom environment, with the support of special teachers throughout the learning process (Fridayati et al., 2022).

Currently, around 32,000 regular schools in various regions have transformed into inclusive education providers (Fridayati et al., 2022). Inclusive education aims to ensure that children with special needs can be educated alongside other normal children. The goal is to eliminate the differences between children with special needs and normal children, so that children with special needs can maximize their potential (Barsihanor & Anindia Rosyida, 2019). Children with special needs (ABK) are children with physical, mental, behavioral, or sensory disabilities who require special or extraordinary education to develop their full potential.

The term "children with special needs" or "exceptional children" refers to children who require special educational services due to disabilities (Putri & Indarto, 2024). Children with special needs have the same opportunities as other normal children in terms of education and teaching (Nugrohowati & Raharjo, 2023). According to the Central Statistics Agency (BPS), the 2022 disability rate for children aged 5-19 years was 3.3%. Meanwhile, the age group in that year (2021) was 66.6 million people, thus the number of children aged 5-19 years with disabilities was around 2,197,833. The data only show people with disabilities, not children with special needs. This means that children with special needs are not only those with disabilities, but more than that, children with needs have classifications and also differences.

Research results of Arifin et al. (2023) show that many elementary schools in Indonesia have accepted children with special needs, but still do not have the readiness of support systems such as special assistant teachers (GPK), adaptive infrastructure, and differentiated curriculum. Indonesia has a strong regulatory framework that supports inclusive education, including the Law No. 20 of 2003 concerning the National Education System, Article 5 Paragraph 2, which states that citizens with physical, emotional, mental, intellectual, and/or social disabilities have the right to receive special education. Meanwhile, Minister of National Education Regulation No. 70 of 2009 concerning Inclusive Education serves as a reference for the implementation of inclusive schools. PP No. 13 of 2020 concerning Appropriate Accommodations for Students with Disabilities affirms the right of students with disabilities to access adaptive education. In Indonesia, inclusive education has begun to be implemented as a part of efforts to fulfill the right to education for all children (Ibnu et al., 2024).

Before implementing inclusive education, the main steps that must be in place are the readiness of human resources, adequate facilities and infrastructure, and consistent policy support as the main factors in the implementation of inclusive education. In addition, teacher readiness is a key factor in the successful implementation of inclusive education, which includes teaching skills, understanding of the needs of children with special needs, inclusive attitudes, and adequate supporting facilities. Thus, with the teacher readiness and school readiness, inclusive education can be implemented more effectively and provide equal learning opportunities for all students.

The implementation of inclusive education in Indonesia is supported by various government policies that guarantee the right of every citizen to receive equal education, such as Law Number 20 of 2003 concerning the National Education System and Regulation of the Minister of National Education Number 70 of 2009 concerning Inclusive Education (Fitriatun, 2022). These policies demonstrate the government commitment to providing equal educational opportunities for all children, including children with special needs. However, in its implementation, various challenges remain, such as school readiness, the availability of competent educators, and the availability of facilities and infrastructure that support inclusive learning.

In practice, inclusive schools and regular schools have quite clear differences. Inclusive schools are designed to accept and serve students with special needs through learning adjustments (Kartikawati et al., 2024). Meanwhile, regular schools essentially provide learning for students without special needs. However, in reality, some regular schools also implement inclusive education due to the presence of students with special needs who do not attend Special Needs Schools (SLB), even though SLB has been specifically designed to provide educational services that are appropriate to the needs and characteristics of these students (Maghfiroh et al., 2024). Another reason why inclusive education in Indonesia is still low is because many children who need special treatment want to attend schools close to their homes. However, not all-inclusive schools can accept them due to the lack of teachers to teach children with special needs (Nopiyanto & Pujianto, 2022). In addition, facilities and infrastructure are also factors that influence the low level of inclusive education in Indonesia (Maghfiroh et al., 2022).

Inclusive education cannot run well if existing facilities are still limited and the number of special assistant teachers in some areas is still insufficient (Aminulloh et al., 2024). The importance of teacher competencies is regulated in the Regulation of the Minister of National Education of the Republic of Indonesia Number 16 of 2007 concerning academic standards and teacher competencies in Article 1, which states that every teacher is required to meet the academic qualification standards and teacher competencies that apply nationally. This is clearly explained in the regulation of the Minister of National Education that there are four main competencies that every teacher must possess as pillars of learning. These four competencies include pedagogical competency, personality competency, professional competency, and social competency (Regulation of the Minister of National Education of the Republic of Indonesia Number 16 of 2007) (Wulandari & Hendriani, 2021).

Factors influencing teacher attitudes toward inclusive education include teacher perceptions of the types of barriers faced by students, gender, age, teaching experience, grade level taught, previous training received, teacher own beliefs, and socio-political views and the surrounding educational environment (Fitriatun, 2022). In physical education lessons in public elementary schools, physical education teachers do not involve students with special needs in sporting activities conducted for students who do not have special needs (Fitriatun, 2022). To create a lesson plan (RPP), schools are administratively required to prepare an RPP

before starting the lesson. However, teachers are not required to create an RPI (individual learning plan). Teachers generally adjust learning according to the existing conditions and situations of students (Fitriatun, 2022). One of the components examined in this study relates to inclusive education in adaptive physical education.

Adaptive physical education is an important learning method that supports the growth and development of students with special needs through physical activities tailored to their abilities (Gandasari, 2023). The implementation of adaptive physical education is also in line with the concept of inclusive education, which provides equal learning opportunities for all children regardless of their conditions or backgrounds (Asdaningsih & Erviana (2022). Through inclusive education, students with special needs can participate in physical education lessons with other students with various adjustments, such as in the curriculum, learning methods, facilities, and assessment systems, so that the learning needs of each student can be optimally met (Asdaningsih & Erviana, 2022; Arista et al., 2022).

Adaptive physical education is an educational process through movement activities that aims to support student physical and psychological growth and development (Haris et al., 2021). This activity is designed to optimize physical potential, abilities, and skills by adapting to the child abilities and limitations, including intelligence, physical fitness, social, cultural, emotional, and aesthetical aspects so that the educational goal of developing a holistic personality can be achieved. Basically, the type of exercise given to children with disabilities is no different from other children, but the strategies, methods, and learning models are modified and adapted to the needs, abilities, and level of disability of the students, so it is known as adaptive physical education (Fitriatun, 2022). Adaptive physical education is a physical education learning process that is adapted and modified to be easily accepted by children with special needs (Nopiyanto & Pujiyanto, 2022). The goal of adaptive physical education is to stimulate the overall development of children, including a positive self-concept. However, in its implementation in inclusive schools, various obstacles still arise. According to the National Commission on Disabilities, the number of inclusive schools in Indonesia has reached more than 40,164 inclusive schools, but only 14.8% have Special Guidance Teachers. Many state schools have implemented inclusive programs but their implementation is not yet optimally ready.

The lack of special education teachers with special education backgrounds leads some schools to appoint teachers who are not graduates of special education programs as assistant teachers. This situation results in some teachers not fully understanding how to handle the emotional and cognitive aspects of children with special needs when they experience learning difficulties (Maghfiroh et al., 2022). Although inclusive education has been implemented in many elementary schools in Indonesia, its implementation in adaptive physical education learning still faces various challenges. Essentially, adaptive physical education encompasses all instructional materials modified to meet the diverse needs of students, particularly those with developmental disabilities or physical limitations. These diverse needs require physical education to act as a mean of providing appropriate learning support. Thus, adaptive physical education serves as a model that facilitates the diversity of student abilities.

Previous research of Fridayati et al. (2022) has focused more on inclusive education policies and strategies in general. Meanwhile, research specifically examining school readiness in implementing adaptive physical education is still limited, especially regarding the competence of physical education teachers, the availability of adaptive sports facilities and infrastructure, and the development of individual learning plans that are appropriate to the needs of students with special needs. Furthermore, there is still a gap between policies that require equal education services and conditions in the field, where students with special

needs are often not fully involved in physical education activities. There has been no research on the readiness of inclusive schools in implementing adaptive physical education learning in elementary schools. For this reason, this study is important to provide an insight into the implementation of adaptive physical education in inclusive schools to further improve its implementation. Therefore, this study aimed to examine the readiness of inclusive schools in implementing adaptive physical education learning.

METHODS

This study employed a qualitative descriptive design with a case study approach, aiming to gain an in-depth understanding of inclusive school readiness to implement adaptive physical education learning. A qualitative approach was chosen because it allows for the exploration of phenomena naturally grounded in field conditions. Data sources in this study consisted of primary and secondary data. Primary data were obtained directly from participants through interviews with three participants: one principal and two physical education teachers. Secondary data were obtained from supporting documents in the form of documentation during the research at school.

Participants

The population of this study was the principal and two physical education teachers involved in the implementation of inclusive education at an Elementary School. The sample was determined using a purposive sampling technique, by selecting informants who were considered to have the best understanding of the research problem. The sample consisted of the principal and physical education teachers directly involved in adaptive physical education learning. The Elementary School, which was designated as an inclusive school since 2006 until now, still accepts children with special needs.

Sampling Procedures

The participants in this study consisted of three individuals from an elementary school implementing inclusive education, including one principal and two physical education teachers. All participants were directly involved in the planning and implementation of adaptive physical education learning for students with special needs. The principal was responsible for managing school policies and overseeing the implementation of inclusive education, while the two physical education teachers were responsible for planning and delivering adaptive physical education lessons. Participants were selected because they possessed relevant knowledge and practical experience related to inclusive education and adaptive physical education in the school.

Materials and Apparatus

Data collection included structured interviews and documentations. One example of an interview question regarding aspects of understanding inclusion is: "What do you understand by inclusive education?". Interviews were used to gather in-depth information regarding the understanding, experiences, and preparedness of teachers and school officials, while documentation was used to corroborate the interview data. The primary instrument in this study was the researcher herself (the human instrument), supported by an interview guide to facilitate more focused and systematic data collection.

Procedures

This study employed a qualitative descriptive design with a case study approach, aiming to gain an in-depth understanding of inclusive school readiness to implement adaptive physical education learning. A qualitative approach was chosen because it allows for the exploration of phenomena naturally grounded in field conditions. Data sources in this study consisted of primary and secondary data. Primary data were obtained directly from participants through interviews with three participants: one principal and two physical education teachers. Secondary data were obtained from supporting documents in the form of documentation during the research at school.

According to Cohen et al. (2018, p. 289), qualitative research focuses on providing in-depth descriptions of individual behavior in its natural context. This approach utilizes not only observational data but also considers meanings, participant interpretations, and latent factors that are not directly visible. The findings are contextual and their generalizability is limited to specific situations. This research was conducted in real-life situations with the researcher involvement over a relatively long period of time to gain a comprehensive understanding. Data collection was carried out systematically, while data analysis was conducted inductively, allowing theory to develop based on empirical data. In this research, the researcher acted as the primary instrument.

Data Analysis

The data analysis in this study used content analysis techniques. The obtained data were selected and focused on aspects relevant to the research objectives. The data were then presented in descriptive narrative form for ease of understanding. Conclusions were drawn based on these findings. To maintain data validity, the researcher also considered credibility and confirmability through systematic documentation and data analysis (Cohen et al., 2018, p. 676). All names in this study are pseudonyms.

RESULTS

Participant Understanding of Adaptive Physical Education

Based on the results of research through interviews and documentation, an overview of the readiness of inclusive schools in implementing adaptive physical education learning was obtained, as assessed by several indicators. In terms of understanding inclusive education, the results of the study showed that respondents had good understanding of the concept of inclusive education as an education system that provides equal opportunities for all students, including children with special needs, to learn together in a school environment without discriminations. Respondents also indicated that the school had implemented an open attitude by accepting all students based on the principle of equality without differentiating student backgrounds or conditions. In addition, efforts to prevent discrimination were carried out by instilling an attitude of mutual respect among students and providing services tailored to the needs of each student. Respondents also understood that children with special needs have the same rights to participate in the entire learning process, including in physical education subjects, without any treatment that limits or excludes them.

School Policy and Support

In terms of school policy and support, the research results indicate that school management plays an active role in supporting the implementation of inclusive education through policies that uphold the principle of equality for all students. However, in its implementation, facilities were still limited thus they were not fully able to meet the needs of

all students, especially children with special needs. Some respondents also understood the importance of adjusting learning methods and strategies according to the characteristics and learning abilities of diverse students, although some teachers still had not implemented these adjustments optimally. In addition, the school actively coordinated with supervisors in the process of identifying and monitoring the development of children with special needs to ensure the appropriateness of assessment and monitoring of student development objectively. As a form of follow-up, the school also compiled and reported assessment results from the beginning of the school year to document the conditions and needs of students.

In terms of learning planning, research results indicate that the curriculum for the 2025/2026 academic year did not specifically accommodate students with physical disabilities or Down Syndrome, because there was no student with these conditions at the school. The learning plan used was still general and there were no specific lesson plans for adaptive physical education. Physical education learning was implemented with the same plan for all students, while adjustments were made flexibly during the learning process according to the conditions and abilities of students.

In addition, the school did not prepare a special individual learning plan due to its status as a public school and the limited number of educators with competency in special education. Nevertheless, teachers continued to strive to provide adaptive services by adjusting the implementation and assessment of learning based on each student abilities. Teachers had attempted to develop learning tools such as lesson plans, but had not yet developed the lesson plan specifically for students with special needs. This indicates that learning plans are still general and do not fully accommodate individual student needs.

Furthermore, in terms of facilities, research results indicated that school facilities were generally standard and did not provide special facilities for children with special needs, especially students with physical disabilities. Fields and sports facilities were shared by all students without any special treatment or provision of facilities. However, from a safety perspective, the available equipment was considered safe enough to use because it was mostly made of plastic and rubber, thus minimizing the risk of injury and still supporting learning for all students. The school was still found to experience limitations in providing facilities and tools to support adaptive physical education learning. In terms of learning evaluation, assessments had been conducted by taking into account student abilities and development, but in practice, these assessments still tended to be the same as for regular students.

Overall, the study results indicate that inclusive schools are quite ready to implement adaptive physical education. This is demonstrated by a basic understanding of inclusive education, school support, and teacher efforts to adapt learning. However, several aspects still need improvement, particularly teacher competence, the availability of facilities and infrastructure, and better planning and evaluation of adaptive learning.

DISCUSSION

Teachers and principals had a basic understanding that inclusive education provides equal opportunities for all students, including children with special needs, to learn together without discrimination. This is in line with the opinion of Asdaningsih & Erviana (2022), emphasizing the importance of equality in learning. However, this understanding remains general and lacks depth, particularly in understanding the characteristics of various types of special needs.

However, this support still needs to be improved in the form of more systematic and targeted policies. Regarding the competence of physical education teachers, teachers had

demonstrated a positive attitude and strived to adapt learning to student needs. However, there were still limitations in professional competence, particularly in understanding the characteristics of children with special needs and optimally implementing adaptive learning strategies. This finding aligns with research by Wulandari and Hendriani (2021) stating that teacher competence in inclusive education still needs to be improved through specialized training.

Meanwhile, research by Fridayati et al. (2022) emphasized the importance of the individual lesson plan in adaptive physical education to ensure the learning process is more focused and tailored to student needs. Throughout the learning process, teachers attempted to modify methods, use simple language, and adapt physical activities to suit student abilities. This demonstrated that learning practices aligned with the principles of adaptive physical education as described by Fitriatun (2022), although the implementation had not been optimal. This condition is one of the obstacles in implementing learning and is in line with research by Nopiyanto and Pujiyanto (2022) stating that limited facilities are major obstacles in adaptive physical education. This indicates that evaluation is not yet fully adaptive, although according to Arista et al. (2022), evaluation in inclusive education must be tailored to the needs and abilities of each student.

These findings reinforce previous research stating that the success of inclusive education is highly dependent on the readiness of various school components. Therefore, continuous efforts are needed to improve the quality of adaptive physical education implementation to optimize it and adapt it to the needs of students with special needs.

Limitations in this study are related to the research implementation process. The researchers recognize that every research activity is inseparable from various obstacles and challenges. One limitation in this study is the limited number of research subjects, which only involved three research participants. In addition, this study also has limitations in terms of time, researcher capabilities, and limitations in mastery of the research material. The research implementation was also limited by time. Therefore, the data collection process and research activities were conducted within a timeframe that could be tailored to the research needs. Despite the relatively limited time available, this research was still conducted in accordance with scientific research procedures and principles.

CONCLUSION

Based on the research results, it concludes that the readiness of the inclusive elementary school to implement adaptive physical education learning was in the sufficient category. The school and teachers had a basic understanding of inclusive education and had demonstrated an open attitude towards accepting students with special needs. Physical education teachers had also attempted to adapt the learning process to suit student abilities through various forms of modification. However, this readiness was not yet fully optimal due to limitations in aspects of teacher competence, the availability of facilities and infrastructure, and learning planning and evaluation that had not been fully tailored to individual student needs. Therefore, continuous improvement efforts are needed so that the implementation of adaptive physical education learning can run more effectively and in accordance with the principles of inclusive education.

AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. The authors confirmed that the paper was free of plagiarism.

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