



Infrastructure Management for Children with Special Needs in Inclusive Schools: A Literature Review

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ABSTRACT: The importance of infrastructure management for children with special needs in inclusive schools is interesting to study more deeply in order to achieve educational goals. There are several articles on infrastructure management in inclusive schools that can be found. The review was conducted to find out how infrastructure management is conducted in inclusive schools. Based on the results of the literature review, it was found that there is a significant relationship between infrastructure management in inclusive schools in order to achieve learning objectives. The management of infrastructure facilities has six important points in its implementation, namely planning needs, procurement of infrastructure facilities, inventory, maintenance, use, and elimination. This is carried out in order to achieve educational goals in inclusive schools.

KEYWORDS: Infrastructure, Inclusive Schools, Management.

INTRODUCTION

Background of this Article

Education is a process of humanizing humans that is adjusted to the needs and times. In addition, education is also a learning process so that students can develop their potential. While students in formal education institutions are not only students who have normal potential, but also students with special needs [1].

Quality education has certain standards so that the implementation of learning does not deviate from the predetermined goals. Education is the main foundation for producing a superior and new generation. In accordance with Law No. 20 of 2003 concerning the national education system which reads National education functions to develop abilities and form the character and civilization of a dignified nation in order to educate the nation's life. Quality education is built on a comfortable learning atmosphere, hence the importance of improving the quality of education. One solution is to improve the education management system in education units, especially the management of infrastructure facilities in inclusive schools in accordance with what is described in the convention organized by the UN Convention on the Rights of Persons with Disabilities (CRPD) in 2006. Inclusive education in Indonesia receives full support from the government as seen from the Education standards that pay attention to the management of facilities and infrastructure in schools. Facilities and infrastructure that are comfortable and friendly to the needs, uniqueness of students are an indication that the implementation of facilities and infrastructure management in the school is good [2].

Infrastructure management is a cooperation mechanism related to all equipment and the use of all educational equipment so that it is more effective and efficient, getting quality education services is the right of every learner without exception so that children with special needs also get maximum service [3].

This is in accordance with the results of research which contains facilities and infrastructure management can be defined as a cooperative process of managing all educational facilities and infrastructure effectively and efficiently. this shows that facilities and infrastructure in the teaching and learning process need to be utilized and managed for the benefit of the learning process at school. This management aims so that in using facilities and infrastructure can run well [4]. National education standards that implement inclusive education must have modifications to the Education indicators so that inclusive program learning can develop properly, one of these indicators is infrastructure facilities. In accordance with the results of research [5] suggests that inclusive education requires several special facilities and infrastructure to facilitate the learning process, especially for children who have special needs. Then the facilities and infrastructure in schools that organize inclusive education must be accessible to all students, especially students who have visual, physical and motor function barriers.



Infrastructure Management for Inclusive Schools

Infrastructure management is managing all the facilities needed by students. The activities of infrastructure management consist of five functions, namely: (1) planning, (2) procurement, (3) inventory (4) maintenance, and (5) removal. Planning is an analytical process in infrastructure management to make the planning process based on systematic procedures not just presumptions [6].

Then procurement which can be interpreted as an activity of procuring and providing all goods related to infrastructure facilities to support teaching and learning activities, then inventory activities, namely recording, coding, and accounting for school infrastructure facilities [7]. Maintenance is an activity of managing and organizing so that infrastructure facilities are in good condition in order to achieve educational goals, and the elimination of infrastructure facilities is the activity of eliminating or eliminating some infrastructure facilities in schools because they no longer have use value [8].

Importance and Gap of Literature Review

The management of infrastructure and facilities for organizing inclusive education will be carried out optimally. So that people can entrust their children with special needs to be sent to inclusive education institutions. So through this literature review journal, researchers will examine more deeply the management of infrastructure facilities in inclusive schools, to add to the development of new theories regarding the management of infrastructure facilities in inclusive schools, because so far other researchers have only focused on research in schools, but there are still very few research in inclusive schools. This is what makes researchers interested in taking this research.

METHODS

The method used to compile this scientific article is the literature review method by reviewing 8 national journals and reviewing several references for the author. Literature review is a study that examines or critically reviews the knowledge, ideas, or findings contained in the body of academic-oriented literature, and formulates its theoretical and methodological contributions to be determined [9].

The review process is drawn from relevant literature using search methods that are transparent, producible, and the data obtained can be analyzed and synthesized. The review process began by using the google scholar search engine to search for articles with the keywords: "Infrastructure Management for Children with Special Needs in Inclusive Schools". The search ranged from 2018 to 2023 and identified a total of 8.850 studies and articles from Asia.

INCLUSION AND EXCLUSION CRITERIA

1. Type

The research design used in this scientific research is a qualitative method.

2. Type of Intervention

The main study in this research is infrastructure management in inclusive schools. Journals that are in accordance with the management of infrastructure facilities in inclusive schools are further reviewed. Then the criteria for journals selected for review are journals with the theme of infrastructure management for children with special needs in inclusive schools. The criteria included in this article are shown in Table1:

Table 1. Inclusion Criteria and Exclusion Criteria

Inclusion Criteria	Exclusion
1. Infrastructure Management	1. School Management
2. Inclusive School	2. School
3. Teacher	3. Dissertation/Thesis

RESULT AND DISCUSSION

1. Results

The following is a review of the work that the research has done. This analysis is carried out as a large about the management of infrastructure facilities in inclusive schools. The literature review that has been conducted by researchers is as follows:



Table 2. Results of Literature Review

No	Title	Author & Year	Country	Method	Sample	Results
1.	Management of Inclusive School Facilities and Infrastructure at Gayungan II/423 Public Elementary School Surabaya	Gayuh & Shelly (2022) [2]	Indonesia	Qualitative research	School principal, infrastructure coordinator, and school committee.	The research findings prove that the planning of inclusive school infrastructure facilities is carried out with management principles and existing laws and regulations, and implementation is in accordance with the capacity of the school.
2.	Infrastructure Management in Inclusive Schools (Case Study at SMAN 14 Bandar Lampung)	Fertika (2022) [10]	Indonesia	Qualitative research (Case Study)	School principal, student coordinator, curriculum coordinator, infrastructure coordinator, public relations coordinator, teachers, guardians, students, and stakeholders	The results of this study show that the planning of infrastructure is done by analyzing needs, procurement of infrastructure comes from the Education Office, maintenance of infrastructure is carried out by schools, and obstacles that occur due to funds.
3.	Management of Educational Facilities and Infrastructure for Children with Special Needs at Star Kid's Jember Special School	Siti Syuaibah (2022) [11]	Indonesia	Qualitative research (Field Research)	Principal, infrastructure coordinator, teachers, and homeroom teachers.	This research shows that the planning of infrastructure facilities must be adjusted to the needs of students, as well as the implementation of infrastructure facilities that must be supervised by teachers.
4.	Management of Learning Facilities and Infrastructure for Children with Special Needs at Semangat Dalam 2 Inclusive Primary School, Batola Regency.	Moch. Reza Gunawan et al (2023) [12]	Indonesia	Qualitative research	GPK (Special Assistance Teacher)	The findings of this study prove that the planning of infrastructure facilities is carried out by special assistant teachers and the organization of infrastructure facilities, the implementation of the use of infrastructure facilities tailored to learning needs, and the supervision of infrastructure management is carried out by special assistant teachers, general teachers, and all school residents.



5	Management of Educational Infrastructure Facilities for Inclusive Schools in Order to Realize the Quality of Learning Outcomes of Children with Special Needs	Hanafi (2019) [13]	Indonesia	Qualitative research	Principal, vice principal, teachers, special assistant teachers, school treasurer, students with disabilities and regular students.	The results of this study indicate that the management of infrastructure facilities is good enough in the aspects of implementation, evaluation, and overcoming obstacles, but the planning is not optimal.
6	Management of Educational Facilities at the School for Children with Special Needs at SDLB YTC Kutablang, Bireuen Regency.	Mustafa et al (2018) [14]	Indonesia	Qualitative research	Principal, vice principal, and teachers.	The findings of this study show that the facilities planning process is well and correctly arranged in accordance with the curriculum, the organization process is arranged in accordance with the learning tools, and the maintenance and supervision process runs well in accordance with the learning objective.
7	Management of Educational Facilities and Infrastructure for Children with Special Needs at YPAC II Special School, Santan Lueng Bnada Aceh Village	Muhammad Oriza (2019) [15]	Indonesia	Qualitative research	Principal, deputy head of infrastructure and facilities, and teachers.	The results showed that the management of educational infrastructure in improving the learning process starts from the process of planning, procurement, distribution, inventory, maintenance, and elimination of infrastructure facilities has been running well but not yet as a whole.
8	Inclusive School Facilities and Infrastructure "The Key to Successful Inclusive Education".	Rita et al (2022) [16]	Indonesia	Qualitative research	Principal, infrastructure coordinator, and teachers.	The researcher found that the keys to successful inclusive education have very important criteria, namely accessibility, availability of resources, and supportive design. Then inclusive education creates an environment that accommodates differences that can be a solution to equality.



2. Discussion

Management of infrastructure facilities in its management is divided into six, namely: (1) planning needs, (2) procurement of infrastructure, (3) inventory, (4) maintenance, (5) use, (6) removal. Then educational facilities and infrastructure can basically be grouped into four groups, namely land, buildings, equipment and school furniture (site, building, equipment, and furniture) [18]. In the results of research [2] discussed about three points in the management of infrastructure facilities, namely planning carried out by management rules and laws and regulations, implementation in its implementation in accordance with the capacity owned, and evaluation is carried out regularly, namely once every four months. This is different from the results of research [10] which discusses more deeply the management of infrastructure facilities, namely planning by analyzing needs, procurement of infrastructure facilities comes from the Education Office, maintenance of infrastructure facilities, obstacles that occur in the management of infrastructure facilities, and factors that support the implementation of inclusive schools. [11] explains that the management of infrastructure facilities that need to be carried out is planning, procurement of infrastructure facilities, inventorying, then maintenance of infrastructure facilities, and elimination of infrastructure facilities. Meanwhile, [12] argues that there are three focuses of infrastructure management problems, namely planning, implementation, and supervision of infrastructure facilities. In contrast to the results of the above research [13] explains that in the management of infrastructure management the aspects of implementation and evaluation are quite good, while in the planning aspect there are still many obstacles that arise. [14] explains that the management of inclusive school infrastructure facilities has four points that must be considered, namely the planning process that is well prepared, the process of organizing utilization, the process of maintaining infrastructure advice, and finally the process of supervising the use of infrastructure facilities. Meanwhile, [15] in his research is more detailed about the points that must exist in infrastructure management starting from planning, procurement, distribution, inventory, maintenance, and elimination of infrastructure facilities. [16] in his research outlines the importance of facilities and infrastructure in supporting the success of students and must comply with the main principles, then equal opportunity, accessibility, and development and security.

CONCLUSION

In general, it can be concluded that the management of infrastructure in inclusive schools has a very important influence in meeting the needs of students with special needs. The implementation of good inclusive school infrastructure management is useful for achieving learning objectives effectively. The important points in the management of infrastructure facilities are (1) planning of infrastructure facilities that must be made in order to meet the needs of students with special needs to help the learning process, (2) procurement of infrastructure facilities can be done in various ways, one of which is buying land, (3) inventory is recorded to determine the number, type, quality and so on, (4) maintenance is an activity that is continuously carried out so that existing infrastructure is in good condition, (5) the use or use of facilities and infrastructure is the responsibility of the principal with the infrastructure coordinator, and (6) deletion if items that have been damaged in order to reduce maintenance and inventory costs must be immediately removed or eliminated. As with other studies, this review has limitations of the authors as well as the scope of the articles reviewed. In this article, the scope of the articles reviewed is only in the country of Indonesia, so it has limitations. The last limitation is that there is no clear and comparable measure in this study, and the study is still very minimal, so it is hoped that other researchers can research further.

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