

# International Journal of Human Sciences Research

## TRAINING FOR PRINCIPALS ON PHYSICAL ACCESSIBILITY IN ELEMENTARY SCHOOLS: A SYSTEMATIC LITERATURE REVIEW

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**Abstract:** Physical accessibility in schools plays a fundamental role in promoting equal educational opportunities for all students, regardless of their abilities or physical conditions. The objective of this study was to analyze, through a systematic review of national literature, articles and dissertations that identify the training of school principals on physical accessibility. This research constituted a qualitative, exploratory and descriptive study, carried out through the process of systematic literature review. With this study it was possible to provide a comprehensive view of the practices, challenges and opportunities related to the training of principals in the context of physical accessibility in schools. It was concluded that there is a need for research related to the theme of training of elementary school principals on the assessment of physical accessibility, since through the research carried out, few studies on the subject were located.

**Keywords:** physical accessibility, elementary education, principal training, systematic review.

## INTRODUCTION

The importance of the school principal is unquestionable and, therefore, it is understood that performing this role requires the development of skills and knowledge acquired, firstly, in their initial training and, secondly, in updating their training, through specializations, specific courses in different areas that involve their work, such as financial resource management, human resource management, school inclusion, among others.

For Libâneo (2013), the school manager needs to have a vision combined with a practice that involves the school in its pedagogical, cultural, administrative and financial aspects.

When thinking about these areas of activity, of practice of the school principal, it is essential to think about training, as it is necessary to involve this principal increasingly

in the commitment to transform their school space with quality.

Regarding the role played by the principal, some authors have highlighted that the principal is considered a central figure and has influence on the entire organizational culture of the school, as he is the driver of the process and his actions have a political dimension, which involves technical, political and pedagogical issues (Souza, 2006; Paro, 2012).

Thus, considering the role of the principal in a democratic management, which is a more current model, he becomes a mediator while at the same time needing to involve and promote collective participation in decisions in the school context.

This way, administration is not limited to the effort spent by individuals in isolation, but to collective effort (Paro, 2012). With this, the author emphasizes that everyone must and needs to participate, and this would be from the planning to the execution of projects and plans, which can be both administrative and pedagogical.

To this end, the principal needs to be prepared and up-to-date with his knowledge to act and direct this management process, and training is therefore essential for this. Schools are constantly changing and only with ongoing training can they intervene in the school environment, implementing public policies, guaranteeing the legal rights of the school and students, and claiming the institution's rights before the competent bodies.

Regarding principal training, the current National Education Plan (PNE) 2014-2024 determines as a strategy, in its goal 19, the development of training courses for principals and school managers (BRASIL, 2014).

Thus, understanding school management as an important factor in defining educational quality, the insufficiency of initial and ongoing training of school principals regarding the specific

knowledge necessary for their performance in the role is insufficient. Thus, it is important to highlight the scarcity of research that aims at the training of school principals.

It is important to note that one of the obstacles to the training of school principals is the diversity of activities to be performed, as there are several dimensions involved in management, which requires multiple knowledge, skills and attitudes (LÜCK, 2009).

It is important to emphasize that the type of training of the principal will influence the (non)existent skills at the head of the school that affect the necessary results. Among these skills is the issue of accessibility in schools, that is, in physical spaces, locations, and routes that people need to take to get to a certain place in the school, that is, to enter through the school gate, to go to the classroom, to move from the classroom to the bathroom, from the classroom to the library, from the classroom to the sports court, from the classroom to the cafeteria. In addition to these routes, it is necessary to identify other important architectural elements that are within the regulations. For example, the size of the doors, the type of flooring, the width of the sidewalk, the hallway to the classroom, the necessary and appropriate bathroom items, ramps, handrails, among others. Thus, accessibility is creating contexts in which people have access to these places, which guarantees the use of furniture, transportation equipment, communication, information, and locomotion (Brazil, 2004; Manzini, 2014; Vasconcelos, 2023).

Data from the 2022 School Census showed that in Brazil, there were 47,382,074 Basic Education students enrolled and that 1,527,794 were in Special Education, with 1,372,985 attending the regular classroom and 154,809 enrolled in exclusive schools, thus occupying 3.2% of enrollments in the country. The 2022 Census also showed that

the Municipal Education Network, with Elementary School I students, occupies 54.3% of Special Education enrollments in relation to other types of Education Networks: State, Federal, and Private. By educational stage, Elementary School I have the highest number of Special Education enrollments at 35.3% (BRASIL, 2023). Based on this, it is possible to see that Elementary School I in the Municipal Network has the highest number of Special Education students. Regarding the fact that part of the school management's role is to manage the entire educational institution, promote democratic management and ensure quality and access to education, it is necessary to know all the standards of educational teaching, as well as the instructions, ordinances and legislation related to this school system, including accessibility conditions. Therefore, school principals need to have knowledge on how to assess physical accessibility conditions in schools, which requires specific training. Thus, "what are the methods, approaches and impacts of principal training on physical accessibility in elementary schools?"

## **GOAL**

The objective of this study is to analyze, through a systematic review of national literature, articles and dissertations that identify the training of school principals on physical accessibility.

## **METHOD**

This research is a qualitative, exploratory and descriptive study, carried out through the process of systematic literature review. This review seeks to investigate in a focused manner a defined question that identifies, selects, evaluates and synthesizes the relevant evidence available (Galvão; Pereira, 2014).

In order to achieve the proposed objective, data collection included the search for articles, theses and dissertations in the Capes database.

Their inclusion is justified by the importance and academic recognition in research in the area of Education.

For this mapping, the following descriptors were used, respectively combined: principal training AND accessibility AND elementary education; principal training AND accessibility; training AND principals; accessibility AND training AND principals; training AND accessibility AND principals; principals AND training AND accessibility; managers AND accessibility AND schools.

As inclusion criteria, studies that addressed the training of elementary school principals and its relationship with physical accessibility were selected, from 2004 (the year of ABNT NBR 9050/2004 legislation) to 2024 (the year the study was published). Systematic literature reviews, essays, book chapters, books and repeated works, international studies that did not specifically address the training of school principals on accessibility, studies focusing exclusively on aspects of accessibility other than physical accessibility, incomplete works and studies that did not highlight elementary education were excluded. According to Bardin (2016), priority was given to analyzing the eligibility of studies identified in the database, in three stages: 1) Pre-analysis: a cursory reading of the titles and abstracts was carried out to select the studies that met the inclusion criteria. 2) Analysis: in this stage, eligible studies were selected, and the selected materials were explored for a more detailed study, and the identified data were subsequently classified and categorized. The categories were established based on reading the studies in full.

3) Processing of results: refers to inference and interpretation, in which an attempt was made to synthesize and separate the information collected.

## RESULTS AND DISCUSSION

A total of 109 studies were found, and 8 articles and 3 dissertations were identified and selected in the initial search. In order to achieve the objective, the material prepared using a spreadsheet with descriptors, title of the work, authors, year of publication and access link was analyzed by two judges and there were disagreements regarding the selection of some studies. The spreadsheet was forwarded to a third judge, who was able to define the selected studies. After the first reading, a total of 98 studies were excluded that were not in accordance with the research or were repeated.

Table 1 shows the distribution of the 11 selected studies, with descriptor, title, author, year and type of study.

The table 2 presents the categories found in the selected studies, which will be presented and discussed below. The criterion used for categorization was semantic. The categories selected by the authors were evaluated by two judges to check the degree of generalization and validation. After the analysis by the judges, Table 2 was prepared.

Categories	Research	Type of research
Assessment of physical accessibility in schools	Viana; Calil(2012)	A
	Magalhães et al (2024)	A
	Evangelo (2014)	A
	Prado e Martins (2023)	A
	Lira (2020)	D
	Calado (2006)	D
	Rodrigues (2021)	A
Cardozo(2021)	D	
Training of school directors	Araújo (2018)	A
	Pocker; Calil e Corrêa(2018)	A
	Santana (2019)	D

Table 2: categories found in the selected studies.

Source: prepared by the author (2024).

Physical accessibility in elementary schools plays an important role in promoting equal educational opportunities for all students, regardless of their abilities or physical conditions. However, implementing effective

Title	Author	Year	Type of research A- article D- Dissertation T- Thesis
Accessibility Assessment of three municipal schools in Criciúma/SC	Viana, Diego Figueiredo.	2012	A
Assessment of Accessibility of Municipal Schools in Itabira/MG	Alice Martins de Magalhães et al	2024	A
Architectural accessibility, physical disability and the right to education: a look at municipal schools in Pinhais	Cardozo, R. D. Scheneider, G	2021	A
The training of school principals: limits and possibilities in the current political context	Araujo, Eduardo Santos	2018	A
Continuing education for School Directors in the Basic Education Network in São José dos Campos- SP	Pocker, Erica Pastorelli; Calil, Ana Maria Gimenes Corrêa	2018	A
Training of school managers in Pernambuco	Rodrigues, Luiz Alberto Ribeiro	2021	A
Assessment of accessibility and architectural mobility in Elementary Schools in Viçosa/MG	Evangelo, Larissa Silva	2014	A
Physical disability and accessibility: evaluation of schools in the interior of Mato Grosso do Sul	Prado, Thaiane de Souza; Martins, Bárbara Amaral	2023	A
Architectural accessibility in the school environment: case study of the Municipal schools of Gravatá- PE covered by the Direct Money in School Program - PDDE- Accessible School	Lira, Jessica Fabíola Gonçalves	2020	D
Accessibility in the school environment: reflections based on the study of two municipal schools in Natal/RN	Calado, Giordana Chaves	2006	D
Accessibility in schools: a look at the application of Accessible School Program Resources in Aracruz / ES	Santana, Renata Corti	2019	D

Table 1: studies selected for research in the Capes database.

Source: own elaboration (2024).

accessibility measures can be challenging for school principals and requires investment of resources and coordinated efforts, including ongoing training.

Through eligible studies in this research, it was possible to determine the need for expanded research on the topic in question, since the search produced revealed a lack of scientific evidence.

The selected studies underwent careful analysis and were categorized. It is clear that there is a need for training school principals on how to assess physical accessibility and subsequently adapt schools according to needs and conditions.

Data collection included searching for studies in the Capes database. After the analysis, no research was found that identified the training of elementary school principals in physical accessibility.

Analyzing category 1 (assessment of physical accessibility in schools), Calado (2006) employed a multi-method approach in her study, using a technical inspection based on NBR 9050/2004, maintaining contact with people with physical disabilities or reduced mobility, accompanied tours and interviews with managers. Initially, 13 schools that had already undergone intervention were selected, but only two had students with disabilities or reduced mobility, who later participated in the study. According to the author, the study concluded that the quality of the works did not meet the appropriate accessibility standard due to the lack of knowledge of both school principals and those responsible for the works. The lack of knowledge of those responsible for the works causes them to carry out palliative interventions that do not meet the standard required by the regulation.

The study by Viana and Calil (2012) aimed to evaluate the physical accessibility of three elementary schools, through a checklist based on the parameters of NBR 9050/2004, using accompanied tours and visual mapping.

The study concluded that the difficulty in assessing accessibility and carrying out appropriate reforms is due to the fact that managers did not receive training, as did the employees in the City Hall's construction sector, as they had difficulty in understanding accessibility regulations. In the study by Evangelo (2014), a post-occupation assessment approach was used with on-site observation, questionnaires with students, and interviews with principals and teachers in schools that only included students with physical disabilities or reduced mobility. The study showed that there were few students with disabilities and reduced mobility in the schools and that none of them were accessible. Principals, teachers, and other employees evaluated the schools negatively, with access and the dimensions of the spaces, as well as the lack of professional training, being the predominant factor for not implementing School Inclusion. Rodrigues (2021) conducted a study in three elementary schools, interviewing principals. The objective was to find out whether the space built and managed by the principals was a space of inclusion or exclusion, according to its architectural characteristics. Several difficulties were discovered regarding the promotion of architectural accessibility for students with physical disabilities or reduced mobility.

Cardozo (2021) conducted a study with the aim of analyzing architectural accessibility in municipal schools in Pinhais, in the state of Paraná, from the perspective of the right to quality education and existing regulations. Four schools were investigated, through an observation script consisting of 122 items and an interview with the principals. It was

clear that, even with adaptations made, architectural accessibility was identified as a form of selection for access and permanence in schools for a specific audience, showing the lack of concepts of Universal Design, the legislation itself and the standards, which indicate parameters for building and adapting environments and furniture, making them accessible. Principals are not prepared to carry out the study of adaptations in schools. And when it becomes necessary, that is, when this student appears, the time is long, often the family gives up on the school or education for the child.

In the study by Lira (2023), the physical accessibility of seven Public Elementary Schools in Piumhi / MG was evaluated. The assessment was carried out using a checklist containing specific criteria to assess the accessibility and mobility of schools and using a questionnaire proposed by Santana (2017). The author stated that they did not use the Audi and Manzini (2006) protocol, as it was not feasible at the time given the reality of the schools. The questionnaire used was adapted with the addition of items such as the cafeteria and library. This research did not find any schools with 100% accessibility, as there are always some items that do not comply with NBR9050/2004.

The author concluded in her search in the database that in 2019, 61.13% of people with physical disabilities or reduced mobility did not complete Elementary School due to lack of accessibility in schools. The reason, according to the author, is the result of the various architectural barriers that still exist in schools. She added that it is necessary to assess the need for accessibility reforms, with appropriate budget spreadsheets to be sent to the competent sectors and authorities, which requires training on the subject. Analyzing the study by Prado and Martins (2023), who evaluated seven elementary schools using

the “Protocol for Assessing Accessibility in Elementary Schools” by Audi and Manzini (2006), using as a data collection instrument, the authors concluded that the schools are poorly adapted to receive students with physical disabilities, since architectural barriers were found capable of preventing or hindering access to all school environments.

Magalhães et al (2024) pointed out a worrying fact in their study, in which they evaluated the physical accessibility of 16 schools, totaling 258 children with some disability or reduced mobility. The result showed that the schools have less than 60% accessibility conditions. The protocol used was from Audi and Manzini (2006). The low accessibility index in these schools is worrying, since even some schools that obtained a higher score still do not meet the accessibility standard proposed by NBR 9050/2004. The authors added that after a search in a database, they concluded that even after some schools had already been evaluated in 2009 and were considered inaccessible, students still needed constant help from colleagues and staff to get around during the research period. Analyzing category 2 (training of school principals), three studies were selected that showed the importance of training principals. The study by Araújo (2018) discussed the training of principals of basic education schools as a fundamental factor in achieving improvements in the quality of public education.

The question was why to train principals. Based on the issues highlighted in the research, it was clear how important the work is to address the difficulties faced by school principals in the absence of more engaged public policies in education.

Pocker; Calil and Corrêa (2018) conducted a study with 10 managers on the ongoing training of principals in the education network in São José dos Campos-SP. The objective was

to collect opinions on different topics and mainly on the urgency of ongoing training for school principals, using focus groups to collect data. The managers who participated in the research had worked in the role for between 5 and 19 years. The study concluded that there is a gap in the training of school principals, that there are not many training options from the Department of Education and that the demand for work is high. What is striking in this study is that none of the managers showed interest in seeking training outside of their working hours, in a proactive manner. Santana (2019) conducted a study on the management of resources from the Accessible School Program (PEA) in municipal schools in Aracruz, which were included in the program from 2011 to 2017.

The study included 15 elementary school administrators who participated in the study through interviews. The study showed that it is possible to infer that the Accessible School Program is making progress towards building an accessible and inclusive school for all. However, the resources allocated are insufficient to carry out what is necessary. The administrators suggested that a survey of the school's real needs be carried out to make the program more efficient, since there is an inconsistency between the resources allocated, the program's purposes, and the school's demands. Large financial investments are needed, as well as difficulties in promoting accessibility for special education students within the standards established by ABNT 9050/2015. Greater engagement between the different administrative spheres of education and knowledge on the subject are needed to carry out a survey of priorities and implement the program within the required regulations.

## CONCLUSION

This study concluded that in order to ensure the inclusion of students with physical disabilities or reduced mobility, as well as the promotion of an accessible school environment for all, school administrators must promote an inclusive space. The financial resources received from the Direct School Money Program (PDDE/Accessible School) are not sufficient, and the way to manage such resources requires an understanding of the topic of inclusion and accessibility, specific knowledge of physical accessibility, requiring ongoing training for both administrators and

employees who carry out the works, to learn how to evaluate, which protocol to use for this evaluation and prioritize adjustments. It is worth highlighting the need for research on the topic of training elementary school principals on physical accessibility, since through the searches few studies on the topic were found. Training principals on how to evaluate physical accessibility in elementary schools has a great impact, since this study showed both the lack of training of administrators, lack of knowledge about evaluation protocols, and the difficulty in making the necessary adjustments in practice in compliance with accessibility regulations.

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