



## Inclusion of Students With Disabilities in Physical Education: The Crossroads of Systemic Coherence

### Authors' contribution:

- A) conception and design of the study
- B) acquisition of data
- C) analysis and interpretation of data
- D) manuscript preparation
- E) obtaining funding

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### Abstract

This study aims to identify and comprehend the factors and pedagogical practices that facilitate or hinder the inclusion of students with disabilities in physical education classes at school, considering micro and macrosystemic levels. The methodology employed in this study was a case study approach, using an interpretative phenomenological analysis to construct thematic categories of analysis. These categories include: 1. Flexibility of the physical education teacher's practices and strategies, 2. Teacher training, 3. Inclusive spaces and infrastructure, 4. Involvement of the educational community. The various data collection tools (interviews, focus groups and observations) allowed to portray and illuminate each of the topics of analysis and the contextual differences of the three schools analyzed. The findings demonstrate that inclusive strategies must be coherent and systemic in accordance with the contexts. However, it is possible to highlight inclusive strategies that reveal the importance of teacher commitment, the interconnected work between teachers and school management, the use of expeditious communication channels within the educational community and with governmental levels, the use of implements related to the practice of physical education and the use of the teacher's voice as the primary agent for the implementation of inclusive learning strategies.

**Keywords:** inclusion, physical education, infrastructure, curricular adjustments, disability.

### Introduction

The first step in this literature review is to define educational inclusion. It refers to equity in the educational experience and equal opportunities in access and participation in the teaching-learning process for all students.

The 2030 Agenda for Sustainable Development aims to bring about a social transformation that makes the world more inclusive (United Nations, 2020). In turn, international policy stresses the importance of inclusion in every aspect of human existence. Specific guidelines are provided to all nations to attain educational inclusion

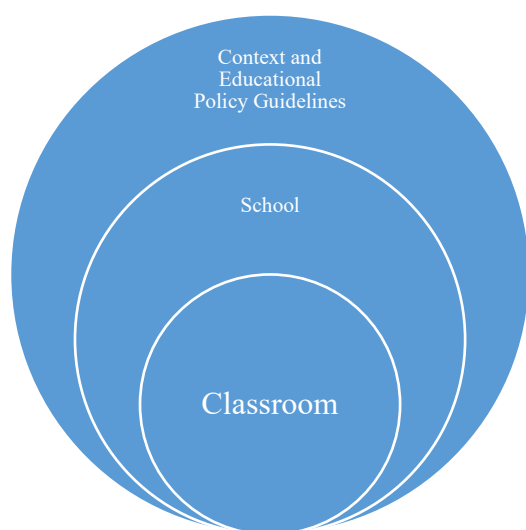
as the initial stage towards promoting human rights and inclusion (United Nations, 2021; UNESCO, 2021).

To move towards more inclusive education, it is essential that policy guidelines can translate into everyday school and pedagogical practices that provide students with opportunities for participation and development. Indeed, these practices are framed within contexts in which curricular regulations, guidelines, and infrastructure can impact the ability to facilitate inclusion fluently. This study examines the inclusion of students with disabilities in physical education classes in Chilean elementary schools. The discourses and practices of school administrators,

inclusion support staff, and physical education teachers are analyzed through three case studies of schools.

The responsibility for achieving inclusion falls on the educational community, who must create environments conducive to learning, considering curricular adjustments and a conducive environment that facilitates participation and recognition of diversity (Fierro y Treviño, 2023). On the other hand, educational integration consists of segregating, within the same space, students with special educational needs and/or disabilities, who carry out exclusive or different activities from their classmates, so the educational experience differs substantially from the rest of the student body, despite sharing the same physical space. It is worth indicating that educational policy in Chile involves tensions, because although some policy documents are structured around the logic of integration – such as Decree 83 and the Educational Integration Program (PIE) – they have guidelines for schools aligned to the notion of educational inclusion, so the coherence between national policy and practical application in educational centers differs substantially according to contextual possibilities (Victoriano and Treviño, 2022).

The educational inclusion of students with disabilities is subject to the influence of various structural factors of educational policy, the attitudes and dispositions of the school community, pedagogical management and teaching practices. This conceptual configuration is concentric in nature, where the external environments influence the internal ones and mold inclusion practices in the school (Bronfenbrenner & Morris, 1998), as illustrated in Figure 1.



**Figure 1:** Concentric map of factors for educational inclusion

With regard to the context, at least four elements are identified that would influence the possibility of promoting inclusive physical education. The first element

is the flexibility of the curriculum: the available literature points towards a coherent transition of the current curricular plans and programs regarding the rigidity of their learning objectives. This transition should aim to articulate the minimum learning outcomes while keeping in mind the reality of the educational center (Daum & Ervin-Kassab, 2023).

The second element refers to teaching capabilities, specifically with regard to initial and continuous teacher training. According to the literature, initial training programs should be reoriented and harmonized according to the needs of inclusive education (Gentile et al., 2023; Grimminger & Seyda, 2022) to achieve the development of teaching competencies necessary for educational inclusion. Some authors assert that teacher training related to inclusion ought to be provided within the contextual environment of the educational institution (Raudeliunaite & Steponeniene, 2020) to account for the characteristics of the school, the students, and the center's own requirements extensively.

In third place, the infrastructure of the educational institution plays a crucial role in achieving inclusion (Singh & Zhang, 2022), particularly in physical education. Universal accessibility (Sirem & Catal, 2023) is deemed a fundamental right for all educational community members, and the literature highlights access to essential services within the school as elementary justice (Grenier et al., 2022).

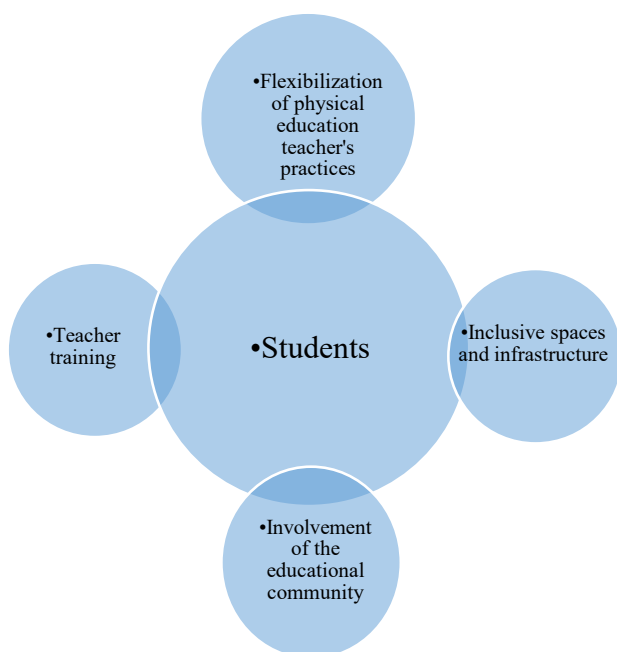
Finally, the arrival to the educational community of the guidelines and recommendations that represent the frontier of knowledge at an international level are key to promoting inclusion (Bjorke & Casey, 2022). The entire educational community needs to be well-informed about the main international trends regarding educational inclusion to sensitize all critical actors in the educational center effectively (Sheenko & Ryzhkova, 2021).

Although raising awareness in the educational community is a necessary step, on its own it is insufficient, which is why pedagogical management plays a central role in materializing educational inclusion in school and classroom processes. In this sense, one of the strategies made visible in the literature is the inclusion in all processes of representatives of various levels (stakeholders, administrative managers, teachers, managers, students) in the joint creation of the definition and protocol procedures of the school (Holland et al., 2023), democratizing the educational process and transition towards an inclusive community.

Ongoing transformations in the Chilean educational system condition the nature of pedagogical management existing in the country's educational institutions. Over the last decades, the administrative tasks of schools have revolved primarily around receiving and responding to directives from the central ministerial level. This approach

focused on the macro level of the school system according to the pressures exerted by governmental sector organizations. As a consequence, institutions directed their efforts towards achieving goals and securing economic resources for the operation of regular schools (Pereira et al., 2022; Rebollo & Losada, 2023).

As a summary, it can be stated that international research recommendations identify four groups of factors to promote inclusion in physical education. These factors include flexibility in the school curriculum (Daum & Ervin-Kassab, 2023; Estevez et al., 2022), the promotion of inclusive spaces and infrastructure (Fernandez & Echeita, 2023; Karisa, 2023), teacher training (Castiblanco & Andrea, 2023; Grimminger & Seyda, 2022; Herberos & Batista, 2022), as well as raising awareness among all members of the educational community (Dauenhauer & Stoecker, 2022; Mavropalias et al., 2023), focusing on the students. These factors are grouped in Figure 2, where their contribution to inclusion in physical education is shown.



**Figure 2:** Student-centered factors

The article places particular emphasis on the level of coherence among curricular and policy guidelines, school management discourses and practices, and the discourses and practices of physical education teachers.

## Methodology

The present research investigates the inclusion of students with disabilities in physical education classes, using three case studies and analyzing the systemic coherence

between policy directors, school management and teaching practices.

The research was conducted through the technique of multiple or collective case study (Yin, 2003; Stake, 2005), characterized by the description and interpretation of each case, to provide a detailed account of the context of the study and its interrelationships. The object of study corresponds to three educational institutions in the city of Santiago, which, on the one hand, have implemented the School Integration Program since 2016, exhibiting high performance and positive results, according to the Ministry of Education, and on the other hand, represent the different economic dependencies of the Chilean educational system. As such, the sample was intentionally selected and defined considering the relevance of the cases with the research objectives.

As stated above, the sample was purposive and defined considering the relevance of the cases to the research objectives. Three techniques were used to collect information across all schools: firstly, focus groups with professionals in charge of pedagogical management; secondly, semi-structured interviews with physical education teachers; and thirdly, observation of physical education classes. These tools were chosen due to their alignment with the research objectives aimed at comprehending the phenomena from the participants' perspectives (Hernández Sampieri et al., 2014), contextualizing the realities drawn from their own meanings to illuminate the various relationships between the factors required for the proper inclusion of students with disabilities in school physical education classes.

For the execution of the focus group and semi-structured interviews, previously designed guidelines and scripts were used. However, they were flexible enough to allow the participants to expose their points of view, sensations and interpretations of their reality, thus ensuring the authenticity and validity of the instruments and their responses. Similarly, observation guidelines with expert-validated categories were used in which the observer was still given room to describe any aspects that were not covered in the guidelines and were directly relevant to the specific context of each school.

The data analysis was conducted in two phases and was carried out by the authors of the article with two research assistants independently, to avoid bias in the interpretation of the data. The first involved the construction of categories of analysis using the inductive process of the research based on the identification of emerging themes in the narratives and observations. This process resulted in an initial list of thematic analysis that allowed for a detailed organization and identification of patterns or themes from the collected information. This, in turn, helped to infer possible results that favor the interpretation and understanding of the phenomena of the study (Braun

& Clarke, 2006). In the second phase, those categories of analysis were validated through the process of “expert judgment,” which allowed the initial coding to be contrasted with the best category assignment in a consensual manner, using a process that involved the identification, definition and exemplification of each category (Hernández Sampieri et al., 2014). The reliability of the findings is associated with the systematization of the results obtained.

Finally, the resulting categories of analysis were the following: flexibility of the physical education curriculum, infrastructure and availability of resources, teacher training, and involvement of the educational community. These categories represent a qualitative approach with a focus on student learning. The analysis of the obtained results aims to understand and examine the pedagogical practices of physical education teachers in institutions with Educational Inclusion Policies that consider students with disabilities while also considering the pedagogical management of the educational center and the national educational policy frameworks.

## Results

This section presents the results of the research for each of the schools that participated in the investigation. Ten interviews were carried out with physical education teachers (in total – in the three cases), with each interview lasting approximately one hour. In the same way, focus groups were held with stakeholders, school administrative and pedagogical management, in which a total of 15 people participated. These focus groups lasted 90 minutes. In addition, six 90-minute observations of physical education classes were carried out in the respective schools (two observations in each school). In each observed course there were 45 students, and in total 135 students were observed.

To maintain confidentiality, each school is identified with a number and a phrase that seeks to summarize the situation of systemic coherence for the inclusion of students with disabilities in each of the cases studied.

School 1: An inclusive discourse in the educational project with a misaligned management to ensure inclusive practices.

School 1 is a private subsidized institution with a School Integration Program (PIE) located in the eastern part of the Metropolitan Region of Santiago, Chile. The total number of students is 870 and 10% of students have disabilities. This school provides elementary and middle school education and has a vulnerability index of 52%.

The vulnerability index is an indicator that comes close to measuring the risk of dropping out of school, through a socioeconomic evaluation of its students. The higher the vulnerability index, the greater the probability of dropping out of school.

The mission of School 1 acknowledges the inclusion of students as part of its Institutional Educational Project. Inclusion is central to its religious tendency as it aims for students to “...develop their spiritual, cognitive, physical, social, emotional dimension, valuing diversity in an inclusive and evangelizing environment...” (School Director 1). Given the voluntary nature of adhering to a PIE by subsidized schools, the fact that the school has implemented the Integration Program indicates its interest in inclusion. In short, the school project has, among its purposes, to become an inclusive school community.

The administrative management of the educational institution demonstrates knowledge of the issues relevant to inclusion, specifically those related to the management of the PIE, where the headship highlights the work of the professionals hired to carry out the program: “we have professionals dedicated to the PIE, psychologist, special educator and speech therapist, who visit the group according to the needs of each class” (Educational Coordinator 1).

In terms of the subject of physical education, the management team presumes the inclusive nature of the classes: “in physical education, apparently, they have materials and spaces, in fact, the students like physical education because they leave the classroom and can play, it seems that there is a more inclusive environment” (Educational Coordinator 2). With this, it is possible to detect assumptions related to the characteristics of the subject, highlighting its potential but at the same time ignoring the depth of the contents and expected outcomes. The latter is evidenced by the school management’s statement: “in physical education, the contents are easier to approach and they do not have to take any SIMCE so there is not so much pressure, besides the outdoor activities are more inclusive than those that can take place in the classroom” (Educational Coordinator 3).

Physical education teachers, in turn, report “a low level of infrastructure, because of the rain the field is bad and there are few materials left, the children always get excited with the materials and sometimes they get lost or worn out” (Physical Education Teacher 1). This statement, which was pointed out by the director, suggests that the subject of physical education is less relevant and is considered easier than others, which could explain the lack of resources and adequate infrastructure to promote physical education and facilitate inclusion.

Teachers also emphasize the significance of communication and continuous participation of all subject representatives to achieve inclusion and to expose the barriers or facilitating factors that each teacher may present. This is reflected in the physical education teacher’s responses: “no, I do not go to these meetings (of the PIE team), only the head teachers go, and they focus more on mathematics and language” (Physical Education Teacher

2). In addition, the interviews also reveal details related to school coexistence that go beyond the limits of the classroom, “there are many cases of bullying of classmates who have special needs, like they bother each other for being PIE children, sometimes that happens more here, in physical education, because they feel freer, they feel like they are in the playground playing with each other” (Physical Education Teacher 3).

About physical education classes, it is possible to detect that there are established mechanisms within the school for the delivery of quarterly plans that account for curricular modifications focused on inclusion: “we have to deliver the plans quarterly, but in general, they trust the teachers, there are not many modifications” (Educational Coordinator 2). Therefore, the inclusion criteria depend exclusively on the physical education teachers, and the PIE team does not make suggestions or modifications to the teachers’ planning. Thus, a lack of systemic coherence between managers, those in charge of the PIE and teachers is evident, which weakens the possibility of promoting educational inclusion due to lack of alignment between these actors. Consequently, there is a distance between the postulates of the institutional educational project and the concrete actions to promote inclusion, particularly in physical education, as observed below.

During class observation, it was noted that some children form a subgroup apart from the course, where they play freely among themselves, despite the teacher’s instructions. The presence of a professional from the PIE team is not observed, despite assurances from the management team regarding the itinerant presence of some support team members due to the characteristics of the children. Therefore, certain behaviors related to integration could be observed as students with disabilities are in the same area as the rest of their classmates but perform activities completely different from the rest of them, giving way to certain attitudes of indifference towards the secluded group. The segregated and accessory participation of students with disabilities in physical education class suggests that beyond the conceptualization of curricular adaptation the school does not have in its central structure.

In conclusion, in this school there is an Institutional Educational Project that discursively follows international guidelines and literature related to the inclusion of students with disabilities. In addition, it has a PIE, which reflects the institutional desire to be an inclusive space. However, the guidelines of these institutional documents are far from materializing in the inclusion of students with disabilities in physical education classes. The above is observed throughout the inclusion implementation chain. Firstly, educational practices are not inclusive, since adaptations are made for the accessory participation of students with disabilities in physical education class.

Secondly, the activities seem designed so that students with disabilities have a tangential degree of participation, instead of designs that consider the inclusion of students with disabilities as a core part, and that they offer adaptive experiences so that the rest of the students can experience activities in which they must adapt to their peers with disabilities – for example, playing sports for the visually impaired using masks to obstruct vision. Thirdly, there is a disconnection between teaching practices in physical education and the support, accompaniment and feedback of PIE professionals to teachers.

School 2: Team of professionals committed to inclusion vs. insufficient infrastructure

School 2 is a publicly funded institution with a PIE located in the central area of the Metropolitan Region of Santiago, Chile. The total number of students is 690 and 10% of students with disabilities. This school provides elementary education and has a vulnerability index of 76%.

The administrative management team states that, due to its municipal economic dependence, “regarding infrastructure, we have prioritized some basic needs, such as the installation of heating in the classrooms, basic furniture, didactic material and also materials of daily use for teachers, such as markers, blackboards, data projectors, etc.” (Educational Coordinator 4). Due to this, the physical education classes lack adequate space and must, on several occasions, share facilities with the schoolyard, while some other groups are in recess. This example may illustrate the precarious situation that many teachers and students face within the national education system, as resources are continually prioritized and political changes affect decentralized governance. The prioritization of resources and the lack of flexibility to meet the needs expressed by teachers generate situations of misinformation and dissatisfaction, as reported by a member of the management team of this school: “I would like to be heard more by the central level (local service) in our demands, we have little information and they do not know what we live inside the school” (Physical Education Teacher 4).

Based on classroom observations, the infrastructure is comfortable; however, the court is outdoors, so on cold days, attendance to classes and activities is more complex, few materials are observed, and not all children are able to use the materials. Hence, there is consistency between what teachers state and what is experienced in physical education classes.

Regarding curricular flexibility, the management team states that “we know what our colleagues are doing, we review their plans and provide feedback on possible adaptations in the evaluations” (Educational Coordinator 4). This aligns with the viewpoints of the physical education teachers, who assert: “we have the possibility of creating our plans according to the Ministry’s curricular bases, the special educators review them and in some cases suggest

some changes, they know the students with needs very well” (Physical Education Teacher 4). The special educators carry out remarkable work in the school. According to the physical education teachers, “the special educators are a great support, you can see that they have a vocation for what they do and they allow us to carry out the classes in a better way” (Physical Education Teacher 5). This is also evident in the class observations: “it is observed that the educators maintain ties with those students since they call them by their names and there is a climate of trust and affection in the activities they carry out” (Educational Coordinator 5).

The statements cited above highlight the importance of collaboration among school educators. Even though collaborative work is robustly exposed in the context, “it is possible to see the special educators carrying out a subgroup with students (not necessarily with special educational needs) who carry out a parallel activity” (Educational Coordinator 5).

Finally, within class observations, “the tone of voice used by the teachers stands out, which fosters an atmosphere of trust and participation, as well as closeness with all students” (Educational Coordinator 5). It is then possible to point out that, in the physical education class, the use of the voice is essential for delivering instructions and student participation. Its use can positively or negatively impact students because it is an indispensable tool in their educational work; while nuances in the tone of voice, articulation and expressiveness can convey a range of sensations and feelings to the students, loading the pedagogical discourse with intentionality and purpose, this tool can, at the same time, lead to demotivation and monotony. In the context of physical education, it may even cause feelings of recrimination or being reprimanded due to spatiality and the characteristics of the curriculum contents.

The case of this school shows that there is a high level of systemic coherence between school management policy and educational practices and shows the insufficient conditions to move towards the effective inclusion of students with disabilities permanently in classes of physical education. Even this coherence embodies the tensions inherent to policy guidelines that are composed of both elements of integration and inclusion. The availability of resources comes into tension with their ability to carry out inclusive physical education classes. From the point of view of school management, collaborative work is observed between the PIE team and physical education teachers, which includes the accompaniment and advice of special education educators during the classes observed.

School 3: Inclusive planning and discourse, exclusive pedagogical practices

School 3 is a public institution with a PIE located in the southern area of the Metropolitan Region of Santiago,

Chile. The total number of students is 755 and 10% of students with disabilities. This school provides elementary education and has a vulnerability index of 78%.

Inclusion in physical education in this school has represented a challenge due to the material conditions of the school. According to the school’s management team, “the implementation of the PIE has been a challenge for all of us since we did not have (sport) infrastructure or knowledge about special educational needs; I think we are now much more prepared”... (School Director 2), “but now, we have filled the PIE quotas for each course, we do not have more enrollments to offer” (Educational Coordinator 6).

In the same way, parents and guardians are exposed to new situations; according to the testimony of a teacher, “in the parents’ meetings the topic always arises that children with special educational needs interrupt the others...”, “...the ‘normal’ children want to learn, and those with disabilities harm the others” (Physical Education Teacher 6). It should be noted that there are studies that delve into the parents’ and guardians’ attitudes towards students with disabilities that claim that they require greater access to information related to new plans or programs that explain the tendency toward inclusion and how such practice benefits the entire educational community.

In the discourse of the management team, a conceptualization of integration in physical education is seen rather than a design oriented towards inclusion. In this sense, the school director states that “there is curricular flexibility in all subjects of the curriculum, but I believe that physical education is a much more inclusive subject because they are outdoors and have the possibility of sharing with their peers” (Educational Coordinator 7). This statement implies that there are some assumptions in terms of the characteristics attributed to physical education classes. While they could reflect the reality of the classes to a certain extent, they also reveal the limited approach toward the contextual reality of that subject. According to physical education teachers, “we make modifications in the planning, and over time, we have learned strategies that allow access to learning for everyone, and thus do not undermine the learning of students who do want to learn” (Physical Education Teacher 7).

In this school, the lack of support for inclusion from the PIE structures is combined with a degree of resistance on the part of the physical education teachers because they consider inclusion to be an additional burden. On collaboration among teachers, the physical education teacher affirms, “I do not attend the PIE team meetings; I find out what they talk about in the teachers’ meetings or with hallway comments” ... “I would like to be included in some important moments to know what measures are taken by other teachers”. (Physical Education Teacher 8). The statements above allows us to see that, once again,

the subject of physical education does not enjoy the same benefits or relevance that other curriculum subjects have, even though the teacher shows an interest in attending such meetings.

Lastly, teachers reveal some dissatisfaction related to their 'new tasks' due to the inclusion of students with disabilities in regular classrooms: "over the years, the number of children with disabilities has increased, and this has not been reflected in salaries; our salaries are more related to the teaching career and not to the current challenges of the classes" (Physical Education Teacher 9). This statement reveals a national problem related to teachers' salaries and the evaluation they are subject to.

In this school, it is perceived that educational inclusion is far from being part of a culture shared by the entire school community. Thus, parents are exposed to new situations. According to the testimony of one teacher, "in parents' meetings the topic always comes up [that] those children with special educational needs interrupt others, ...'normal' children want to learn and those with [special] needs harm others" (Physical Education Teacher 10).

In summary, there are perceived challenges for educational inclusion in physical education in this school. Although the school establishment has the basic infrastructure, it is limited because activities such as recess and other courses that use the same infrastructure overlap. At the curricular level, activities for physical education are made more flexible, although there is an unsophisticated conception regarding the elements that entail inclusion in physical education beyond sharing an outdoor space, which must include aspects of infrastructure, social and pedagogical inclusion. From the teachers' side, tensions are observed, since there is a willingness to participate and be informed of the inclusion guidelines at school and, at the same time, educational inclusion is considered an additional workload.

## Discussion and Conclusions

The study of the inclusion of students with disabilities in physical education classes in the three schools in the sample reveals variability in the systemic coherence between policy guidelines and research recommendations, the pedagogical management of the establishment, the perspectives of the teachers and the practices during physical education classes.

In all participating schools, the intention to promote the inclusion of students with disabilities is noted through their institutional educational projects and the implementation of the PIE. This intention also appears in the discourses of the management teams; however, differences are observed in the implementation associated with different perspectives of pedagogical management and

collaborative work, as well as the forms of implementation of the classes. All of the above are mediated by a limited infrastructure.

According to the responses of physical education teachers and the observations made during their classes, there are several practices that could be more suitable for promoting inclusion. One of these is universal curricular adaptations (OECD, 2019), which aim to recognize the diversity present in the classroom while also facilitating the use of didactic strategies that support the achievement of learning objectives (Furrer et al., 2020). Also, the lesson plans that must be submitted to the management team of the institutions allow their review by specialized professionals who, in turn, provide feedback and suggestions about the planned activities and evaluations appropriate for each type of special educational need.

In addition, it is possible to retrieve various methodological strategies related to the discipline of physical education from the results, namely, the use of peers with special educational needs to demonstrate exercises or model motor skills, thereby making different types of disabilities visible while validating them through intentional demonstrations by the teacher. This strategy allows legitimized participation in the diversity of possibilities offered by human movement (Lopez et al., 2022; Sheenko & Ryzhkova, 2021).

From the responses of the physical education teachers and the class observations, it is possible to discern certain ambivalent attitudes regarding the discourse and what is observed during their classes. While there is an inclusive narrative in which the characteristics of each student and the appropriate attention towards diversity are acknowledged, and the necessary curricular adaptations to the semester planning are made, during the development of the class, those students with disabilities are often ignored by the teacher and left to assistants, or, in some cases, special educators.

However, within the literature, some authors (Singh & Zhang, 2022) consider the assistance of professional specialists as an opportunity for inclusion, provided that the learning objectives proposed for the entire class are met (Bjorke & Casey, 2022) and that they are not excluded from activities that allow the adequate development of disciplinary skills. During the classroom observations, it was possible to appreciate a deferential treatment towards students with good performance and optimal sports executions, which could encourage segregating behaviors from peers. In their responses to the interviews, physical education teachers allude to the rare participation in meetings of management teams and teams of special education professionals, which restricts their in-depth knowledge about the medical diagnoses of some students. Some authors advocate for the promotion of a cooperative culture among teachers of all subject areas through regular weekly

meetings, informative lunches, and technological communication channels, as well as the inclusion of parents and guardians associations and student centers that can contribute diverse strategies to address the current challenges of inclusive classrooms (Mavropalias et al., 2023).

One of the main factors that may impact the accomplishment of inclusion, according to physical education teachers, is having detailed knowledge of the types of disabilities prevalent at school ages. Specifically, teachers allude to the scarce understanding of intellectual and behavioral disabilities, referring to them as the most complex to understand and those that would require a thorough knowledge of medical diagnosis (Fierro-Saldaña, 2024).

Some authors (Tristani et al., 2022) point out that the teachers' perspective mentioned above is centered on a model that recognizes the deficit by focusing on students' individual characteristics, making them responsible for their own deficiencies and considering them the problem to be solved. Other authors propose a more holistic or ecological approach (Dauenhauer & Stoepker, 2022; Woodcock et al., 2022), which advocates for adapting the context and the educational process to the existing diversities in regular classrooms. Finally, other authors suggest that the interaction between both realities is a conjunction of perspectives and that recognizing the characteristics of the student body as well as the contextual reality of the educational community would facilitate access to learning processes and allow quality education (Mavropalias et al., 2023).

In northern-hemisphere countries, existing policies and regulations establish norms related to the sports facilities required for educational institutions (Karisa, 2023). These regulations mandate the obligatory existence of areas designated for physical education classes, considering them essential spaces within the educational policy (OECD, 2019). While having the minimum conditions to carry out the classes is a minimum standard requirement in school institutions, in the reality of the Chilean educational system, the educational gaps are not only evidenced by academic results but also in the habitability conditions and infrastructure of educational institutions, exposing the substantial differences between public and private schools.

In order to establish the appropriate context for the promotion of inclusion, governmental systems must allow for the gradual transformation of regular schools into spaces sensitive to inclusion, thereby facilitating a joint co-creation process from the particularities of each school that takes into account the characteristics of teachers, staff, students, families and infrastructure (Fierro & Treviño, 2023).

### Limitations

The research carried out is not without limitations. Although this study is not intended to be generalizable,

the sample size may not represent the large number of educational establishments that have integration programs. The country's private schools have their own inclusion projects that are executed based on their contexts and needs and that apparently could reflect inclusive practices of greater scope and impact. This may be because higher-income families prefer private education with the ideal of obtaining a quality education and greater student support. Likewise, it is relevant to contemplate a curricular analysis of the subject of physical education to identify the inclusive perspectives promoted by the national curriculum (Fierro-Saldaña 2024b), and whether there is coherence between the learning objectives and the inclusion of students with disabilities. On the other hand, the research does not address or represent the voice of students with and without disabilities, who in some way could collaborate in the creation of a more comprehensive and systemic model towards the inclusion of their peers.

At a methodological level, it is important to consider that the data collection was carried out in post-pandemic times, which in some way could affect the results obtained due to the contingency and adjustments to which the members of the educational community in general were exposed.

Based on the results evidenced in the analyzed cases, it is possible to establish the existence of systemic disparities between the discourse of the pedagogical management teams and teaching staff and what is observed in educational practices. Despite the intentions of inclusion in subjects such as physical education, the strategies put into place tend to be characteristic of integration methodologies towards special educational needs, which ultimately promote and perpetuate inequalities between students with and without disabilities.

In the same way, the results indicate that collaboration and communication among teachers are fundamental, as is the attendance to meetings with management teams within the school and the development of communication channels with governmental levels, all of which could promote the correct inclusion in subjects such as physical education.

It may be necessary to deepen research in the field to understand the way in which schools and teachers with different perspectives on inclusion develop management and teaching practices during physical education classes. Likewise, it is essential to understand the perspectives of inclusion and integration of educational actors and how they intertwine in the daily planning and implementation of school practices. Finally, it is necessary to understand the priority that physical education occupies in a school system like the Chilean one, which tends to focus on basic language and mathematics skills, and other disciplinary content, rather than on the comprehensive development of children.

### Ethics approval and informed consent

The study followed integrity parameters in scientific research approved by the social science ethics committee of the Pontificia Universidad Católica de Chile.

### Competing interests

No potential conflict of interest was reported by the authors.

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