

DIAGNOSTIC REPORT

TEACHER EDUCATION IN PHYSICAL EDUCATION

BRAZIL AND CHILE

PARTICIPANTS



FUNDING



This diagnostic study aimed to evaluate the quality of initial teacher training in Physical Education in Brazil and Chile, based on the perceptions of students, graduate teachers, and managers working in the field. The research sought to identify strengths, weaknesses, and gaps in the curricula and training experiences, with a view to providing recommendations for improving courses and aligning university education with the demands of professional contexts.

The diagnosis was developed through online questionnaires and focus group interviews.

Despite specific adaptations for each audience and country, all questionnaires share a standardized structure, divided into three dimensions, preceded by the Free and Informed Consent Form (TCLE), which ensured the voluntary nature, confidentiality, and the possibility of interrupting participation at any time.

Dimension 1 - Demographic and Professional Insertion Data: This initial section was dedicated to outlining the socio-professional profile of the respondents, collecting essential information such as age, gender identity, level of education, length of experience, and the professional field(s) in which they are involved.

Dimension 2 - Evaluation of University Education (Likert Scale): This constituted the quantitative core of the research. It presented a series of statements to be evaluated by participants using a four- or five-point Likert scale (ranging from "Strongly Agree" to "Strongly Disagree," including the option "I don't know/don't know how to evaluate/answer"). The statements were designed to assess crucial aspects of the education, such as curricular adequacy, mastery of theoretical and practical knowledge, the approach to cross-cutting themes (inclusion, ethnic-racial and gender issues, sustainability), and overall satisfaction with the education received.

Dimension 3 - Open-Ended Questions (Discursive Responses): This qualitative dimension aimed to deepen data collection by asking participants to discuss, based on their experiences, topics such as: the main essential skills and abilities for Physical Education professionals; the most frequent weaknesses in training; the most/least relevant training experiences; and concrete suggestions for improving undergraduate courses and organizing continuing education programs.

Recognizing the importance of responsible research involving human subjects, the project was submitted to and duly approved by the Research Ethics Committee (CEP) of São Judas Tadeu University, which validated the proposed methodology and ensured compliance with all current ethical standards for conducting the study.

Data collection through online questionnaires involved 161 students, 166 alumni professors, and 67 administrators, totaling 394 participants, distributed as follows:

Brazil:

- 62 students (25 from the Bachelor's degree program and 33 from the Licentiate degree program).
- 106 graduate teachers (39 working in school settings and 67 in non-school settings).
- 38 managers (20 from the education sector and 18 from academies, clubs and health).

Chile:

- 99 students in a unified training program (without distinction between bachelor's and licentiate degrees).
- 60 graduating teachers, mostly working in the education system.
- 29 managers, predominantly school managers (79.3%).

General Profile of Participants

Students: Predominantly male (Brazil: 67.7%; Chile: 77.8%), with a more pronounced age diversity in Brazil, where 24.1% were 30 years or older. In Chile, the majority were concentrated in the 20-24 age range.

Professors : Mature profile, with consolidated career paths and significant teaching experience. In Brazil, a strong presence of graduates from public institutions in teacher training programs and from private institutions in bachelor's programs was observed.

Managers: Experienced professionals with more than 7 years of experience in management. In Brazil, there was gender balance in the school sector and a male predominance in bachelor's degrees. In Chile, the majority were male (62.1%) and worked in school management.

Analysis methodology

The methodological approach combined quantitative and qualitative analyses, allowing for a multidimensional understanding of initial teacher training.

Detailed sociodemographic and professional profiles were developed for each group (students, teachers, and managers), considering variables such as age, gender, educational institution, years of experience, and field of work.

Responses to questions on a Likert scale were analyzed using medians and dispersions, organized into thematic dimensions:

- Curriculum and formative coherence
- Preparation for the performance
- Ethics, diversity and social responsibility
- Cross-functional skills and use of technologies
- Internships and practical training
- Material conditions and methodologies
- Institutional support and satisfaction

The open-ended questions and data from the focus group interviews were processed using thematic analysis as proposed by Braun and Clarke (2006), which involved:

- Thorough reading of the initial responses and notes.
- Identification of relevant sections and systematic coding.
- Grouping of codes into emerging themes, with iterative review and refinement.
- Consolidation of the final themes that represent the central perceptions of the participants.
- Interpretation of the themes in light of the research objectives, illustrated with representative extracts.

The report is organized into sections that present, in detail, the results of the questionnaires by country and by participant category (students, teachers, and administrators), followed by comparative summaries and specific recommendations for undergraduate and bachelor's degree programs in Brazil, and for unified teacher training in Chile. The data from the focus group interviews are then presented.

The qualitative phase, involving focus group interviews in both countries, aimed primarily to deepen the perceptions and meanings underlying the questionnaire findings, allowing for the free expression of opinions on gaps, competencies, and suggestions for innovation in Physical Education training. Qualitative data collection was carried out in separate meetings for each audience in both Brazil and Chile, with an average duration ranging from 55 to 90 minutes.

QUESTIONNAIRE DATA

BRAZILIAN AND CHILE STUDENTS

This section presents the results of a study on the quality of initial training in Physical Education from the perspective of 161 students - 62 in Brazil and 99 in Chile. These future professionals, who directly experience the training process, offer crucial insights into the alignment between university education and their expectations for professional practice.

The study reveals significant national particularities. In Brazil, the sample was segmented to capture the duality of the educational system: 25 students in the Licentiate program (training for teaching in schools) and 33 in the Bachelor's program (training for work in academies, clubs, and health programs). This distinction allows for a contrast between the experiences and expectations of two pathways that, while sharing common foundations, prepare students for distinct fields of work.

In Chile, the 99 students represent a unified model of education, where there is no separation between teaching degrees and bachelor's degrees, constituting a single pathway that prepares them to work both in school settings and in non-school environments.

Analysis of student profiles reveals differences between countries. Brazilian students show greater age diversity, with a significant number of students over 25 years old (24.1%), indicating non-linear academic trajectories. The gender distribution is markedly male (67.7%), especially in undergraduate programs, and there is a predominance of students from public institutions (61.3%).

Chilean students also have a predominantly male profile (77.8%) and a predominantly young population, with the highest concentration in the 20-24 age group. Unlike Brazil, there is a balance between public (45.5%) and private (54.5%) institutions, reflecting nuances of the different Chilean educational contexts.

BRAZILIAN STUDENTS

The questionnaire included the participation of 62 students from Physical Education courses at different Brazilian higher education institutions. Regarding age range: 24 students (38.7%) are between 20 and 24 years old, and 18 (29.0%) are in the 25 to 29 age range. A contingent of 15 participants (24.1%) are 30 years old or older, indicating that training in Physical Education also mobilizes people at different stages of adult life, whether for resuming studies or professional reorientation. Only two students (3.2%) are under 20 years old.

The gender distribution reveals a markedly masculine profile: 42 men (67.7%) and 17 women (27.4%) responded to the questionnaire. Although the female presence is significant, the male predominance remains aligned with historical trends in the field of Physical Education, especially at the bachelor's level.

Regarding the type of institution attended, there is a predominance of students from public universities (38 participants, 61.3%), in contrast to 21 (33.9%) from private institutions. This data shows that the research managed to capture perceptions from different educational contexts, although with a greater weight given to public institutions.

The group is divided into 33 students (53.2%) pursuing a Bachelor's degree in Physical Education, while 25 (40.3%) are pursuing a Licentiate degree in Physical Education. This division ensures comparability between the two Brazilian educational pathways, revealing aspects of both teacher training and training oriented towards work in gyms, clubs, physical activity programs, and health and sports.

Profile of Brazilian female students in the Physical Education Bachelor's Degree program.

The group of 27 students enrolled in the Physical Education Bachelor's degree program is predominantly male, with 18 men (66.7%) compared to 9 women (33.3%). This distribution deviates from the pattern found in other bachelor's degree programs in Brazil, which have historically been marked by a strong female presence.

Age analysis reveals that the majority are concentrated in the 20-24 age range, corresponding to the most typical profile for entering higher education, continuing from their schooling. However, the group also includes participants in the 25-29 and 30+ age ranges, indicating the presence of non-linear academic trajectories, with students who accessed

university after some time in the workforce or other formative experiences.

Regarding the type of institution , enrollment in federal and state public universities prevails , although there is also representation from private institutions. The geographical distribution confirms a capillarity that reaches different regions of the country. Undergraduate students are enrolled in institutions in the Central-West (MT, TO, MS) , Southeast (SP, MG, ES) , and South (SC) . In relation to the course period , there is a distribution that favors evening and full-time shifts , indicating that many undergraduate students combine their studies with work activities or other daytime commitments.

Finally, regarding the type of course offered , the vast majority of respondents are enrolled in in-person courses . Distance or blended learning, although present in some institutions, does not appear to be predominant among this group of undergraduate students.

Analysis of Likert scale questions : Brazilian undergraduate students

Analyzing the responses to the questions on a Likert scale allows us to understand how undergraduate students in Physical Education perceive their initial training, both in terms of structural aspects of the curriculum and in broader dimensions such as inclusion, pedagogical practices, and institutional support. Organizing the responses into dimensions facilitates interpretation and highlights regularities, tensions, and expectations regarding the course.

Curriculum and formative coherence

The initial questions addressed the adequacy of the balance between theory and practice , **the** content timeliness and the Curriculum organization . The results indicate high medians (4 to 5), suggesting that most students recognize a well-structured course that is consistent with future teaching practice.

The prevailing perception is that the curriculum offers an adequate balance between theory and practice, although some records of intermediate responses show that there is still room for improvement in the articulation between disciplines and in the ways of practically applying the content. The view that the content meets the current needs of basic education reflects the effort to update the course, but also shows that this process is not unanimous, revealing

heterogeneity of experiences between institutions and classes.

Teacher preparation

Students were asked to assess whether they feel prepared for Basic Education, whether the content is aligned with teaching functions, and whether their training experiences allow them to understand the reality of schools. Responses showed medians around 4, demonstrating that pre-service teachers recognize significant progress in their training, but also indicate persistent insecurities. The feeling of preparedness is positive, but not homogeneous: some students still consider that their training experience does not fully reflect the challenges encountered in schools. This tension reflects the historical difficulty of reconciling theory and practice in teacher training, a recurring challenge in the field.

Ethics and diversity

The students emphatically highlighted the presence of ethics and social responsibility in the training (median score of 5), demonstrating that this dimension is consistently addressed in the curricula. Regarding diversity issues, there is a growing appreciation: medians between 4 and 5 for the inclusion of people with disabilities, gender and sexual orientation, and ethnic-racial issues. This evaluation demonstrates recognition that the course addresses these themes, but the variations in results reveal differing perceptions about the depth and consistency of these approaches. For some students, the treatment is still introductory, requiring further exploration to ensure truly inclusive pedagogical practices.

Transversal skills

The development of oral and written communication, the use of digital technologies, and critical thinking. The encouragement of early contact with the school and the community were the points evaluated in this section. The results show a median of 4 for communication, critical thinking, and outreach, but only 3 for the use of digital technologies. This data reveals an important gap: although the courses advance in stimulating critical reflection and promoting community ties, training for the pedagogical use of technologies still does not keep pace with contemporary demands. This weakness indicates the need for greater investment in the digital preparation of future teachers, especially in blended learning contexts and in schools that already incorporate technological tools into their daily routines.

Internships and practical training

The three questions about supervised internships addressed their organization, the support received, and their connection to theory. The medians, again around 4, suggest a positive evaluation of internships as part of training. However, the dispersion of responses points to an uneven experience: while many students highlight the internship as a central element of preparation, others report deficiencies in monitoring, clarity of guidance, or connection to theoretical content. This heterogeneity reveals that internships, although valued, still face structural problems, often linked to institutional conditions and the availability of supervising professors.

Material conditions and methodologies

Another set of questions addressed infrastructure (classrooms, laboratories, equipment), access to teaching materials, the use of **active** methodologies, and clarity in assessment processes. The results show medians between 3 and 4, highlighting less enthusiastic perceptions than in previous blocks. Many students recognize efforts in adopting innovative methodologies and in the provision of resources, but they also identify deficiencies that limit the effectiveness of learning. The evaluation suggests that the quality of infrastructure and materials is uneven among institutions, directly impacting the learning experience. The clarity of the assessment processes was better evaluated, although some students highlighted the need for more consistent feedback to improve learning.

Institutional support and satisfaction

The final questions addressed access to scholarships and grants, the academic and psychological support services, student retention, and overall satisfaction with the course, and the willingness to recommend **the institution**. The results indicate medians between 3 and 4 for institutional support, revealing that many students do not feel fully assisted. In contrast, satisfaction with the course, the perception that it exceeded expectations, and the recommendation of the institution showed medians around 4 to 5, which demonstrates positive recognition of the training received. Despite structural weaknesses, undergraduates tend to value the academic experience as significant for their trajectory.

In general, undergraduate students evaluate their training positively, especially regarding ethics, social responsibility, supervised internships, and the promotion of critical thinking. However, they recognize important

limitations: weaknesses in the pedagogical use of technologies, inequality in the quality of internship practices, and deficiencies in infrastructure and institutional support. The analysis reveals a picture of tensions, but also recognition of the courses' efforts to train critical, ethical professionals sensitive to diversity. The challenge is to move towards a more integrated, innovative training supported by better material conditions, in order to enhance the experience of future Physical Education teachers in basic education.

Analysis of open-ended questions for Brazilian undergraduate students.

Question 1 - Essential skills, abilities or knowledge

Final themes : Ethical and socio-emotional posture; Communication and relational skills; Pedagogical planning and management; Technical-didactic knowledge; Continuing education and critical thinking.

The responses reveal that the student teachers understand teaching as a complex practice that goes beyond the transmission of content. The ethical core appears as the foundation of the work, with recurring mentions of responsibility, respect, and empathy. Communication and the ability to build relationships with students are seen as indispensable skills for success in the school environment. References to planning also emerge and to pedagogical management as essential conditions for the smooth running of classes, demonstrating an awareness that teaching practice requires organization and clarity. Finally, the emphasis on the need for continuous updating and critical thinking reinforces the perception that the teacher must remain in permanent training.

Question 2 - Most relevant formative experiences

Final themes : Internships and field practices as central elements; Extension and community projects as learning spaces; Academic research and reflection; Innovative methodologies; Teacher mediation and support networks.

The analysis shows that supervised internships and school placements are identified as the most relevant formative experiences, allowing students direct contact with professional reality. Extension activities and community projects were also highlighted, demonstrating the value placed on spaces that connect the university and society. Scientific initiation and study groups appear as opportunities for critical reflection and theoretical deepening. Active methodologies and interdisciplinary

projects are valued for stimulating innovative and collaborative learning. Finally, the figure of motivating teachers and the support of colleagues reinforce that teacher training also takes place within networks of coexistence and human mediation.

Question 3 - Less relevant formative experiences

Final themes: Theoretical disciplines with little application; Internships and practices devoid of meaning; Bureaucratic activities without relevance; Fragmented curriculum; Lack of articulation between theory and practice.

The responses consistently point to criticisms of the excessive emphasis on theoretical subjects with little connection to the reality of schools. Expository lectures and repetitive content are seen as demotivating. There are also reports of poorly supervised internships that have lost their formative function and have been reduced to bureaucratic requirements. Curricular fragmentation, with overlapping content, is perceived as an obstacle to building an integrated vision of teaching. These perceptions reveal the need for a more cohesive curriculum and better structured and monitored practical experiences.

Question 4 - Current challenges of the teaching profession

Final themes: Structural conditions and professional development; Inclusion and diversity as a challenge; Work overload; Indiscipline and violence; The need for methodological innovation.

The responses indicate that the challenges of the profession extend beyond the classroom, involving structural, social, and political conditions. Many students They point to precarious infrastructure and excessive workload as central problems. Salary devaluation is mentioned as a factor contributing to demotivation and insecurity regarding the future of one's career. The inclusion of students with disabilities appears as an ethical and pedagogical demand, but frequently without adequate institutional support. Indiscipline and school violence are mentioned as daily barriers. Finally, the need for constant updating in methodologies and technologies is highlighted, evidencing the perception that teaching requires permanent renewal.

Question 5 - Priority topics for continuing education

Final themes : Inclusion and adapted practices as a central focus; Diversity and equity as principles; Pedagogical innovation and digital technologies; Public health and the

promotion of quality of life; Management, evaluation, and public policies.

The responses indicate that continuing education should prioritize inclusion, focusing on adapted practices and strategies to embrace the diversity of students. Gender equity, ethnic-racial issues, and cultural diversity appear as central themes to be explored in greater depth. Active methodologies and the pedagogical use of technology are indicated as paths to innovation in teaching. Public health and the promotion of healthy habits emerge as relevant themes to expand the role of Physical Education in schools. Finally, management and evaluation, linked to public policies, are seen as fundamental areas to strengthen teaching performance.

Thematic analysis of open-ended questions from undergraduate students shows consensus on the centrality of ethical conduct, communication, and technical-didactic mastery as the foundations of teaching. Supervised internships and field practices are identified as the most significant experiences, while decontextualized theoretical subjects and bureaucratic activities are seen as weak points. The challenges of the profession range from precarious structural conditions and devaluation to demands for inclusion, addressing indiscipline, and pedagogical innovation. In the context of continuing education, inclusion and diversity stand out as priorities, followed by methodological innovation, public health, and educational management. In short, the undergraduate degree in Physical Education is perceived as a space for solid training, but still lacks greater integration between theory and practice, better institutional conditions, and a deeper understanding of the social and inclusive dimensions of teaching work.

Profile of Brazilian students in the Bachelor's Degree in Physical Education.

The student group consists of 33 undergraduates. Regarding age, although there is also a predominance of young people between 20 and 24 years old, there is a greater balance with the age groups of 25 to 29 years and 30 years or more. The distribution by

Gender inequality is even greater among undergraduate students than among male students: men represent a large majority, confirming the historical masculinization of this educational path, linked primarily to preparation for the fitness, sports, and health market. The female presence, although still a minority, points to gradual changes in the

composition of the field, reflecting trends of greater female participation in areas previously dominated by men.

Regarding the type of institution, bachelor's degrees are strongly present in public institutions, but are also quite widespread in private universities, reflecting the market dynamics of the area, marked by the expansion of courses aimed at rapid and broad training for academies, clubs, clinics, and health and wellness spaces.

Analysis of Likert scale questions for Brazilian undergraduate students.

This section presents an analysis of Likert scale responses from students in the Bachelor's degree in Physical Education (including the Bachelor's degree in Physical Education and Health). The results are organized into dimensions that synthesize axes of the training: curriculum and formative coherence; preparation for practice; ethics, diversity, and social responsibility; transversal skills and technologies; internships and practices; conditions and methodologies; institutional support and satisfaction. Following this, we conducted a thematic analysis of the open-ended questions, according to Braun and Clarke (2006), considering initial codes, themes, and implications for the course.

Curriculum and formative coherence

In this dimension, which includes 3 items, the median average was 4.0, with moderate dispersion. The highest-rated questions included: "The course presents a balance between theoretical and practical subjects for my future work in the field of the Bachelor's degree." (Median=4); "The course content is adequate for the different fields of work for a Bachelor of Physical Education." (Median=4); "The curriculum structure reflects the current demands of the professional market in the Bachelor's degree area." (Median=4). This set suggests student recognition of the relevance of this dimension, even though the variability points to distinct institutional experiences and a possible heterogeneity in curriculum implementation.

Preparation for the performance

In this dimension, which includes 1 item, the median average was 4.0, with moderate dispersion. The highest-rated questions included: "During the course I learned to use technologies applied to professional practice." (Median=4). This set suggests students' recognition of the relevance of this dimension, even though the variability points to distinct institutional experiences and a possible heterogeneity in curricular implementation.

Ethics, diversity and social responsibility

In this dimension, which comprises 5 items, the median average was 4.0, with moderate dispersion. The highest-rated questions included: "During the course, topics such as ethics and the social commitment of the profession were addressed." (Median=5); "I feel prepared to work with the inclusion of people with disabilities in my future professional activities, as the course addressed this theme." (Median=4); "The course addressed ethnic-racial diversity and the fight against racism in the field I wish to work in." (Median=4). This set suggests recognition by students of the relevance of this dimension, even though the variability points to distinct institutional experiences and a possible heterogeneity in curricular implementation.

Conditions and methodologies

In this dimension, which includes 2 items, the median average was 4.0, with moderate dispersion. The highest-rated questions included: "I had access to useful teaching materials for my future professional performance" (Median=4); "The assessment contributed to improving my professional skills." (Median=4). This set suggests recognition by students of the relevance of this dimension, even though the variability points to distinct institutional experiences and a possible heterogeneity in curricular implementation.

Institutional support and satisfaction

In this dimension, which comprises 8 items, the median average was 3.88. The highest-rated questions included: "I feel informed about the different job opportunities in the field." (Median=4, IQR=1.75); "Career guidance was promoted from the early years of the course." (Median=4); "I received information about scholarships, grants, and support offered by the institution." (Median=4). This set suggests students' recognition of the relevance of this dimension, even though the variability points to distinct institutional experiences and a possible heterogeneity in curricular implementation.

In general, students value curricular balance and recognize the formative coherence of the bachelor's degree with market demands, assigning high median scores to items dealing with course content and organization. Preparation for working with different audiences and scenarios also receives favorable evaluations, although with variations indicating differing experiences among institutions. In ethics and diversity, the high median scores suggest a consistent formative commitment; however, the variability indicates that the depth of these topics is still uneven.

The transversal skills block reveals good performance in communication and teamwork, but gaps in the integration of digital technologies.

Internships and practical training are well-evaluated, but heterogeneous in terms of supervision and the articulation of theory and practice. Finally, the dimensions of conditions and methodologies and institutional support and satisfaction show more ambiguous evaluations: there are perceived efforts, but complaints persist regarding infrastructure, materials, support services, and career guidance.

Analysis of open-ended questions for Brazilian undergraduate students.

Question 1 - How do students rate the training they have received so far?

Final themes: (i) Formative coherence with the market; (ii) Sufficient, but uneven, technical-scientific base; (iii) Deficit in technology and management; (iv) Infrastructure as a limiting factor for experience.

It is noted that students recognize advances in the course's alignment with the market and value the technical and scientific foundation, but point out persistent gaps in digital skills, business/service management, and entrepreneurship. Differences in teaching performance and infrastructure generate unequal educational experiences.

Question 2 - Most relevant formative experiences

Final themes: Centrality of real-world practices; Applied technical-scientific core; Teacher mediation and learning networks.

For undergraduate students, when connected to the real-world context, experiences gain formative depth. The triad of applied practice + scientific basis + engaged teachers appears as a decisive combination for meaningful learning, according to undergraduate students.

Question 3 - Less relevant experiences

Final themes: Curriculum fragmentation; Practices devoid of supervision; Poorly formative assessment.

Students criticize the internal coherence of the curriculum and the pedagogical value of the practices. Without qualified supervision and feedback, the experiences lose their impact. Product-centered assessment is perceived as unfair or of little use for learning.

Question 4 - Current challenges in the field that should have been addressed more thoroughly in the course.

Final themes: Management and entrepreneurship as key competencies; Digital transformation of the sector; Health and expanded social responsibility.

Students perceive a changing market that demands skills to create, manage, and innovate services, engaging with technologies and the demands of public health.

Question 5 – Suggestions for improving the course

Final themes : Progressive and supervised practice; Technological integration; Management and entrepreneurship; Interdisciplinarity and school services; Formative assessment.

Data analysis reveals student demand for a curriculum design that accelerates practical immersion, institutionalizes supervision, and incorporates technology and management as core elements, with assessment focused on evidence of learning throughout the course.

The convergence between quantitative and qualitative findings reinforces the perception that the bachelor's degree is aligned with the market and capable of providing a relevant technical-scientific foundation, provided that practical experience is intensive, supervised, and articulated with theory. Gaps are concentrated in applied technology, management/entrepreneurship, and the heterogeneity of infrastructure and supervision, which make the formative experience uneven. Derived recommendations include: anticipating and expanding supervised internships; incorporating robust technology and data analysis modules; institutionalizing content in management, finance, and ethical entrepreneurship; strengthening partnerships with health and fitness services; and adopting portfolio-based formative assessment and systematic feedback.

The analysis of questionnaires administered to Physical Education students reveals a panorama marked by both recognition and criticism, allowing for the formulation of recommendations aimed at improving the courses. In general, both the teaching degree and the bachelor's degree show significant progress in terms of curricular coherence, emphasis on ethics and social responsibility, and the provision of practical experiences. However, recurring weaknesses also emerge, such as inequality in the quality of internship practices, deficiencies in infrastructure, insufficient incorporation of digital technologies, and gaps in management and entrepreneurship content. Based on this context, general and specific recommendations for each training modality are highlighted.

General recommendations

- Theory-practice integration: strengthening mechanisms that ensure consistent articulation between theoretical content and practical experiences, reducing curricular fragmentation and overlapping disciplines.
- Qualified supervised internships: expand the practical workload, ensuring close supervision and systematic feedback, with clear protocols that reduce the disparity in experiences between institutions.
- Digital technologies: to incorporate the pedagogical and professional use of technologies—digital platforms, data analysis, multimedia resources—in a structured way as a cross-cutting axis of training, responding to the contemporary demands of education and the market.
- Infrastructure and teaching resources: invest in improving physical spaces, laboratories, and materials, ensuring equitable learning conditions and effective practical experiences.
- Formative assessment: adopting assessment strategies that prioritize the learning process (portfolios, self-assessments, qualitative feedback), instead of assessments focused solely on products or final results.
- Inclusion and diversity: deepen the work around gender equity, ethnic-racial diversity, and the inclusion of people with disabilities, ensuring that these themes are not merely introductory but become consolidated as practical and attitudinal competencies.

Specific recommendations for the Bachelor's degree.

- Training for the school environment: expanding opportunities for immersion in schools from the early years of the course, focusing on classroom management, conflict mediation, and building pedagogical relationships.
- Institutional support and retention: improving policies for scholarships, grants, and psychological and academic support services, elements that appeared to be weak points for undergraduate students.
- Pedagogical innovation: investing in active methodologies, blended learning, and interdisciplinary practices that promote the creation of dynamic lessons integrated with the demands of basic education.
- Training for diversity in schools: consolidating disciplines and practices focused on inclusion, gender

equity, and cultural diversity as central elements of teaching, overcoming superficial approaches.

- Valuing teachers and educational policies: include in the curricula more in-depth discussions about public policies, teaching careers, and working conditions, preparing future teachers to understand and face the structural challenges of the profession.

Specific recommendations for the Bachelor's degree.

- Management and entrepreneurship: institutionalize disciplines focused on service administration, marketing, finance, and ethical entrepreneurship, responding to the explicit demand from students for better preparation to manage gyms, clubs, and health service
- Technology applied to fitness and health: integrating content about digital platforms, wearables, monitoring applications, and data analysis, expanding the ability of graduates to work in increasingly digital markets.
- Public health and specific populations: strengthening work in areas related to aging, chronic diseases, and rehabilitation, expanding the social inclusion of bachelor's degree holders in public health and clinical contexts.
- Partnerships with the professional sector: creating and consolidating agreements with gyms, hospitals, clubs, and social organizations, allowing internships and projects in diverse contexts that closely reflect the realities of the market.
- Teaching services and interdisciplinarity: developing teaching clinics and interdisciplinary projects with courses such as Nutrition, Psychology, and Physiotherapy, promoting integrated training focused on comprehensive care.

The recommendations converge on the idea that Physical Education training needs to be more integrated, practical, and connected to social and professional demands. For the teaching degree, the focus should be on consolidating teacher identity, preparing to face the challenges of Basic Education, and valuing diversity. For the bachelor's degree, priorities are concentrated on management, entrepreneurship, technology, and public health, reinforcing the professional's insertion into transforming markets.

The questionnaire administered in Chile included the participation of 99 students from Physical Education courses at different Chilean higher education institutions. Unlike the Brazilian reality, Physical Education training in Chile

does not present a formal division between Licentiate and Bachelor's degrees, constituting a single pathway that prepares the student to work both in school settings and in non-school environments, such as gyms, clubs, and health promotion.

CHILEAN STUDENTS

Ninety-nine Chilean students participated in the diagnostic study. The gender distribution in the Chilean sample shows a markedly male profile, with 77 men (77.8%) and 22 women (22.2%). Regarding age range, the data indicate a predominantly young population, typical of those entering higher education immediately after completing secondary education. The highest concentration is in the 20-24 age group, with smaller contingents in the 25-29 and 30+ age groups.

The research captured perceptions of students from different educational backgrounds. 54 students (54.5%) are enrolled in private universities, while 45 (45.5%) attend public institutions. This balance allows for a view

A comprehensive overview of Physical Education training in the country, reflecting the nuances of different institutional realities.

Analysis of Likert scale issues for Chilean students.

Analyzing the responses to questions on a Likert scale allows us to understand how Chilean Physical Education students perceive their initial training.

Curriculum and Formative Coherence

The initial questions addressed the suitability of the content, the curriculum structure, and the relationship between learning and professional practice. The results indicate consistently high median scores (4 to 5), suggesting that most students recognize the course as well-structured and coherent.

The prevailing perception is that the content is suitable for different fields of work (Q1, median 4) and that the learning is directly related to the future profession (Q3, median 5). Students also positively evaluate the training's ability to prepare them for the specific realities of the area (Q4, median 4) and, even more emphatically, feel capable of applying the knowledge in real professional contexts (Q5, median 5). The curriculum structure is seen as a reflection of market demands (Q2, median 4), although this question had a slightly less uniform evaluation than the others in this block, indicating a perception that there is room for further updating.

Ethical and Diversity Preparation

This section reveals a positive assessment, but with important nuances. The question about the approach to ethics and social commitment (Q6) obtained a maximum median (5), demonstrating that this dimension is strongly consolidated and is clearly perceived by students as a pillar of their education.

However, when addressing the specific themes of diversity and inclusion (Q7 to Q10), the medians remain at 4, but the analysis of the frequency distribution reveals a greater dispersion in the responses. While a significant majority of students agree or strongly agree that the themes of inclusion of people with disabilities (Q7), ethnic-racial diversity (Q8), gender issues (Q9), and environmental sustainability (Q10) were addressed, between 15% and 20% of students disagree. This heterogeneity indicates that, although the curriculum includes these contemporary issues, the depth, practical application, or students' perception of them is not uniform. For a significant portion, the treatment may be perceived as introductory or insufficient for a critical and confident approach to these complex topics.

Development of Transversal Skills and Critical Thinking

This is one of the strongest dimensions of the assessment. Students unanimously recognize the success of the training in strengthening fundamental skills. The medians are at their highest (5) for the ability to reflect on the social impact of the profession (Q11), for the development of oral and written communication (Q12) and, above all, for the promotion of critical thinking and analytical skills for decision-making (Q14).

In contrast, the question about learning to use technologies applied to professional practice (Q13) obtained a median of 4. Although still a positive assessment, the higher percentage of neutral and negative responses compared to the other skills points to a training gap. This data reveals that, although courses are making excellent progress in stimulating critical reflection, training for the pedagogical and professional use of digital technologies is not yet keeping pace with the demands of the 21st century.

Overall, the 99 Chilean Physical Education students rate their training extremely positively, especially regarding the coherence of the curriculum with professional practice, the development of critical thinking, and the solid ethical foundation. However, they acknowledge important challenges to making the training even more robust and aligned with social demands.

For Chilean students, it is necessary to consolidate the approach to issues of diversity, inclusion, and sustainability, ensuring that these themes are not only mentioned but also addressed with the depth and practical applicability necessary for all future professionals to feel prepared to act critically and inclusively.

Education needs to invest more systematically and effectively in the integration of applied technologies, preparing students to use them as powerful tools in their future work, whether in schools, academia, or healthcare projects.

Thematic analysis of open-ended questions for students in Chile.

Question 1 - Skills, abilities and knowledge considered essential

Final themes: Ethics and social sensitivity . Communication and relational skills . Pedagogical management and group leadership . Technical and didactic knowledge in Physical Education . Professional development and critical thinking.

Teaching is described as a complex practice that demands a balance between technical knowledge, human sensitivity, and relational skills. Students highlight attitudes such as respect, empathy, and responsibility, associated with building positive relationships with students. Effective communication, leadership, and the management of school groups are perceived as central to teaching performance. From a pedagogical point of view, they point to the importance of planning, organizing classes, and mastering physical and sports practices. Finally, they reinforce the need for continuous updating, indicating an awareness of the dynamic nature of educational work.

Question 2 - Most relevant formative experiences

Final themes: Internships and school practices as a central axis . Community experiences and university extension . Academic activities and research . Active methodologies and innovative practices . Interaction with teachers and support from colleagues.

Students strongly emphasize internships and practical activities in a school setting, recognizing them as fundamental for consolidating knowledge and developing professional confidence. Extension initiatives and work with communities appear as significant opportunities to connect with social and school realities. Research activities, participation in seminars and study groups are cited as spaces for theoretical expansion and reflection. Active methodologies and innovative experiences are valued for

fostering more dynamic learning. Furthermore, the positive influence of teachers and peer support are recognized as important mediators in the formative process.

Question 3 – Less relevant formative experiences

Final themes: Theoretical disciplines with little application to the school context. Practices with low supervision and poorly structured experiences. Bureaucratic and meaningless processes. Fragmented curriculum and overlapping content. Insufficient articulation between theory and practice.

The criticisms from Chilean students focus on curricular units perceived as excessively theoretical or detached from the reality of the school. Reports point to practical experiences that, although planned, failed to fulfill their formative function due to a lack of consistent pedagogical support. Bureaucratic elements associated with training are identified as insignificant. Some participants highlight a feeling of curricular fragmentation and repetition of content, indicating a desire for greater cohesion between theory and practice.

Question 4 – Current challenges of the teaching profession

Final themes: Structural conditions and professional development . Inclusion and addressing diversity . Group management and school climate . Community involvement and social demands . Pedagogical innovation and the use of technology.

The challenges mentioned go beyond the pedagogical dimension and point to structural and social issues that permeate the profession. The lack of adequate infrastructure and unequal working conditions appear as recurring concerns. School inclusion is seen as an ethical and professional commitment, but students recognize limitations in terms of training and institutional support. Behavior management, conflict resolution, and the diversity of school realities are highlighted aspects. Finally, they acknowledge the need for constant pedagogical innovation and mastery of educational technologies, reflecting the contemporary transformations of the school.

Question 5 – Priority topics for continuing education

Final themes: Inclusion and adapted practices as a priority. Diversity, equity, and social justice. Pedagogical innovation and applied digital technologies. Health, well-being, and physical activity from a community perspective. Pedagogical management, educational policies, and professional development.

Students emphasize continuing education as an essential process, especially concerning inclusion and serving diverse populations. Issues related to gender equality, cultural diversity, and respect for differences are understood as indispensable in the contemporary educational landscape. Innovative methodologies and the use of digital technologies are seen as strategic resources to improve pedagogical practices. Furthermore, approaches to health and the promotion of quality of life appear as key fields in the area. Finally, pedagogical management and an understanding of public educational policies emerge as fundamental dimensions of teacher training.

Thematic analysis of the responses from Chilean students reveals a mature understanding of teaching and its social responsibilities. The student teachers strongly value ethics, effective communication, teaching skills, and a commitment to inclusion and the community. At the same time, they express a desire for greater curricular integration, in-depth practical experience, and more consistent training to address diversity and educational technologies.

The data indicate that, despite the contributions of university education to future professional performance, Chilean students point to clear demands for reinforcement in the inclusive dimension, in the articulation of theory and practice, in pedagogical innovation, and in the strengthening of institutional support policies.

Summary and Recommendations from Students in Brazil and Chile

An integrated analysis of the perceptions of 161 Brazilian and Chilean students reveals points of convergence, despite the significant differences in the educational models of the two countries. Future professionals from both countries share a critical view of their education, acknowledging important advances but pointing to gaps that need to be overcome.

Students positively evaluate the ethical rigor, the development of critical thinking, and the overall coherence of the curricula with their professional expectations. In Brazil, undergraduate students highlight the quality of supervised internships, while bachelor's degree students value the technical-scientific foundation. In Chile, students recognize the program's ability to prepare them for different fields of work. However, three gaps emerge in both countries:

1. **Inclusion and diversity.** Although the themes of diversity and inclusion are present in the curricula, students in Brazil and Chile agree that the treatment is superficial and insufficient to prepare them for the real challenges of a truly inclusive education. Training to work with students with disabilities, autism spectrum disorder (ASD), and other specific needs is perceived as the major educational gap.
2. **Use of digital technologies .** Preparation for the pedagogical and professional use of technologies is assessed as a weak competency in both countries. Students recognize that their training does not adequately prepare them to integrate digital tools into their professional practice, whether at school or in other work settings.
3. **Contextualized practical training.** While acknowledging the value of practical experiences, students criticize the heterogeneity in the quality of supervision and the lack of connection between theory and practice. In Brazil, this criticism is more acute among undergraduate students; in Chile, it manifests as a demand for greater depth in the practical application of knowledge.

To meet the demands of future professionals, training institutions in Brazil and Chile should prioritize the following transformations:

- Overcoming the superficial approach to inclusion and diversity issues by transforming inclusive education into a subject with specific disciplines and supervised practices with diverse populations, including strategies for adapting to and valuing diversity.
- To systematically incorporate the critical use of digital technologies by teaching the use of applications, platforms, and devices as tools for teaching, assessment, and management.
- Ensure qualified and systematic supervision in all practical experiences, with clear monitoring and feedback protocols formative. Establish strong partnerships with schools, clubs, and communities for hands-on learning scenarios in real-world contexts.
- Include applied curricular components and real-world case studies in the training, ensuring that theory is built upon constant dialogue with professional practice, making it easier for students to transfer academic knowledge into professional practice.
- In Brazil, for undergraduate degrees, there should be increased immersion in the reality of schools from the

first semesters, focusing on classroom management and addressing the challenges of basic education.

- In Brazil, the goal is for bachelor's degrees to institutionalize content in management, entrepreneurship, and marketing, responding to the explicit demand for preparation for entry into the job market.

TEACHERS BRAZIL AND CHILE

This section presents the perceptions of teachers who graduated from Physical Education courses in Brazil and Chile regarding their initial training. In Brazil, the sample included both graduates working in school settings (n=39) and those with bachelor's degrees in non-school settings (n=67). In Chile, the research involved 60 teachers with degrees in Pedagogy in Physical Education, mostly working in the education system. The analysis sought to identify strengths, weaknesses, and gaps in training, offering a well-founded diagnosis for the curricular and pedagogical improvement of courses in both countries.

TEACHERS BRAZIL

The questionnaire, aimed at teachers who graduated from undergraduate and bachelor's degree programs in Physical Education, involved the participation of 39 teachers from the school setting and 67 teachers from physical activity and sports programs in non-school settings.

Brazilian Physical Education Teachers

The questionnaire was answered by 39 Physical Education teachers from basic education. The gender composition shows a male predominance: men represent 71.8% (n=28) and women 28.2% (n=11). In terms of age, a mature teaching staff is observed, concentrated in the 35-44 age range, 43.6% (n=17), and 45-54 age range, 28.2% (n=11). There is also participation from teachers aged 55 or older, 12.8% (n=5), and from 25-34 years old, 12.8% (n=5); the presence of those under 25 years old is 2.6% (n=1). This profile suggests already consolidated career paths in teaching, with a strong weight of experiences accumulated over more than a decade of work.

The geographical distribution of the states where they completed their undergraduate degree is concentrated in the Southeast, especially in São Paulo: SP - Southeast, 59.0%, (n=23); MG - Southeast, 12.8% (n=5); RJ - Southeast, 5.1% (n=2). There are also graduates from the Midwest (MT - 7.7%, n=3), the Northeast (BA - 5.1%, n=2) and the South (RS - 5.1%, n=2; PR - 2.6%, n=1). In aggregate terms by region,

the Southeast accounts for 76.9% (n=30), followed by the South and Midwest, both with 7.7% (n=3), the Northeast with 5.1% (n=2) and one record without information, 2.6% (n=1). This pattern is repeated in other profiles analyzed in the study and is plausibly explained by the dissemination bias of the research – even though the instrument circulated nationally, the network of leading researchers in the Southeast, especially in SP, tends to amplify local responses; and the historical concentration of graduate courses and programs in the region, which strengthens academic and professional ties and increases the likelihood of participation by graduates from these states.

The time elapsed since graduation confirms the predominance of long trajectories: more than 16 years since course completion account for 56.4% (n=22), followed by 11 to 15 years, 15.4% (n=6); 4 to 6 years, 15.4% (n=6); 7 to 10 years, 7.7% (n=3); and 1 to 3 years, 5.1% (n=2). Regarding the modality of the initial training course, the face-to-face format prevails overwhelmingly, 97.4% (n=38), with occasional participation of blended learning, 2.6% (n=1). These data suggest a group of graduates who were predominantly trained in face-to-face contexts, during periods when the expansion of distance education had not yet reached the extent currently observed.

Regarding professional insertion and workload, the predominant regime is 31 to 40 hours per week, 30.8% (n=12), followed by more than 40 hours, 25.6% (n=10). Intermediate ranges are also present: 12 to 20 hours, 17.9% (n=7); 21 to 30 hours, 15.4% (n=6); and less than 12 hours, 10.3% (n=4). Considering the total teaching time in school Physical Education, most have been working for more than 16 years, 56.4% (n=22), followed by 11 to 15 years, 17.9% (n=7); 7 to 10 years, 10.3% (n=4); 4 to 6 years, 7.7% (n=3); 1 to 3 years, 5.1% (n=2); and less than 1 year, 2.6% (n=1). Together, these two dimensions – workload and teaching experience – paint a picture of a group with a strong presence of full-time or almost full-time professionals, and with extensive accumulated experience in schools, which may influence more rigorous assessments of training and working conditions.

The institutional spaces of activity (multiple marking) clearly show a predominance of the public network: Municipal Public School, 56.4% (n=22); State Public School, 38.5% (n=15); Private School, 20.5% (n=8); and Federal Public School, 10.3% (n=4). As the markings are cumulative, these percentages indicate the distribution of affiliations and not exclusivity of activity. The municipal and state predominance is consistent with the structure of educational

provision in the country, in which public networks concentrate the majority of basic education enrollments—a reality that, in the daily life of teachers, translates in the planning and management of diverse classes, often in contexts of greater social vulnerability.

The educational stages in which the respondents work (also multiple selection) reveal a versatile profile, distributed across different segments of basic education: Elementary School - Early Years, 66.7% (n=26); Elementary School - Later Years, 64.1% (n=25); High School, 51.3% (n=20); and Early Childhood Education, 41.0% (n=16). This multi-stage activity indicates that a significant portion of the group moves between different age ranges and pedagogical arrangements, which requires differentiated skills in planning, evaluation, and methodological adaptation of Physical Education to the curriculum and material conditions of each school.

Regarding continuing education after graduation (multiple selection), lato sensu specialization is predominant, 74.4% (n=29), followed by academic master's degrees, 20.5% (n=8); professional master's degrees, 15.4% (n=6); and doctoral degrees, 10.3% (n=4). There is also a contingent that did not pursue postgraduate studies, 15.4% (n=6). These percentages, being cumulative, indicate diverse and often combined educational paths. The high rate of lato sensu specializations suggests a search for qualifications directly applied to daily school life (classroom management, inclusion, assessment, teaching methodologies, among others), while enrollment in master's and doctoral programs, although a minority, reveals a core of teachers investing in theoretical-methodological deepening and research—with the potential to spread more investigative pedagogical practices in schools.

Analysis of Likert scale questions for Brazilian physical education teachers.

The first dimension sought to capture the evaluation of the adequacy of university training in relation to the demands of teaching work and the balance between theory and practice in the course. "The training received meets the needs of the current educational context": median 3.5; heterogeneous distribution, with a greater concentration in responses 3 and 4. "The balance between theoretical and practical content was adequate for my professional performance": median 3.5; similar dispersion, with a tendency towards evaluations between "fair" and "adequate".

The results suggest mixed perceptions: although many acknowledge that undergraduate studies offer relevant

contributions, the articulation between theory and practice is still seen as insufficient to fully meet the concrete needs of the school. This interpretation points to a training that partially fulfills its role, but leaves gaps in the integration between academic foundations and pedagogical experience.

The second dimension focused on the institutional infrastructure and the relevance of practices during undergraduate studies. "The course infrastructure was consistent with the demands of the training process": median 4; distribution more concentrated in positive evaluations (4 and 5). "The practices carried out during undergraduate studies were useful for my professional insertion": median 4; similar distribution.

There is a more positive view on this aspect: both the infrastructure and the training practices were considered satisfactory by the majority, although not unanimously. The accounts suggest that the practical experience provided by the university was, for many, a real bridge to entering teaching, indicating that when practice is valued and well-structured, it tends to be recognized as decisive for professional performance.

The third dimension sought to assess the perception of preparedness for school challenges and the solidity of the formative base. "I felt prepared to face the challenges of the school context from my first professional experience": median 3; dispersed distribution, with responses ranging from 2 to 5. "I consider that the training obtained in the Bachelor's degree course provided a solid foundation for my performance and professional development": median 4; less dispersion, more concentrated in positive evaluations.

The integrated reading reveals a contrast: graduates acknowledge that the training provided a solid foundation in general terms, but many did not feel effectively prepared to face the immediate challenges of the classroom upon entering their careers. This suggests that initial training provides important foundations, but falls short in the transition between university and daily practice.

The fourth dimension assessed the acquisition of digital and communication skills. "I acquired skills in the use of technologies applied to teaching during the course": median 2; with a strong concentration of negative responses (1 and 2). "The training allowed me to improve my oral and written communication skills": median 3; balanced distribution, but still with a significant portion rating it only average.

The discrepancy between the two indicators reveals that training in educational technologies is clearly perceived as

deficient, while communication appears as a dimension that is better addressed, although not fully. In times of expanding digital resources, this gap in technologies applied to teaching proves critical for contemporary teaching.

The fifth dimension explored analytical capacity and preparedness to deal with educational inclusion. "I feel capable of analyzing relevant information to make pedagogical decisions": median 4; predominantly positive distribution. "During the course, the following content was addressed.."

Regarding the educational inclusion of people with disabilities: median 3; wide dispersion, with responses divided between median and positive evaluations.

The results indicate that graduates feel relatively confident in their pedagogical decision-making abilities, but perceive that preparation for the inclusion of students with disabilities has not yet been sufficiently developed. This suggests that the courses are able to foster critical analytical skills, but do not guarantee a homogeneous and consistent approach to inclusion policies.

The sixth dimension assessed the attention given to social and diversity aspects during undergraduate studies. "The training adequately addressed gender equity issues": median 3; dispersed distribution, with ratings between 2 and 4. "The training adequately addressed ethnic-racial equity issues": median 3; similar pattern. Both questions reveal median and inconsistent perceptions, indicating that themes related to gender and ethnic-racial relations do not yet occupy a structuring space in initial training. The dispersion of responses suggests very unequal experiences among different undergraduate Physical Education courses.

The seventh dimension assessed the contributions of the undergraduate program to ethical training and social responsibility. "The course promoted ethical commitment and social responsibility, acting in the fight against prejudice and in the appreciation of differences": median 4; distribution concentrated in positive evaluations. "I am satisfied with the professional training I received during the Bachelor's degree course": median 4. The analysis shows that, despite gaps in specific areas, graduates recognize that their training cultivated ethical values and social responsibility, and, in general, positively evaluate the formative experience received.

Finally, the eighth dimension sought to understand the reputation of the training institutions among their graduates. "I would recommend my training institution to

other people interested in pursuing a Bachelor's degree in Physical Education": median 4; predominantly positive distribution.

"The training received meets the needs of the current educational context" (already considered in dimension 1, here as reinforcement): median 3.5; intermediate evaluations. In general, the institutional image is well evaluated, but the recognition that the training needs to be better adjusted to the demands of the present accompanies the willingness to recommend the institution.

Analysis of the questions on a Likert scale reveals that licensed teachers have an ambivalent view of their initial training. There is recognition of strengths—infrastructure, training practices, ethical commitment, and social responsibility—but also consistent criticism, especially regarding the use of educational technologies, immediate practical preparation for the classroom, and the insufficient treatment of topics related to inclusion, gender equity, and ethnic-racial diversity. The medians ranged from 2 (technologies) to 4 (ethics, infrastructure, satisfaction), indicating that the group perceives relevant advances but identifies gaps that need to be addressed to make initial training more in tune with contemporary school demands.

Analysis of open-ended questions for Brazilian physical education teachers.

Question 1 - Essential skills, abilities, or knowledge.

Final themes : Ethical and socio-emotional posture; Communication and relational skills; Pedagogical planning and management; Technical-didactic knowledge; Continuing education and critical thinking.

The responses show that undergraduate professors do not reduce the teaching function to the simple transmission of content. An ethical core emerges as fundamental, highlighting attitudes of responsibility, empathy, and respect as indispensable. The importance of communication, leadership, and the ability to build meaningful bonds with students—essential skills for managing the classroom democratically—was also emphasized. Planning, assessment, and mastery of physical practices comprise the instrumental axis of teaching work, but always articulated with a reflective stance. Finally, the emphasis on continuing

education and critical thinking reveals that these professionals see themselves as subjects in constant learning, recognizing that education demands permanent updating and the capacity for critical reflection on practice.

Question 2 - Most relevant formative experiences

Final themes : Internships and field practices as central axes; Extension and community projects as spaces for meaningful learning; Research and academic reflection; Innovative and interdisciplinary methodologies; Teacher mediation and support networks.

The responses indicate that teacher training gains depth when it connects the student to the reality of the school environment. Supervised internships and practical experience in schools were unanimously highlighted as crucial experiences, as they allowed students to experience the daily routine of teaching. Extension activities and community projects were also valued, as they broadened the understanding of the social role of Physical Education. Some respondents highlighted scientific initiation and study groups, recognizing them as opportunities to develop critical thinking and articulate theory and practice. Furthermore, the use of active methodologies and interdisciplinary projects was mentioned as a differentiating factor, allowing for innovative teaching experiences. Finally, the recognition of the mediation of university professors, their motivation, and their ability to create bonds reinforces the importance of the human and relational dimension of teacher training.

Question 3 - Less relevant formative experiences

Final themes: Theoretical disciplines with little application; Practical training and internships devoid of meaning; Bureaucratic and mandatory activities without relevance; Fragmented and repetitive curriculum; Lack of connection between theory and practice.

The data reveals consistent criticisms of the fragmented and disconnected nature of part of initial teacher training, detached from the reality of the school environment. Many teachers reported excessively theoretical subjects, taught in an expository manner, that did not engage with the real challenges of teaching. Reports also emerged of bureaucratic supervised internships, lacking adequate follow-up, which failed to fulfill their formative role. Repetition of content and lack of curricular integration were identified as recurring problems. Taken together, these perceptions reinforce the need for greater articulation

between theory and practice, as well as a less fragmented curriculum more connected to the daily life of the school.

Question 4 – Current challenges of the profession

Final themes : Structural conditions and professional development; Inclusion and diversity as a pedagogical challenge; Work overload and precarious employment; Indiscipline and violence in the school environment; Need for updating and methodological innovation.

The responses reveal that the challenges faced by undergraduate physical education teachers extend beyond the classroom. Poor infrastructure, overcrowded classrooms, and low salaries emerge as central factors contributing to burnout. The inclusion of students with disabilities was cited as an ethical and pedagogical imperative, but the lack of specialized support and adequate resources hinders the effective implementation of this practice. Indiscipline and school violence were mentioned as barriers to teaching, while the need for constant updating in methodologies and technologies reflects the demands of a transforming educational landscape. These challenges indicate that teaching in Physical Education is constructed amidst structural and social pressures that demand more consistent public policies and better working conditions.

Question 5 – Priority topics for continuing education

Final themes : Inclusion and adapted practices as a central axis; Diversity and equity as formative principles; Pedagogical innovation and digital technologies; Public health and promotion of quality of life; Management, evaluation and public policies.

The responses indicate that continuing education should prioritize multiple areas. Inclusion appears as an absolute priority, highlighting the need to deepen adapted practices and resources aimed at students with disabilities. Diversity—gender, ethnic-racial, and cultural—is also emphasized, signaling that teacher training needs to incorporate equity as a pedagogical principle. Pedagogical innovation, supported by active methodologies and digital technologies, is seen as essential in the face of contemporary transformations in education. Themes related to public health and the promotion of quality of life are also highlighted, indicating that teachers perceive their role as part of a broader policy of care and prevention in health. Finally, classroom management, assessment, and knowledge of public policies were identified as fundamental areas for enhancing the effectiveness of teaching work.

The thematic analysis of open-ended questions from undergraduate professors reveals a rich panorama of tensions and expectations. There is consensus on the centrality of ethical conduct, communication, and technical-didactic mastery as the foundations of teaching. Supervised internships and field practices emerge as the most significant experiences, while decontextualized disciplines and bureaucratic activities are seen as weaknesses. Current challenges point to structural issues (working conditions and recognition), as well as pedagogical (inclusion, indiscipline, methodological innovation) and social (violence, diversity) issues. In the context of continuing education, professors identify inclusion and diversity as urgent priorities, followed by pedagogical innovation, public health, and management. This set of perceptions highlights that the undergraduate degree in Physical Education, although recognized as responsible for providing a solid foundation, still needs to be more integrated, practical, and connected to the demands of the school and society.

3.4 Profile of teachers in non-school sports and physical activity programs

Most participants are between 35 and 44 years old (46.3%, n=31), followed by the 45 to 54 age group (25.4%, n=17). This predominance of intermediate age groups reveals a group consolidating their careers, already far from the initial years of their careers, but still at a productive age to expand their trajectory. There are also 14.9% (n=10) aged between 25 and 34 years, representing younger professionals in the initial stage of consolidation; another 10.4% (n=7) are over 55 years old, while only 3.0% (n=2) are under 25 years old. This age composition suggests that the profession is mostly represented by teachers in full professional maturity, capable of combining accumulated experience and productive vigor.

The gender variable points to a clear male predominance: 74.6% (n=50) of respondents are men, while 25.4% (n=17) are women. This data reinforces a historical characteristic of the field of Physical Education bachelor's degrees, which, unlike school teaching degrees, still presents a more restricted female presence. This gender inequality may be related both to the conditions of the gym and club market—traditionally more associated with the male figure—and to structural barriers to greater balance between men and women in these spaces.

Another relevant piece of data concerns the type of institution where the undergraduate degree was obtained. The vast majority (n=61, 91.0%) graduated from private

universities, while only 6 (9.0%) did so from public institutions. This predominance of private institutions suggests that undergraduate Physical Education training is strongly linked to the private education sector, possibly due to the greater reach of these institutions in Brazil and the concentration of courses geared towards the gym and fitness market. Among the most frequently mentioned institutions, Uninove and Estácio (n=6 each), FMU (n=4), and UNIP (n=4) stand out, which together account for almost a third of the participants. The remaining responses were distributed across 34 different institutions, highlighting the dispersion and diversity of educational backgrounds.

Analysis of the geographical distribution confirms the centrality of the Southeast region, especially São Paulo. More than half of the participants (55.5%, n=37) graduated from institutions in São Paulo, followed by Rio de Janeiro (10.5%, n=7) and Minas Gerais (7.5%, n=5). Other states, such as Espírito Santo, Bahia, and Paraná, also appear, but less significantly. This pattern reflects not only the population and economic concentration of the Southeast region, but also the historical predominance of Physical Education courses offered in this region. This concentration may also have been enhanced by the network of contacts that supported the dissemination of the questionnaire, as was observed among managers.

Regarding the time since graduation, the results point to a distribution that mixes consolidated career paths and more recent experiences. A significant portion (32.8%, n=22) graduated more than 16 years ago, and another 16.4% (n=11) have been graduated for between 11 and 15 years. This group highlights the presence of professionals with long tenures in the market. However, there are also 22.4% (n=15) with 4 to 6 years since graduation, 11.9% (n=8) between 1 and 3 years, and 7.5% (n=5) with less than one year since graduation, revealing renewal in the field. This coexistence of different generations suggests a market that continues to attract new professionals, although marked by the presence of experienced professionals.

Regarding the format of the degree program, the in-person model prevailed (85.1%, n=57), followed by blended learning (10.4%, n=7) and distance learning (EAD), represented by only 4.5% (n=3). This result reinforces the perception that, in the field of bachelor's degrees, in-person practice is still seen as fundamental to training, given the applied and technical nature of the area's content.

Continuing education was also a recurring theme among respondents: 70.1% (n=47) completed lato sensu postgraduate studies, 16.4% (n=11) pursued an academic master's degree,

9.0% (n=6) opted for a professional master's degree, and 6.0% (n=4) obtained a doctorate. Only 22.4% (n=15) interrupted their academic career after graduation. This data confirms a trend of valuing continuing qualification, whether through specializations focused on applied practice or through paths of scientific deepening.

In the field of professional activity, only one of the 67 respondents stated that they did not work in the area, confirming strong market presence. The majority work as **Personal Trainers** (82.1%, n=55), followed by work as instructors in gyms (38.0%, n=26) and physical trainers for athletes (17.9%, n=12). Other areas of employment include health programs (16.4%, n=11), management of sports organizations (11.9%, n=8), sports coaches (9.0%, n=6), and participation in social projects (9.0%, n=6). This diversity suggests that many professionals work in different areas, reflecting both the versatility and fragmentation of the job market for bachelor's degree holders.

Analysis of weekly working hours confirms this diversity: 26.9% (n=18) work less than 12 hours per week, 25.4% (n=17) between 12 and 20 hours, 9.0% (n=6) between 21 and 30 hours, 14.9% (n=10) between 31 and 40 hours, and 23.9% (n=16) more than 40 hours per week. This mosaic reveals both the flexibility of employment arrangements and the existence of grueling work schedules, especially in roles such as Personal Trainer.

Professional trajectories also show a consolidated profile: 37.3% (n=25) have been working in the field for more than 16 years, 20.9% (n=14) between 11 and 15 years, 14.9% (n=10) between 4 and 6 years, 9.0% (n=6) between 7 and 10 years, 16.4% (n=11) between 1 and 3 years, and only 1.5% (n=1) started less than a year ago. This data reinforces that the bachelor's degree field is composed of professionals with high retention rates, but also has room for new entrants.

Regarding the target audience, there is great diversity. Almost all work with adults (91.0%, n=61) and the elderly (74.6%, n=50), which confirms the focus of the bachelor's degree on academia and health programs. However, many also work with young people (61.2%, n=41), adolescents (41.8%, n=28), children (25.4%, n=17), and people with disabilities (25.4%, n=17). A significant portion (49.3%, n=33) deals with people with chronic diseases, expanding the field's responsibility in public health care.

The profile of teachers graduating with a bachelor's degree in Physical Education reveals a diverse group in terms of age, years since graduation, and professional experience,

but marked by some dominant traits: a male predominance, concentration of training in private institutions and in the state of São Paulo, emphasis on in-person practice during undergraduate studies, and a strong presence of postgraduate courses. Professionally, roles related to personal training and gyms predominate, but the group is also dispersed across multiple areas, serving varied audiences with growing demands for health and quality of life. This picture suggests a field in expansion, but still marked by gender inequalities, regional concentration, and a strong dependence on the private sector, both in training and in the job market.

Analysis of Likert scale questions for Brazilian teachers in non-school sports and physical activity programs.

The first dimension sought to assess whether the training received meets the needs of the field of work and whether the balance between theory and practice was adequate for professional performance.

In the question "Does the training received meet the needs of the area in which I work?", the median was 4, with a relatively balanced distribution: 53.0% (n=35) assigned scores of 4 or 5, while 24.3% (n=16) rated it between 1 and 2. This division suggests ambivalent perceptions: on the one hand, a significant portion recognizes its relevance, but almost a quarter disagree, indicating that there are gaps that compromise the alignment of the degree with market demands.

In the statement "The balance between theoretical and practical content was adequate for my professional performance," the median was also 4, with 53.0% (n=35) giving scores of 4 or 5, but 28.8% (n=19) registered low scores (1 or 2). This reinforces the perception of heterogeneity: while for some the articulation of theory and practice was satisfactory, for others there was a clear weakness.

This dimension reveals that the overall relevance of the training and the balance between theory and practice are not universally agreed upon. Although a large portion perceives it as adequate, there are significant criticisms from a contingent that does not feel fully served.

The second dimension investigated the adequacy of the infrastructure and the presence of innovative methodologies. In the question "Were the physical spaces, materials, and equipment of the University adequate?", the median was 4, with 56.1% (n=37) giving scores of 4 or 5. This result shows a predominantly positive evaluation, although 16.6% (n=11)

assigned scores of 1 or 2, revealing that not everyone had access to satisfactory conditions.

In the question "Innovative teaching methodologies were used during training," the median dropped to 3, with a more dispersed distribution: 25.8% (n=17) rated it with scores of 4 or 5, but 25.8% (n=17) gave scores of 1 or 2. This dispersion suggests that methodological innovation was perceived unevenly, perhaps depending on specific courses, teachers, or periods.

A joint reading reveals a contrast: while the physical infrastructure receives recognition, the methodological dimension generates more doubts and criticism, indicating that innovation in teaching has not become a common practice.

The third dimension assessed the relevance of the teaching materials and the usefulness of the practices carried out during the undergraduate course.

In the question "I received relevant and applicable teaching materials", the median was 3, with one third of respondents rating it positively (33.3%, n=22, giving a score of 4), but 33.3% (n=22) registered scores of 1 or 2. This data suggests divided perceptions, revealing that the quality and applicability of the materials was uneven.

In the question "The practical experiences I received during my undergraduate studies were useful for my professional integration," the median score was 4, with 56.1% (n=37) giving scores of 4 or 5. This data highlights a greater recognition of the importance of practical experiences, although 27.2% (n=18) gave low scores.

This contrast shows that, even with materials that are not always valued, concrete practices were perceived as more relevant, reinforcing the centrality of practical experience in Physical Education training.

In the fourth dimension, teachers evaluated the updating of content and the existence of connections with the market from the initial stages.

In the question "Did the course content meet current market demands?", the median was 3, with 30.3% (n=20) giving scores of 4 or 5, but 39.4% (n=26) giving scores of 1 or 2. This result shows a clear perception of outdated curriculum.

In the category "The course promoted links with the real work environment from the initial stages," the median was also 3, with a dispersed distribution: 43.9% (n=29) rated it positively (4 or 5), but 34.8% (n=23) gave low scores.

This data reveals that curriculum updating is a critical point, with a significant portion of respondents indicating

that the content does not keep pace with transformations in the field. Although there was some initial connection to the work, it was neither systematic nor universal.

The fifth dimension brought together issues concerning the use of technologies and the development of professional communication.

In the statement "During the course I learned to use digital technologies and tools," the median was 2, with 62.1% (n=41) giving a negative rating (scores of 1 or 2). This result points to a significant gap in training, considering the growing importance of technology in professional practice.

In contrast, the question "Did the course promote the development of communication skills with different audiences?" obtained a median of 3, with a heterogeneous distribution: 39.4% (n=26) rated it positively (grades 4 or 5), while 31.8% (n=21) gave low grades (1 or 2).

This dimension highlights two weaknesses: the near absence of preparation for the use of digital technologies and insufficient training in communication, crucial dimensions in a market that demands qualified interaction with different audiences and increasingly integrated digital resources.

The sixth dimension analyzed perceptions about planning skills and the breadth of areas explored during undergraduate studies.

In the question "Did the course promote skills to plan, execute and evaluate physical activity programs?", the median was 4, with 53% (n=35) rating it positively, although 28.7% (n=19) gave low scores.

Regarding the question "My degree allowed me to learn about and explore different areas of professional insertion," the median score was 4, with 59.1% (n=39) giving scores of 4 or 5. This data suggests recognition that the education opened up diverse career paths, albeit with some gaps.

Thus, this dimension shows that, although there are criticisms, the training was seen as relatively effective in building planning skills and exploring different career possibilities.

The seventh dimension gathered issues related to values, ethics and diversity.

In the question "Topics such as professional ethics, inclusion, and social responsibility were addressed," the median was 5, with a large concentration of positive

responses: 77.3% (n=51) assigned scores of 4 or 5. This is the strongest point of the training, showing that the ethical dimension was valued.

In contrast, in "Content on environmental sustainability and cultural diversity was included," the median was 3, with a balanced distribution: 39.4% (n=26) rated it positively, but 33.4% (n=22) gave it low ratings.

This dimension reveals that, although ethics and social responsibility are well addressed, sustainability and cultural diversity are still less systematically incorporated.

The eighth dimension investigated the approach to gender and ethnic-racial issues. In the question "Did the training adequately address gender equity?", the median was 3, with 33.3% (n=22) giving high scores and 37.9% (n=25) giving low scores. The result indicates a critical perception of inadequacy. Similarly, in the question "Did the training adequately address ethnic-racial equity?", the median was 3, with a similar distribution: 33.3% (n=22) positive and 36.4% (n=24) negative.

This situation highlights that, despite advances in the overall ethical dimension, gender and racial equity are still addressed in an incipient manner, suggesting the need for further curricular development on these topics.

The final dimension sought to capture overall satisfaction with the training received. In the question "I am satisfied with the professional training I received," the median was 3, with a split distribution: 50.0% (n=33) giving scores of 4 or 5, and 20% (n=13) giving low scores (1 or 2). In "Would I recommend my institution to other interested people?", the median was 4, with 55.5% (n=37) giving scores of 4 or 5. Finally, in the question "I consider that my training was a solid foundation for my performance and development," the median was also 4, with 54.5% (n=36) giving a positive evaluation.

This dimension shows that, despite specific criticisms regarding particular aspects, there is recognition of the overall value of the training received, which sustains relatively high levels of satisfaction.

The analysis of the nine dimensions reveals a picture marked by contrasts. On the one hand, aspects such as professional ethics, exploration of different areas, and planning skills received positive evaluations. On the other hand, critical gaps emerge in curriculum updating, use of technologies, communication, and equity. In general, the undergraduate degree in Physical Education is seen as a

reasonable foundation, but still far from fully meeting the demands of a dynamic and socially diverse market.

Analysis of open-ended questions by teachers of non-school sports and physical activity programs.

Question 1 - Evaluation of the university education received

The first open-ended question sought to understand how teachers generally evaluate the university education they received, inviting them to express perceptions about the strengths, weaknesses, and relevance of their undergraduate studies to their professional practice.

Final themes: Education perceived as heterogeneous and unequal, with strengths in certain areas but structural weaknesses.

Insufficient practical experience and disconnect from the job market. Occasional recognition of teaching quality, but lack of systematization in the course.

Analysis of this issue reveals that teachers' perceptions are marked by a sense of ambivalence. Many acknowledge that undergraduate studies provided a solid theoretical foundation in certain areas, such as anatomy, physiology, and training, but that this knowledge was little explored in applied situations. The criticism that university education prepares students more for the reproduction of content than for solving concrete problems in academies, clubs, or health programs appears recurrently. The absence of systematic supervised internships is pointed out as one of the main gaps, as is the curricular lag in relation to recent transformations in the field. On the other hand, there are positive mentions of some teachers who managed to articulate theory and practice, revealing that quality often depended on individual effort and not on the curricular structure as a whole.

Question 2 - Most relevant formative experiences

Final themes : Applied practices as a structuring axis, even if limited in number. Extension and research as spaces for meaningful learning. Teacher mediation as a determining factor in the relevance of the experience.

The professors emphasize that the experiences that most contributed to their training were not limited to the formal classroom setting. Extracurricular internships, participation in extension projects, tutoring, and scientific initiation activities were widely mentioned as

moments of genuine learning. These experiences allowed for direct contact with different audiences, the development of communication skills, and a clearer perception of the real demands of the profession. The figure of the engaged professor, capable of mobilizing students beyond the expository content, appears as a decisive element in transforming activities into robust training opportunities. This analysis suggests that, although the formal curriculum has limitations, the spaces for practice and extension functioned as compensators for structural weaknesses, guaranteeing experiences considered fundamental to their professional trajectory.

Question 3 - Less relevant experiences

themes : Fragmented and poorly integrated training. Formal experiences seen as merely obligatory, without real value for practice. Lack of articulation between theory and professional intervention.

The responses reveal a consistent critique of what professors perceive as academic activities "just to fulfill requirements." Many subjects were seen as poorly connected to professional practice, with content far removed from the real demands of academies, clubs, or health programs. The excess of expository, repetitive, and teacher-centered lectures is mentioned as a demotivating factor, reinforcing the perception that methodological innovation was lacking. Poorly supervised internships, marked by bureaucracy or a lack of clarity in objectives, also appear as frustrating experiences. In short, participants indicate that a large part of the activities considered mandatory did not effectively contribute to their training, reinforcing the idea that the degree could have been more focused on authentic and applicable experiences.

Question 4 - Current challenges and needs for continuing education

Final themes: Curriculum update focused on the contemporary market (management, entrepreneurship, technology). Public health and aging as strategic areas. Diversity and inclusion as central themes that are still under-explored. Continuing education as a permanent condition for professional development.

The professors emphasized that their initial training did not adequately prepare them to deal with emerging 21st-century challenges. Criticism of the lack of content on academic management, personal marketing, entrepreneurship,

and technological innovation appears recurrently. Similarly, there is a strong demand for greater preparation to work in public health, in the care of people with chronic diseases, and in the care of the elderly—contexts that are increasingly relevant to the profession. Issues of cultural diversity, gender equity, and ethnic-racial equity are also identified as gaps, suggesting that training has not yet systematically incorporated an inclusive perspective. Finally, respondents reinforce the need for continuing education, seen as essential for dealing with a constantly transforming field.

The thematic analysis of the four open-ended questions reveals a picture marked by tensions, specific acknowledgments, and expectations of transformation. Undergraduate professors recognize that their university education provided an important foundation, but clearly point to gaps in supervised practice, curriculum updates, and preparation for contemporary challenges. The most valued formative experiences were precisely those that went beyond the formal classroom setting, such as extracurricular internships, extension projects, and research, revealing that the university can be formative when it manages to connect theory and practice in real-world situations.

On the other hand, less relevant experiences demonstrate that disconnected disciplines, poorly organized internships, and traditional methodologies are still present, generating frustration and contributing to the perception that much of the training is fragmented. The responses also show that the future of Physical Education training at the bachelor's level needs to more explicitly incorporate content on management, entrepreneurship, and technology, as well as engage with public health, population aging, and social diversity.

Taken together, the consolidated final themes indicate that the desired profile for teachers is that of an ethical professional, technically competent, capable of working with diverse audiences and continuously updating themselves in a transforming market. However, initial teacher training still does not systematically deliver this set of competencies, leaving professional experience and continuing education to fill important gaps. This scenario reinforces the urgency of rethinking the Physical Education bachelor's degree curriculum, articulating practice, interdisciplinarity, ethics, and innovation to prepare professionals capable of responding to the complex demands of the contemporary world.

Summary and recommendations from Brazilian teachers for initial teacher training.

Based on the analysis of the teachers' responses, it was possible to derive recommendations for improving the initial training of Physical Education teachers. These recommendations cover both general aspects, valid for both fields of practice (bachelor's degree and teaching degree), and specific indications that address the particularities of each professional trajectory.

For the teachers who participated in the research, initial training in Physical Education needs to overcome the historical fragmentation between theory and practice. To this end, it is fundamental to strengthen supervised internships, guaranteeing real and diverse experiences from the first years of the course. The consolidation of structured partnerships with schools, gyms, clubs, and health services constitutes a strategic path to bring the academic world closer to the concrete demands of the profession. Furthermore, managers, especially those working in gyms, clubs, and health services, emphasize the need to deepen basic scientific knowledge, such as physiology, biomechanics, and psychology, articulating it with practical teaching and intervention situations.

Another key point is the emphasis on ethics, social commitment, and sensitivity to diversity. Courses should guarantee spaces for reflection on the social role of Physical Education, incorporating discussions on race, gender, inclusion, and accessibility, while simultaneously encouraging the development of an ethical stance consistent with contemporary challenges. Similarly, it is necessary to reinforce relational and communication skills, preparing professionals to work in teams, lead processes, and communicate clearly and empathetically. Finally, the critical and creative integration of digital technologies emerges as an indispensable axis, both for dynamizing pedagogical processes and for expanding market access.

Specific Recommendations - Bachelor's Degree (academic)

An analysis of responses from school Physical Education teachers regarding their initial training, considering both Likert scale questions and open-ended responses, reveals a multifaceted panorama that combines recognition of strengths and criticism of weaknesses in their training.

Theory-practice integration

The results indicate that the adequacy of the training in relation to the needs of the current educational context and the balance between theory and practice obtained

intermediate medians (3.5). Open-ended responses reinforce this view: although the training is considered solid on a theoretical level, many teachers reported difficulty in feeling prepared for the immediate challenges of the classroom. Internships and supervised practices were recognized as central formative experiences, but criticism of curricular fragmentation and the implementation of bureaucratic or poorly supervised internships shows that there is still a gap between university foundations and daily school practice.

Infrastructure and practices

The axis related to infrastructure and practices carried out during undergraduate studies presented more positive evaluations (median 4), highlighting the perception that practical experience helped in professional insertion. This finding suggests that, when properly structured, practices constitute an important anchoring point for teaching identity. Even so, qualitative criticisms of bureaucratic activities and the lack of integration between theory and practice reveal that the effectiveness of these experiences is not homogeneous.

Preparing for the challenges of teaching.

While the solidity of the training received a favorable evaluation (median 4), the perception of preparedness to face the concrete challenges of the school was lower (median 3). This contrast points to a recurring tension: the courses provide consistent theoretical foundations, but fail to ensure a safe and confident transition to professional reality. In open-ended responses, teachers reported facing difficulties in dealing with indiscipline, school violence, work overload, and the inclusion of students with disabilities without adequate support—challenges that require more contextualized preparation.

Digital and communication skills

Training in technologies applied to teaching was assessed as deficient (median 2), while communication skills received an intermediate rating (median 3). Teachers' statements confirm that the use of digital technologies has not been addressed in a structured way, which becomes even more problematic given the increasing centrality of these resources in the educational process. In contrast, oral and written communication was considered more developed, but still insufficient to fully meet the demands of the school environment.

Inclusion and equity

Although analytical skills were well evaluated (median 4), items related to the inclusion of people with disabilities and issues of gender and ethnic-racial equity obtained medians of 3, with wide dispersion. Open-ended responses reinforce this interpretation, pointing to inclusion as a priority for continuing education and highlighting that the treatment of these topics in undergraduate studies was unequal and insufficient. Cultural and social diversity, although recognized as relevant, still does not occupy a structuring space in initial training.

Ethics, social commitment and institutional reputation

Dimensions related to ethics and social responsibility were better evaluated (median 4), indicating that the courses manage to cultivate fundamental values, even if they do not always articulate them with consistent pedagogical practices. Satisfaction with the training and willingness to recommend the institution were also predominantly positive, although accompanied by the perception that adjustments are needed to align the training with contemporary demands.

Taken together, the findings reveal an ambivalent picture: there is recognition of important advances, especially in infrastructure, meaningful practices, ethics, and social responsibility; but gaps persist in critical dimensions—integration of theory and practice, immediate preparation for teaching, mastery of educational technologies, inclusion, and diversity. Teachers express expectations that initial training will become more connected to the reality of schools, less fragmented, and more committed to emerging themes such as equity, pedagogical innovation, and public health.

The recommendations derived from the analysis seek to address the identified tensions and guide improvements in the curricular design of initial teacher training in Physical Education at the school level. They are organized into general and thematic areas.

1. **Effective integration between theory and practice** : promoting supervised internships from the early years of the course, linked to theoretical subjects and accompanied by professors prepared to guide the student reflectively.
2. **Strengthening the meaningful practical dimension** : expanding outreach activities, community projects, and real-world experiences in schools, ensuring that students experience different educational contexts.
3. **Curriculum revision to reduce fragmentation** : organize the curriculum in an integrated way, avoiding

overlapping content and theoretical subjects disconnected from daily school life.

4. **Integration of educational technologies** : incorporating specific modules on the critical and creative use of digital technologies in teaching, moving beyond an instrumental perspective.
5. **Emphasis on ethics, diversity and inclusion** : consolidating content and practices focused on gender equality, ethnic-racial diversity and inclusion of people with disabilities, linking them to real pedagogical experiences.
6. **Emphasis on communication and socio-emotional skills** : intentionally developing communication, leadership, empathy, and conflict management skills, recognized as central to teaching.

Recommendations from Brazilian teachers for Physical Education in schools.

- To increase the time dedicated to the didactics of Physical Education, learning assessment, and classroom management, responding to criticism about insufficient preparation for immediate teaching work.
- Strengthen partnerships between universities and schools, ensuring qualified supervision in internships and joint teaching, research, and outreach projects.
- To structure teacher training mechanisms focused on preventing and managing indiscipline and school violence, challenges identified as recurring by teachers.
- To ensure that the diversity of physical practices is considered, going beyond a purely sporting focus, in order to broaden the cultural and pedagogical repertoire of future teachers.
- Prioritize courses and programs focused on educational inclusion and adapted practices, with an emphasis on students with disabilities and special educational needs.
- To offer training in gender equity, ethnic-racial diversity, and intercultural education, consolidating these themes as structuring axes of teaching practice.
- To develop continuing education programs in active methodologies and blended learning, with an emphasis on the pedagogical use of digital technologies.

- To create initiatives for public health and active aging, positioning Physical Education as a strategic field for promoting social well-being.
- Include educational management, public policy, and evaluation in Physical Education as mandatory components of continuing education.

Specific Recommendations - Bachelor's Degree (gyms, clubs, health and sports)

Relevance of training and balance between theory and practice.

Participants acknowledge valid theoretical foundations (e.g., anatomy, physiology, assessment), but complain about low application in real-world situations and **insufficient** systematic supervised internships. Reports from professors and highly qualified, specific experiences emerged, but the perception is one of **internal heterogeneity** within the course: what works often depends on the engagement of certain professors and extracurricular opportunities, not on the **curriculum structure** as a whole.

Physical infrastructure and methodological innovation

In summary, there is recognition of reasonable material conditions, but pedagogical innovation is not consolidated as a recurring practice. In the reports, criticisms of repetitive expository methodologies and activities "to fulfill a quota" reappear, indicating **little culture of orienting training** towards real problems in the field (service management, customer relations, safety at work, communication of results, etc.).

Teaching materials and the value of practices

Concrete experiences, especially supervised practices, extension programs, mentoring, and on-the-job experiences, are identified as the formative axis that "turns the key" for professional insertion. The open-ended responses reinforce that extension projects **and** extracurricular **internships** function as compensators for curricular weaknesses, provided there is qualified faculty mediation.

Curriculum updates and early job placement

The professors mention the need to include content such as service management, entrepreneurship, digital marketing, applied technologies, remuneration and regulation models, **and** connections with public health (chronic diseases, active aging).

Technologies and communication with different audiences

Teachers working in the areas of sports and physical activity programs note the lack of technological training and communication literacy as a bottleneck that reduces employability, service quality, and **the ability to demonstrate value to the client/patient/user.**

Ethics, social responsibility and diversity

Teachers recognize **ethics** as a present value, but **equity and diversity** are not yet seen as consolidated **transversal competencies** in training routines.

Recommendations from Brazilian professors who graduated with a bachelor's degree.

- Integrate progressive supervised practice pathways in gyms, clubs, health programs, multidisciplinary teams, and social projects from the early semesters.
- To map market competencies (service management, ethical sales, customer retention, safety and risk, protocols for chronic diseases, active aging) and align physiology, training, and assessment content with concrete use cases .
- Create mandatory technology and data modules: selection and use of prescription and monitoring software, and responsible digital content production.
- Incorporate practical projects
- Introduce operations management, financial planning, pricing, digital marketing, and entrepreneurship (including business models for fitness, health, and wellness services; projects with social impact).
- Strengthening evidence-based healthcare in undergraduate programs: prevention and management of NCDs, low-risk functional rehabilitation, safe physical activity protocols for specific populations (elderly, obesity, diabetes, heart disease, mental health), intersectoral collaboration with the Brazilian Unified Health System (SUS), and health promotion policies.
- To make gender and ethnic-racial equity cross-cutting themes that are evaluated in practice.
- Incorporating sustainability and cultural diversity into the management of physical education services.
- Formalize partnerships with gyms, clubs, hospitals, companies, and social organizations, including career mentoring, panels with managers, and residencies/internships with qualified tutors.
- Implement certification tracks (first aid, CPR, prescription platforms, inclusive care) within the course, increasing employability and confidence of graduates.

Teachers working in non-school settings recognize key strengths in their initial training—ethics, practical experiences that give meaning to learning, the ability to plan programs, and the capacity to envision different areas of work. At the same time, they identify formative obstacles that hinder the development of professionals fully aligned with current demands: outdated knowledge in the face of market dynamics, a deficit in technology and data, insufficient communication skills to engage with diverse audiences, and an incipient approach to equity and sustainability.

CHILEAN TEACHERS

The questionnaire included the participation of 60 teachers with degrees in Physical Education Pedagogy from different Chilean higher education institutions. The sample comprises professionals working in the Chilean education system, providing a view of initial teacher training from practical experience in the field.

The group is predominantly male, with 46 men (76.7%) and 14 women (23.3%). This predominance is consistent with the historical profile of the area. Regarding age, most participants (28 individuals, 46.7%) are in the 25-34 age range, followed by 18 participants (30.0%) in the 35-44 age range. The presence of 8 professors (13.3%) aged 45 or older and 6 (10.0%) under 25 indicates a composition ranging from professionals at the beginning of their careers to those with established trajectories.

The group presents a balanced distribution regarding the time since completion of training: 16 teachers (26.7%) obtained their degrees 1 to 3 years ago; 14 (23.3%) 4 to 6 years ago; 10 (16.7%) 7 to 10 years ago; and 20 (33.3%) 11 years or more ago. The majority (51 teachers, 85.0%) completed their initial training in the face-to-face modality.

Regarding the institution of origin, the sample is composed mostly of graduates from the Universidad del Bío-Bío and the Universidad Católica de la Santísima Concepción (UCSC), with a minority of graduates from other institutions such as the Universidad San Sebastián (USS), Universidad Andrés Bello, Universidad de las Américas, and Universidad de la Frontera. The majority (35 professors, 58.3%) graduated from public institutions.

The vast majority of participants (46 teachers, 76.7%) currently work as Physical Education teachers. Of these, most work in subsidized private or public schools, with a predominant workload of 31 to 40 hours per week (12 teachers) and 21 to 30 hours (10 teachers). The length of professional experience varies, with concentrations of 1 to 3 years (10 teachers) and 11 to 15 years (10 teachers), reflecting the diversity of the sample.

Analysis of questions using a Likert scale by Chilean teachers.

Relevance of Training and Theoretical-Practical Balance

In the question "Does the training received meet the needs of the current educational context?", the distribution was 22% (n=13) with scores of 5 and 55% (n=33) with a score of 4, totaling 77% positive evaluations. However, a significant contingent of 20% (n=12) positioned themselves neutrally. This high rate of neutrality, in contrast to the low explicit disagreement (4%), suggests a widespread perception that the training is partially adequate, but not fully responsive to the complexities and rapid changes of the current educational landscape, leaving a feeling that it could be more up-to-date and targeted.

In the statement "El equilibrio entre los contenidos teorías y prácticos fue adecuado para mi desempeño profesional", the results were more consolidated. 42% (n=25) totally agreed (grade 5) and 33% (n=20) partially agreed (grade 4), totaling 75% favorable perceptions. The median is 4. This result indicates that, for the majority, the training managed to establish an effective bridge between academic knowledge and practical application, this being one of the best-evaluated pillars of the training process.

Infrastructure and Utility of Professional Practices

Regarding the question "La infraestructura ofrecida fue coherente con las exigencias del proceso formativo", the evaluation was overwhelmingly positive. 47% (n=28) assigned a score of 5 and 28% (n=17) a score of 4, totaling 75% favorable responses. With a median of 4, it is clear that the majority of graduates consider that the university provided facilities and equipment consistent with the needs of their training.

In the section "Las prácticas realizadas durante mi formación fueron útiles para mi inserción profesional" (The practices carried out during my training were useful for my

professional insertion), the approval was even more significant. 55% (n=33) rated it with a score of 5 and 33% (n=20) with a score of 4, reaching 88% agreement. This is one of the strongest indicators in the entire analysis, highlighting that professional practices are perceived as the most crucial and successful axis of training, providing confidence and familiarity with the real school environment.

Third Dimension: Preparation for Challenges and Connection with the Reality of Work

In the statement "Me siento pronto para encarar los desafíos del contexto requer desde mi primera experiencia profesional", the results reinforce the self-efficacy of the teachers. 47% (n=28) strongly agreed (score 5) and 38% (n=23) partially agreed (score 4), totaling 85%. With a median of 4, it is evident that the training, together with the practices, managed, for the vast majority, to build a solid foundation of confidence for entering the profession.

In "Durante mi formación se promovieron vínculos con el ambiente real de trabajo desde las etapa iniciales", the perception is also mostly positive, although slightly less intense. 43% (n=26) fully agreed and 37% (n=22) partially agreed, totaling 80%. This indicates that the strategy of progressive insertion into real-world contexts is recognized and valued, although it may not have been a universally consistent experience for everyone.

Fourth Dimension: Skills in Technology and Communication

Regarding the question "I acquired skills in the use of technologies applied to teaching," the data reveals the most critical gap in the entire training. Only 25% (n=15) fully agreed (grade 5) and 37% (n=22) partially agreed (grade 4), totaling 62% of non-negative evaluations. However, a significant 23% (n=14) took a neutral stance and 15% (n=9) expressed disagreement (grades 1 and 2). The median is 3, highlighting a clear deficiency in teachers' preparation to integrate digital tools into their pedagogical practice, a fundamental skill in the 21st century.

In stark contrast, the statement "The training allowed me to improve my oral and written communication skills" received an excellent rating. 58% (n=35) strongly agreed (grade 5) and 25% (n=15) partially agreed (grade 4), reaching 83% positive responses. This result demonstrates that the training was very effective in developing these fundamental skills for the teaching profession.

Fifth Dimension: Addressing Cross-Cutting Themes (Inclusion, Gender, and Race)

In the question "Durante el curso fueron endereços contenidos sobre inclusión educacional de personas con discapacidad", the evaluation is divided and critical. Only 33% (n=20) totally agreed (grade 5) and 23% (n=14) partially agreed (grade 4), totaling 56%. It is alarming that 12% (n=7) totally disagreed (grade 1) and 12% (n=7) partially disagreed (grade 2), totaling 24% explicit disagreement. This is a clear sign that training in inclusive education is insufficient and does not meet the real demands of classrooms.

In "La formación abordó adecuadamente las cuestiones de equidad de gênero", the scenario is even more deficient. Only 27% (n=16) rated it with a score of 5 and 18% (n=11) with a score of 4, totaling 45% positive evaluations. Disagreement reaches 28% (scores 1 and 2) and neutrality 27%, indicating that the topic was treated superficially, inconsistently, or even ignored in many cases.

Finally, in "La formación abordó adecuadamente las cuestiones de equidad sétimo-racial", the situation is repeated. 32% (n=19) totally agreed and 23% (n=14) partially agreed, totaling 55%. Meanwhile, 15% (n=9) partially disagreed and 8% (n=5) totally disagreed, reinforcing the perception that issues of ethnic-racial diversity constitute a widespread and priority gap in the curriculum.

Sixth Dimension: Overall Satisfaction and Recommendation

In the question "Estoy satisfecho (a) con la formación profesional que recibí en la universidad", satisfaction is very high. 45% (n=27) totally agreed (score 5) and 47% (n=28) partially agreed (score 4), reaching a remarkable 92% satisfaction rate. The median is 4.

This positive sentiment is strongly reflected in the statement "I would recommend my training institution to other people interested in Physical Education," where 72% (n=43) fully agreed (score 5) and 23% (n=14) partially agreed (score 4), totaling 95% approval. This is the highest indicator in the entire survey, demonstrating strong institutional loyalty and a deep recognition of the value of the training received.

Finally, in "I consider my training to have been a solid base for my current performance and professional

development," the confirmation is robust. 60% (n=36) fully agreed (score 5) and 28% (n=17) partially agreed (score 4), totaling 88%. With a median of 4, it is clear that, despite the identified gaps, Chilean teachers consider their initial training a solid and fundamental base for their professional performance.

The analysis reveals, on the one hand, that training is highly valued in its fundamental aspects: theoretical-practical balance, quality of professional practices, development of communication and critical thinking, culminating in exceptionally high overall satisfaction. On the other hand, critical and systemic gaps are exposed in modern and urgent areas, notably in the use of educational technologies and in the in-depth approach to the themes of inclusion, gender equity, and ethnic-racial diversity. These weaknesses represent a mismatch between the training received and the complex and diverse demands of the contemporary Chilean educational system.

Thematic analysis of open-ended questions from Chilean teachers.

Theme 1: Strengths and most relevant experiences

Teachers highlight the importance of "progressive practices," "early practices," and the opportunity to work in "diverse school contexts" as fundamental to building confidence and understanding the educational reality.

Extension projects are cited as relevant, with groups such as "Akapana" (UBB's formative gymnastics) and work in "carceles" (prisons), "escuelas especiales" (special schools), and "Teletón" (a telethon) being remembered as transformative experiences that provided rich experiences and practical application of knowledge.

The influence of specific teachers, described as "committed," "demanding," and "dedicated," is a crucial factor. They are seen as role models who "marked a change" in their teaching methods.

Disciplines such as Anatomy, Physiology, Biomechanics, Motor Learning, and Curriculum are cited as fundamental for a well-founded and high-quality performance.

Theme 2: Weaknesses and less relevant experiences

Criticisms of overly theoretical and philosophical disciplines, without direct application in the classroom context (e.g., "history of education," "sociology," "cultural branches").

Multiple complaints about ICT courses that were "poor," "outdated," or focused on basic tools (Word, Excel) without addressing contemporary educational platforms and apps.

Remote learning is almost unanimously considered a negative experience, creating learning gaps, especially in practical and sports disciplines that "required in-person interaction".

Some argue that certain sports disciplines prioritized the physical performance of the university student, to the detriment of the pedagogical dimension of how to teach that sport.

Theme 3: Current Challenges Not Addressed in Training

The most frequently cited challenge was working with inclusion. Teachers do not feel prepared to work with students with ASD (Autism Spectrum Disorder), ADHD, physical and intellectual disabilities. They demand "tools for true inclusion".

Another relevant topic involves addressing the "mental health" of students, and the "mental health" of teachers themselves is a recurring challenge. This includes strategies for managing emotional crises and coping with the stress and burnout of the profession.

Chilean teachers also point to shortcomings in training regarding bureaucratic and administrative aspects: Knowledge about "administrative work," "class book," "school coexistence protocols," "labor laws," and "project development" are cited as lacking in training, but essential in daily practice.

In addition to the lack of content to address classroom management such as "conflict resolution," "dealing with parents," "classroom management in conflictive contexts," and "communication skills with families."

Theme 4: Priority themes for continuing education

Inclusive Education and Special Educational Needs (SEN): This is the most requested topic. Teachers are asking for

courses and diplomas on "disability," "neurodiversity," "strategies for ASD/ADHD," and "adapted and Paralympic sports."

School Coexistence Management: Training in "school coexistence," "conflict management," and "educational psychology" to deal with the complexity of classroom relationships.

Updates in Technology and Innovation: These require training in "ICT use," "apps and digital platforms," "artificial intelligence" applied to education, and "active methodologies" such as gamification and PBL (Project-Based Learning).

Disciplinary Specialization: There is interest in "sports nutrition", "sports psychology", "neuroscience applied to motor learning" and in-depth study in specific sports disciplines.

Topic 5: Post-Graduation Link

Communication exists, but is irregular: The majority ($\approx 70\%$) report that the institution maintains some contact, but in an "occasional" way. A minority ($\approx 20\%$) say they receive communication "con frecuencia" (frequently).

Lack of Communication for a Minority: A significant portion ($\approx 10\%$) states "No recibí ninguna información" or "No lo recuerdo", indicating a weakness in the post-graduation bond with these graduates.

Chilean physical education teachers give a predominantly positive assessment of their initial training, recognizing its theoretical solidity, the quality of professional practices, and the impact of a dedicated faculty. However, the diagnosis reveals a clear mismatch between the training received and the demands of the current educational context.

The gaps are concentrated in areas such as educational inclusion (in its multiple dimensions), the pedagogical use of digital technologies, and the management of school coexistence and mental health.

Summary and Recommendations from Professors in Brazil and Chile

In Brazil and Chile, teachers value their training courses for their theoretical foundation and general education, but

they point out gaps and a need for updating university-level training programs.

Practical experiences (internships, progressive internships, extension projects) are unanimously identified as the most relevant and decisive factor for professional insertion and performance.

Graduates from both countries acknowledge that the training fostered analytical skills for pedagogical decision-making and promoted an ethical commitment and sense of social responsibility.

Satisfaction levels with the training and willingness to recommend the institution of origin are remarkably high in Chile and relatively high in Brazil, indicating a general recognition of the value of the training received.

The gaps in learning are described in relation to 5 aspects:

1. Digital technologies: This is the most critical and widely shared gap. Training is perceived as profoundly deficient in preparing students for the pedagogical use of digital technologies, online tools, and artificial intelligence.
2. Superficial approach to inclusion and diversity: In both Brazil and Chile, teachers report that training to work with students with disabilities (ASD, ADHD, impairments) was insufficient. Issues of gender equity and ethnic-racial diversity are also addressed in an incipient and non-cross-cutting manner.
3. Insufficient preparation for socio-emotional and management challenges : Graduates do not feel prepared to deal with classroom management, conflict resolution, school coexistence, student mental health, and their own mental health as teachers. In Brazil, graduates also point to a lack of skills in business management and entrepreneurship.
4. Theory and practice: While the overall balance is well-regarded, there is consistent criticism regarding overly theoretical and philosophical disciplines that do not translate into tools applicable to daily professional life.
5. Weakness in the bond with the University after graduation: Communication from institutions with graduates regarding continuing education or professional development opportunities is irregular or non-existent for a significant portion of participants.

Cross-cutting recommendations (Brazil and Chile)

- Integrate disciplines and projects that teach the critical and creative use of technologies. This should include the use of apps, digital platforms, artificial intelligence for personalized learning, media content production, and data analysis for evaluation.
- To transform the themes of inclusion (special educational needs, disabilities, neurodiversity), gender equity, and ethnic-racial diversity into curricular components articulated with internship practices in diverse contexts.
- Create curricular spaces for the development of skills in conflict management, non-violent communication, leadership, empathy, and self-care for teacher mental health. Include concepts of administrative management and school coexistence.
- To ensure that professional practices (internships, extension programs) are progressive, supervised by qualified professionals, and carried out in real and diverse environments from the early years of the course.
- Establish systematic continuing education programs, offering refresher courses, lectures, and seminars in an accessible way to graduates, strengthening a lifelong learning community.

Specific recommendations for working in schools in Chile and Brazil.

- To increase the teaching hours and depth of subjects in Didactics, Learning Assessment, and Curriculum specific to Physical Education, ensuring that future teachers know how to translate theoretical knowledge into lesson plans.
- Formalize agreements with educational networks for the development of qualified internships, joint intervention projects, and co-training between university professors and primary school teachers.
- Include in training discussions and strategies for dealing with indiscipline, school violence, cultural diversity, and working with families, preparing teachers for the real challenges of everyday life.

Specific recommendations for non-school activities in Brazil.

- Incorporate subjects such as Management and Entrepreneurship, Personal and Digital Marketing,

Business Models, and Innovation in Health and Fitness Services.

- To deepen applied knowledge for working with the elderly, individuals with chronic non-communicable diseases (NCDs), and in public health contexts, including safety protocols and exercise prescription.
- To offer, within the undergraduate program, opportunities to obtain certifications in first aid (CPR), use of prescription software, and specific training methodologies, increasing employability.

MANAGERS: BRAZIL AND CHILE

This section presents the results of a questionnaire administered to a total of 67 managers in the field of Physical Education - 38 in Brazil and 29 in Chile. These professionals, who hire, supervise, and evaluate the performance of graduates in their work contexts, offer a critical and well-founded perspective on the alignment between university education and the real demands of the professional field.

In Brazil, the sample was intentionally segmented to capture the duality of the market: 20 managers work in the educational/school field (pedagogical coordination, school administration, education departments) and 18 work in other professional spaces (gyms, clubs, social organizations, consultancies, and health services). This distinction allows us to contrast the expectations and evaluations of two universes that, although sharing the same formative base, operate under distinct logics - the educational one and that of the fitness, sports, and health market in non-school programs.

In Chile, the sample of 29 managers is mostly composed of professionals in School Management (79.3%), with a minority working in Public Sports Management, clubs, and gyms. Unlike Brazil, Chile does not have a formal division between teaching degrees and bachelor's degrees in education, which is reflected in a more homogeneous manager profile, predominantly linked to the education system.

Brazilian managers

The questionnaire was answered by 38 Physical Education managers, 20 of whom work directly in the educational/school area, in roles linked to schools and education departments, while 18 hold positions in other professional settings, such as gyms, clubs, social organizations, consultancies, and health services.

Brazilian managers in the educational/school field.

In the group of 20 managers working in the educational/school field, a predominantly mature group is observed in terms of professional trajectory. The age profile shows a higher incidence in the 40-49 age range (50.0%, n=10) and the 50-59 age range (30.0%, n=6), totaling 80% (n=16) in advanced career stages; three managers (15.0%) are between 30 and 39 years old, and only one (5.0%) is 60 years old or older.

The group of managers is heavily concentrated in São Paulo, which accounts for 75.0% (n=15) of respondents. Minas Gerais follows, with 10.0% (n=2), and there are occasional presences in Rondônia (RO - North, 5.0%, n=1) and Piauí (PI - Northeast, 10.0%, n=2). This concentration can be explained by the dissemination bias resulting from the research process—although the questionnaire was sent to researchers throughout the country, the project leaders are linked to institutions in São Paulo, which expands local reach; on the other hand, the historical concentration of undergraduate and graduate courses in Physical Education in the Southeast region strengthens academic and professional networks in that territory.

Regarding gender identity, the sample is balanced: 50.0% (n=10) women and 50.0% (n=10) men. In terms of length of time in management roles, those with 1 to 3 years (30.0%, n=6) and 4 to 6 years (25.0%, n=5) stand out, totaling 55% (n=11) of professionals in the initial or intermediate stage. In contrast, 35% (n=7) have accumulated a long career, with 11 to 15 years (15.0%, n=3) or more than 16 years (10.0%, n=2). Two managers have been in their roles for less than 1 year (10.0%) and another two for between 7 and 10 years (10.0%), reinforcing the diversity of experience levels present in the group.

When we examine the educational path, we find a foundation strongly marked by Physical Education. However, training in related areas such as Pedagogy, Geography, Literature, and Biology also emerges.

Among the 20 managers, 14 completed Lato Sensu Postgraduate degrees, demonstrating investment in specializations applied to pedagogical practice and educational management. In addition, seven completed academic master's degrees, one completed a professional master's degree, and one completed a doctorate. The specific postgraduate areas mentioned confirm the emphasis on the interface between Physical Education and Education. These included Education (3 records), School Physical Education (2 records), as well as fields such as Psychomotricity, School Psychology, School Management, Special Education,

Environmental Education, Public Health, Neuropsychopedagogy, and Psychopedagogy.

Regarding the functions performed, two main areas stand out: on one hand, school management (pedagogical coordination, direction, guidance), which brings together 12 managers; on the other hand, educational management in technical teams from Municipal and State Secretariats, with 8 managers. This division shows that leadership is distributed both in the daily life of schools and in broader administrative instances, composing a field of action that requires articulation between pedagogical practice and public policies.

Analysis of questions on a Likert scale: Brazilian educational/school field managers

The first dimension assessed by the Likert scale questions was the relevance of initial training. Two questions in this dimension sought to capture managers' perceptions of the capacity of Physical Education degrees to prepare professionals for the concrete demands of schools. The proposed questions were: "Does initial training allow Physical Education professionals to face the challenges of the context in which I work?" and "I observe that the initial training of Physical Education professionals is consistent with the performance I expect from them?" The results reveal a critical perception. The first question obtained a median of 2.5, indicating that a large portion of managers do not recognize the initial training as sufficient preparation to deal with the daily challenges of the school. The second question had a median of 3, indicating neutrality regarding the coherence between the training received and the expected performance. Taken together, the data show that, although there is a certain general coherence perceived, there are important doubts about the effectiveness of the training in the face of real demands, suggesting gaps that weaken the ability of graduates to respond to the demands of school performance.

In the second dimension, focused on examining the content of the training and theoretical mastery, the managers answered the following questions: "I notice that the content covered in the initial training of Physical Education professionals is relevant to the public with whom they work" and "The Physical Education professionals with whom I work demonstrate theoretical and conceptual mastery of the area." The results point to an interesting contrast. The first question, with a median of 3, indicates that the relevance of the content is perceived only partially, without consensus among the managers. The second, however, reached a median of

4, evidencing a stronger recognition of the professionals' theoretical and conceptual mastery. This difference suggests that, although the curricular content may not always seem aligned with the specific needs of the school public, graduates demonstrate having built a solid conceptual base, which ends up being valued in the exercise of their function.

The third dimension investigated practical experience and the ability to integrate theory and practice. The following statements were presented: "The Physical Education professionals I work with have experiences consistent with the performance I expect" and "I perceive that the Physical Education professionals I work with integrate theory and practice during their work." Both obtained a median of 4, revealing that managers positively evaluate the practical experience of the professionals and their ability to articulate theory and practice in their daily work. The results of this dimension contrast with previous critical perceptions, as here emerges the recognition that, even if initial training presents gaps, professionals, throughout their careers, consolidate consistent practices that allow them to meet the expectations of school management.

The fourth dimension addressed ethical aspects and inclusive practice through the questions: "Are Physical Education professionals ethical and do they recognize the social commitment of their work?" and "Do I perceive that the Physical Education professionals I work with are trained to act inclusively and value differences?" Both received a median score of 4, although the first showed less dispersion, indicating greater consensus among managers. This dimension shows that there is confidence in the ethical stance and social commitment of Physical Education professionals, characteristics considered fundamental in the school context. The perception that they act inclusively is also significant, albeit with greater variability, suggesting progress in this training, even if not uniformly recognized by all managers.

The fifth dimension sought to evaluate training for sustainability and the use of technologies, through the following propositions: "I observe that Physical Education professionals are trained to act sustainably and practice democratic values" and "I note that the initial training of Physical Education professionals prepared them to use technologies involved in their work activities." The results point to clearer weaknesses: the first question reached a median of 3, reflecting neutrality regarding the incorporation of sustainable practices, while the second obtained a median of 2.5, evidencing a critical perception

of the technological preparation of graduates. These data suggest that initial training still does not fully meet contemporary demands related to sustainability and the integration of digital resources in pedagogical practices, revealing an important area for curricular updating in undergraduate Physical Education courses.

In the sixth dimension, attention turned to the development of planning skills and the encouragement of continuous improvement. The statements analyzed were: "I consider that the initial training achieved effective results in the development of skills in planning, executing, and evaluating classes" and "I observe that Physical Education professionals are trained to collect and use relevant information about their practices for their continuous improvement." The results maintain a critical tone: the first question had a median of 2.5, indicating that managers do not perceive the training as effective in this fundamental aspect of pedagogical practice. The second question obtained a median of 3, suggesting neutrality regarding the capacity to foster reflective and improvement practices. This dimension shows that initial training falls short precisely in areas central to the exercise of teaching, such as planning, executing, and evaluating teaching practices.

Finally, the seventh dimension brought together two questions of a more general evaluative nature: "I am satisfied with the overall level of preparation of graduates from Physical Education courses" and "I consider that the training offered to Physical Education professionals meets the needs of the institution where I work." The first question, with a median of 2, signals significant dissatisfaction among managers regarding the overall preparation of graduates; the second, with a median of 3, indicates a more neutral perception of the adequacy of the training to institutional needs. A combined reading of these questions reinforces the feeling of a mismatch between the initial training received in Physical Education courses and the concrete demands of schools and educational institutions.

When analyzed together, the seven dimensions compose a picture that combines recognition and criticism. Managers value ethics, social commitment, acquired experience, and the integration of theory and practice, but strongly question the relevance of curricular content, preparation for pedagogical planning, the use of technologies, and the adequacy of training to institutional needs. The transversality of the responses suggests that the main challenge lies in bringing Physical Education courses more

directly closer to the effective demands of daily school life, ensuring that graduates not only master concepts but are able to transform them into practices that respond to the complexity of the contemporary school.

Thematic analysis of open-ended questions: managers in the Brazilian educational/school field.

Question 1 - Essential skills, abilities and knowledge

Final themes : Pedagogical-curricular domain; educational management and leadership; ethics and social commitment.

School administrators emphasize the indispensable need for training that goes beyond sports technique and prioritizes solid pedagogical foundations. Mastery of curriculum, planning, and assessment appears repeatedly, indicating that teaching requires the ability to articulate objectives, methodologies, and ways of measuring learning. Management and leadership are also valued, both in terms of coordinating pedagogical teams and organizing school resources and spaces. The ethical and social dimension emerges as a cross-cutting axis: recognizing oneself as a public servant, respecting the diversity of students, and acting inclusively are seen as non-negotiable requirements. These data show that, in the school setting, the ideal professional is one who combines pedagogical and curricular competencies with an ethical and socially committed stance, without abandoning creativity and innovation to engage with different cultures and contexts.

Question 2 - Main qualities of the professionals you currently work with

Final themes: Professional commitment; collaborative and communication skills; innovation and inclusion.

When describing the qualities of the professionals they currently work with, managers recognize a set of attributes that underpin daily pedagogical practice. Dedication, commitment, and consistency between discourse and practice appear as positive traits. Creativity and enthusiasm are also highlighted, indicating that professionals are able to motivate students and make classes more engaging. Communication skills and teamwork with other teachers or managers are pointed out as important differentiators, especially in the school context that demands integrated efforts. Furthermore, there is recognition of a concern for inclusion, that is, for valuing the differences present in the classes. Thus, it is noted that the recognized qualities largely converge with the competencies considered

indispensable: pedagogical organization, ethical commitment, and sensitivity to diversity.

Question 3 - Most frequent weaknesses in training and/or performance

Final themes: Theoretical-pedagogical gap; weaknesses in planning and evaluation; difficulties in integrating theory and practice.

The responses regarding weaknesses point to structural problems in initial teacher training. Many administrators emphasize that teachers arrive at school with significant gaps in theoretical knowledge, especially concerning curriculum and teaching methodologies. There is criticism of the disconnect between what is learned at university and the concrete demands of the school, suggesting that courses are still unable to prepare future teachers to deal with the complexities of daily school life. The planning of diversified lessons, the assessment of learning, and the management of disciplinary situations are seen as weak points. Furthermore, administrators highlight the limited adoption of digital technologies as a pedagogical tool, which restricts innovation in teaching. In short, there is a widespread perception that initial teacher training still does not guarantee sufficient conditions to face the practical challenges of the contemporary school.

Question 4 - Gaps in initial training to be addressed in curricula

Final themes : Inconsistent internships and practices; lack of connection with the school; deficiencies in valuing diversity; insufficient preparation for management and policies.

School administrators are emphatic in pointing out the need for curricula that more effectively address pedagogical practice. Supervised internships, although planned, are evaluated as inconsistent and incapable of bringing students closer to the reality of the school environment. There is also criticism of the weak articulation between university and school, which compromises the relevance of learning. Furthermore, gaps are highlighted in the appreciation of bodily practices in local culture and in the approach to diversity, indicating that courses still tend to privilege traditional modalities to the detriment of broader cultural expressions. The absence of content related to school management and public policies is also mentioned, suggesting that the training does not adequately prepare students for coordination and leadership roles in the educational context. These gaps reinforce the perception that the curriculum needs to be rethought to respond to the demands

of the contemporary school, expanding the dialogue between theory, practice, and culture.

The analysis of the four open-ended questions revealed that school administrators share a highly critical, yet proactive, view on the initial training of Physical Education teachers. On the one hand, they recognize competencies related to curriculum mastery, planning, teaching methods, and ethical conduct as fundamental. They also value dedication, the ability to innovate, and commitment to inclusion in practicing professionals. On the other hand, they identify persistent weaknesses, such as theoretical gaps, difficulty in planning and evaluation, poor integration between theory and practice, and insufficient use of educational technologies.

The final themes allow us to conclude that educational/school administrators expect their professionals to act ethically, inclusively, and creatively, engaging with the real demands of the school. However, initial teacher training still does not fully meet these expectations, leaving the task of filling gaps to daily practices and the individual efforts of teachers. This situation reinforces the urgency of a curricular review that brings universities and schools closer together, strengthens the link between theory and practice, and values both the pedagogical and the cultural and social dimensions of Physical Education.

Brazilian managers of sports and physical activity programs outside of school.

Among the 18 managers working in spaces linked to sports and physical activity, we find a profile distinct from that of managers working in the educational/school area. A male predominance is observed: 77.8% (n=14) are men and 22.2% (n=4) are women.

The predominant age group is 40 to 49 years (50.0%, n=9), followed by 30 to 39 years (22.2%, n=4). The remainder are distributed among those under 30 years (11.1%, n=2), 50 to 59 years (11.1%, n=2), and 60 years or more (5.6%, n=1). This analysis shows a profile of consolidated leadership, but with significant participation of mid-career professionals.

The regional concentration is repeated: the Southeast region accounts for 72.2% (n=13) of the managers, with São Paulo being the state with the greatest weight (44.4%, n=8), followed by Rio de Janeiro (16.7%, n=3), Minas Gerais (11.1%, n=2), and Espírito Santo (5.6%, n=1). In addition, there are representatives in Paraná (5.6%, n=1) and Ceará (5.6%, n=1), while two respondents (11.1%) did not specify their state. This concentration reflects both the historical distribution

of Physical Education courses and the networks of relationships that enabled participation in the study.

Regarding experience, the group is quite experienced: 27.8% (n=5) have more than 16 years of experience, 22.2% (n=4) have been working for 11 to 15 years, and 16.7% (n=3) between 7 and 10 years. Another 22.2% (n=4) are in the 4 to 6 year range, while only 5.6% (n=1) have between 1 and 3 years of experience, and another 5.6% (n=1) have less than 1 year. Thus, two-thirds (66.7%, n=12) have accumulated seven or more years of experience, revealing a consolidated profile in management roles related to bachelor's degrees.

Initial training focuses exclusively on Physical Education, in its different emphases and combinations (teaching degree, bachelor's degree, or both). This homogeneity reinforces the professional identity of bachelor's degree holders as area specialists who have migrated to leadership and administrative roles.

In continuing education, the majority invested in Lato Sensu Postgraduate courses (83.3%, n=15), confirming the applied and technical nature of this profile. However, a significant portion also achieved Stricto Sensu degrees: academic master's (33.3%, n=6), doctorate (22.2%, n=4), and professional master's (5.6%, n=1). This data shows that, although the logic of applied practice is dominant, there is a significant layer of managers who sought academic depth.

Postgraduate areas confirm this trait. Notable areas include Exercise Physiology (2), Physiology (general, 2), Sports/Sports Training (2) and Education (2), as well as Sports Psychology, Cardiac Rehabilitation, Fitness, Pilates and Health. This is a repertoire strongly anchored in biological, training and health promotion bases.

Regarding the roles performed, there is a clear predominance of gym management (61.1%, n=11), followed by isolated participation in third-sector organizations, teacher collectives, sports consultancies, psychiatric hospitals, fitness studios, private practices, and personal trainer activities (each with 5.6%, n=1). This mosaic demonstrates that management in the bachelor's degree field takes place in varied environments, but is still strongly anchored in the fitness sector and the health and sports services market.

Analysis of Likert scale questions: Brazilian managers of sports and physical activity programs outside of school.

The first dimension evaluated was the relevance of initial training. In this dimension, two statements sought to capture managers' perceptions of the adequacy of a Physical Education degree in relation to the practical demands of the field. The questions were: *"Does initial training allow Physical Education professionals to face the challenges of the context in which I work?"* and *"I observe that the initial training of Physical Education professionals is consistent with the performance I expect from them?"* . Both obtained a median of 2 , with moderate dispersion, suggesting a critical and relatively consistent perception: for most, the training does not adequately prepare professionals for daily challenges , nor is it consistent with the expected performance. Here, unlike what was seen in the educational field, there is no clearer space for neutrality; the view of insufficiency prevails.

The second dimension addressed the content of the training and the theoretical mastery of the professionals. The following questions were presented: *"I notice that the content covered in the initial training of Physical Education professionals is relevant to the public with whom they work"* and *"The Physical Education professionals with whom I work demonstrate theoretical and conceptual mastery of the area."* The data point to a distinction: in the first question, the median was 2, reinforcing a perception of inadequacy of the content in relation to the public served. In the second, the median was 3, revealing more neutral assessments regarding theoretical and conceptual mastery. This contrast suggests that, even if the initial training does not include content fully adjusted to practical realities, there is some recognition of the conceptual basis built by the graduates, albeit without great enthusiasm.

The third dimension addressed practical experience and the integration of theory and practice. The statements evaluated were: *"The Physical Education professionals I work with have experiences consistent with the performance I expect"* and *"I perceive that the Physical Education professionals I work with integrate theory and practice during their work."* Both obtained a median of 3, with considerable dispersion. These results indicate intermediate perceptions: there is no consistent recognition that practical experience is fully satisfactory, but there is also no clear rejection. Managers seem to identify important variations among professionals, with some managing to integrate theory and practice, and others not, which generates an overall assessment of neutrality.

In the fourth dimension, focused on ethical and inclusion aspects, managers evaluated the statements: "Physical Education professionals are ethical and recognize the social commitment of their work" and "I perceive that the Physical Education professionals I work with are trained to act inclusively and value differences." The results were distinct: the first statement reached a median of 2, indicating a critical view regarding the ethical and social commitment of professionals; while the second presented a median of 3, reflecting neutrality regarding training for inclusion. The interpretation of this set suggests that, in the field of bachelor's degrees, managers do not consistently recognize ethical and socially committed performance, but at least identify signs of preparedness for inclusion and valuing diversity.

The fifth dimension addressed sustainability and the use of technologies. The following propositions were analyzed: "I observe that Physical Education professionals are trained to act sustainably and practice democratic values" and "I note that the initial training of Physical Education professionals prepared them to use technologies involved in their work activities." The first obtained a median of 3, suggesting a neutral perception regarding the presence of sustainability as a formative axis. The second reached a median of 2, indicating negative evaluations regarding technological preparation. This dimension highlights gaps already observed in the educational group as well: contemporary demands related to sustainability and, above all, to the mastery of technologies are not yet translated into positive perceptions by managers.

In the sixth dimension, planning and continuous improvement competencies were evaluated through the questions: "I consider that initial training achieved effective results in the development of skills in planning, executing, and evaluating the classes that Physical Education professionals teach" and "I observe that Physical Education professionals are trained to collect and use relevant information about their practices for their continuous improvement." The first received a median of 2, reinforcing the criticism that training has not been able to adequately prepare for planning, executing, and evaluating practices. The second, however, reached a median of 3, suggesting an intermediate view regarding the encouragement of continuous improvement. The overall picture is one of distrust regarding the capacity of initial training to provide robust didactic-pedagogical tools, but with some recognition that the courses encourage at least a reflective movement.

Finally, the seventh dimension more succinctly assessed the overall preparedness of graduates. The two propositions were: "I am satisfied with the overall level of preparedness of graduates from Physical Education courses" and "I consider that the training offered to Physical Education professionals meets the needs of the institution where I work." Both obtained a median of 2, indicating clear dissatisfaction. The managers' perception is that the initial training, as a whole, does not meet expectations or respond to the institutional needs in which they are involved.

Data from undergraduate program administrators reinforces a more critical pattern than that found in the educational field. While some positive aspects (such as ethics, social commitment, and theory-practice integration) were recognized among school administrators, in the undergraduate program field these points appear weak or only average. Theoretical mastery and practical experience are not rejected, but neither are they clearly affirmed as strengths. The general dissatisfaction, combined with low evaluations in planning, ethics, and technological preparedness, suggests a scenario in which initial teacher training courses need to overcome a considerable gap in relation to the expectations of the market and the institutions in which these administrators work.

The analysis of the set of dimensions allows us to identify significant differences between managers in the educational/school area and those linked to bachelor's degree programs. Right from the first dimension, which assessed the relevance of initial training, clear contrasts emerge. In the school group, responses oscillated between criticism and neutrality: the median was 2.5 on the question about the training's ability to prepare for daily challenges and 3.0 on the question about coherence with expected performance. This suggests a view of insufficiency, but still with some room for partial recognition. In the bachelor's degree program group, both questions had a median of 2, reinforcing a more negative and homogeneous perception that the training does not meet expectations, neither in terms of practical preparation nor in relation to coherence with professional demands.

In the second dimension, which examined the content of the training and theoretical mastery, differences continue to appear. Among school administrators, the relevance of the content was evaluated neutrally (median 3), while theoretical mastery was better recognized (median 4). This indicates that, even if the content is not seen as fully

adjusted, there is confidence in the conceptual knowledge of the professionals. Among bachelor's degree administrators, however, the relevance of the content received a critical evaluation (median 2), and theoretical mastery only reached neutrality (median 3). Thus, what appears as a relative strength in the school group—theoretical mastery—is diluted into median perceptions in the bachelor's degree group, reinforcing a view of fragility.

The third dimension, which addressed practical experience and the integration between theory and practice, also presents interesting contrasts. In the school setting, both questions reached a median of 4, revealing managers' confidence in the accumulated experience of professionals and their ability to articulate theory and practice in their activities. In the bachelor's degree setting, both questions had a median of 3, suggesting neutral perceptions, without consensus and with greater variability. This shows that, while in school daily practice seems to reinforce and even compensate for gaps in initial training, in bachelor's degree settings this same experience does not translate into such positive recognition, possibly due to dealing with specific technical demands of the health, fitness, and sports market.

When examining the fourth dimension, related to ethics and inclusion, a striking reversal is observed. Among school administrators, ethics was one of the best-rated aspects (median 4, with little dispersion), and training for inclusion was also perceived positively (median 4, although with greater variability). However, at the undergraduate level, ethics received a critical evaluation (median 2), and the issue of inclusion remained neutral (median 3). This suggests that, in the school setting, professionals are recognized for their ethical and social commitment, while in market-oriented environments the perception is less favorable, possibly because these dimensions are not explicitly prioritized in daily practices.

The fifth dimension addressed sustainability and technologies. In both groups, the results revealed weaknesses. In the school setting, sustainability was in a neutral position (median 3), and technological preparedness was critically evaluated (median 2.5). In undergraduate programs, the pattern repeats itself: neutral sustainability (median 3) and even more negative technology (median 2). This convergence suggests a structural challenge in initial Physical Education teacher training courses: both in schools and in the market, the incorporation of sustainable practices and technologies is not yet perceived as sufficiently consolidated.

The sixth dimension investigated planning and continuous improvement. In the school group, responses showed dissatisfaction regarding the development of planning, execution, and evaluation skills (median 2.5), but indicated some neutrality in encouraging continuous improvement (median 3). In the bachelor's degree program, the situation is similar, but with a more critical tendency: planning with a median of 2 and continuous improvement also at 3. In both cases, managers consider that initial training does not adequately prepare them for pedagogical planning and reflective management of practices, but the bachelor's degree program is more stringent in its evaluation.

Finally, in the seventh dimension, which synthesized the overall evaluation, the school group expressed dissatisfaction (median 2 in overall satisfaction and 3 in adequacy to institutional needs), while the bachelor's degree program was even more critical, with a median of 2 in both questions. This shows that, for both groups, the preparation offered by Physical Education courses does not satisfactorily meet the expectations of the job market, but this perception is more severe in the bachelor's degree program.

Thematic analysis of open-ended questions: Brazilian managers of physical activity and sports programs outside of school.

Question 1 - Essential skills, abilities and knowledge

The thematic analysis of the first open-ended question, which sought to assess the skills, abilities, or knowledge essential for professional practice in Physical Education, according to the managers, revealed the following initial codes and themes.

Final themes : Ethics and professional conduct. Technical and scientific knowledge articulated with practice. Relational and management skills.

The answers to this question reveal that the managers of the bachelor's degree program do not see the Physical Education professional merely as a technician who executes exercises. On the contrary, they expect a multifaceted profile that articulates science, ethics, communication, and a strategic market vision. The ethical and socio-emotional core appears as a foundation, highlighting that attitudes of respect, empathy, and responsibility are considered indispensable. At the same time, relational skills are required, such as good communication and teamwork, seen as fundamental for interacting with clients and colleagues in dynamic environments such as gyms and clubs. Mastery of scientific knowledge—physiology, training, evaluation—is

pointed out as a necessary condition to support safe and qualified interventions. Added to this is the appreciation of intellectual curiosity and the willingness to learn continuously, attributes that indicate the expectation of a professional in permanent updating. Finally, market insertion is mentioned, with references to personal marketing and team management, revealing that working in the bachelor's degree program also demands managerial skills and a business vision. These axes reflect the expectation that the Physical Education professional with a bachelor's degree should not only be an executor, but an individual capable of articulating science, ethics, human relations, and strategic vision.

Question 2 - Main qualities of the professionals you currently work with

The second open-ended question, focused on the main qualities of professionals in the field, brought up a set of initial codes and themes that reveal both relational and technical aspects valued by managers.

Final themes: Ethical and humanized posture . Relational and communication skills.

There is a continuity with the findings from the previous question: the qualities recognized in practicing professionals correspond precisely to those competencies identified as indispensable, indicating that many graduates are able to develop, in practice, virtues that compensate for gaps in their initial training.

The responses show that managers recognize in current professionals a set of qualities that go beyond the technical dimension. Responsibility, respect, and empathy are frequently mentioned values, suggesting that interpersonal relationships form the basis of performance recognized as high-quality. Communication skills appear as an important differentiator, associated with dynamism and proactivity. Furthermore, a "clinical eye" and the ability to correct movements and adapt practices to clients' needs indicate an appreciation for individualized attention. Although they criticize initial training, managers find virtues in the professionals' daily practices that translate into ethical commitment, the ability to stay updated, and sensitivity in dealing with different audiences.

Question 3 - Most frequent weaknesses in training/performance

The third question sought to identify the most common weaknesses perceived in the training and performance of professionals, revealing a critical situation based on the following codes and themes.

Final themes : Technical and scientific inadequacy. Weakness in planning and practical application. Inconsistent professional conduct.

The responses from managers reveal a scenario of structural weaknesses. There is particular emphasis on insufficient mastery of fundamental areas of Physical Education, such as physiology and biomechanics, which compromises the capacity for technical performance. Furthermore, difficulty in applying theory to practice and a lack of planning appear as recurring problems. The limitations are not restricted to technique: many managers point to shortcomings in managerial and market skills, associated with a poor understanding of management dynamics and career strategies. From the point of view of attitude, a lack of humility, interest in learning, and professional ethics are mentioned as significant barriers. Thus, this set of criticisms reinforces the perception that initial training has failed to ensure either a solid scientific foundation or consistent professional attitudes.

Question 4 - Gaps in initial training that should be addressed in curricula

Finally, the fourth question asked managers to identify gaps in initial training to be addressed in the curricula, indicating the following codes and themes.

Final themes: Insufficient professional practice. Fragmented and poorly interdisciplinary training. Absence of social and inclusive dimensions. Deficit in market management and innovation.

The responses were emphatic in highlighting that professional practice, especially through consistent internships, remains a weak point in initial training courses. Criticism of the predominance of distance learning reinforces the perception that practice and real-world experience are being neglected. Furthermore, managers point to the absence of subjects that broaden theoretical training, such as anthropology, psychology, and statistics, as well as content applied to the market, such as digital marketing, human resource management, and entrepreneurship. The need for greater attention to social issues—race, gender, and inclusion—and the importance of reinforcing ethics and interdisciplinarity as central axes are also mentioned. Together, these gaps reveal an expectation for a more practical, critical training that is connected to both social demands and the requirements of the contemporary market.

The analysis of the four open-ended questions reveals a picture of tensions and complementarities regarding the training and performance of Physical Education professionals

at the bachelor's level. On the one hand, managers describe an ideal profile marked by a combination of ethics, relational skills, technical-scientific mastery, capacity for continuous learning, and market vision. This ideal is also reflected in the qualities recognized in practicing professionals, who stand out for their responsibility, empathy, communication, and sensitivity in dealing with clients, revealing that many virtues emerge from individual effort and daily work experiences. On the other hand, the responses regarding curricular weaknesses and gaps highlight structural limitations: deficits in the scientific foundation, planning difficulties, lack of effective practice in internships, insufficient preparation for management and business, and insufficient attention to social and inclusive issues. The criticism of the predominance of distance learning reinforces the perception of a disconnect between university and professional reality. In summary, managers indicate that, although they find committed professionals capable of building qualities in their daily work, initial training still does not systematically deliver the necessary competencies for a bachelor's degree, requiring a review that articulates practice, interdisciplinarity, ethics, and innovation, in order to align the curriculum with the contemporary demands of the market and society.

The final themes identified in the four questions allow for a more consistent interpretative framework. They show that managers strongly value ethics, professional conduct, and relational skills, recognize the indispensability of technical and scientific knowledge, but point to significant gaps in practical application, pedagogical planning, management, and attention to social and inclusive issues. Furthermore, they criticize the low effectiveness of practical experiences and the weakness of physical education teacher training in distance learning courses.

Thematic analysis reveals that the profile desired by bachelor's degree holders combines technique, ethics, humanization, management, and inclusion, but initial training still fails to deliver this set of skills systematically, leaving the task of filling training gaps to the professional and the market itself.

Summary and recommendations from managers for initial teacher training in Physical Education.

Analysis of the information collected from managers reveals that:

- School administrators tend to recognize strengths in professionals, such as ethics, social commitment,

practical experience, and integration of theory and practice, even when faced with criticism of initial training. However, administrators of bachelor's degree programs adopt a more critical stance in almost all dimensions, negatively evaluating both the relevance of the content and the practical, ethical, and technological preparation.

- Both groups agree in pointing out weaknesses in planning, the use of technologies, and the overall capacity of initial teacher training to meet institutional needs. However, they diverge in recognizing positive aspects: the school values and identifies strengths in daily practice and social values, while the bachelor's degree program sees more gaps than potential.

This contrast suggests that initial training in Physical Education faces the challenge of engaging with two worlds that, while sharing the same academic origin, operate under different logics. In the school setting, the weight of the pedagogical and social dimension allows gaps to be compensated for by practice and collective commitment. In the bachelor's degree program, on the other hand, technical, market-related, and scientific demands seem to expose the shortcomings of the training more harshly, resulting in more critical evaluations and greater dissatisfaction.

By comparing the two profiles, it becomes clear that physical education managers share some common characteristics, such as geographic concentration in the Southeast region of Brazil and a strong emphasis on physical education training. However, their work contexts and educational backgrounds clearly differentiate the groups.

In the educational/school field, there is a marked approach to physical education, particularly its interface with pedagogy, with paths that value institutional management and articulation with public policies. Within this group, the plurality of initial training and postgraduate areas points to a broader vision of the educational function of Physical Education.

Among managers in other professional fields within Physical Education, a market-oriented, technical-scientific logic predominates, with an emphasis on physiology, training, health, and fitness. The role of manager in this context is linked to the administration of gyms, studios, consultancies, and projects, requiring operational and strategic management skills combined with technical expertise.

Both groups reveal the relevance of continuing education as a structuring element of their career paths, albeit with distinct focuses: on one hand, specializations and master's degrees that address pedagogical and educational demands; on the other, training focused on biological foundations, training, and health practices.

This overview confirms that management in Physical Education is a plural field, which moves between the school and the market, between public policy and private enterprise, between pedagogical planning and technical prescription. Recognizing these specificities is fundamental for thinking about both the initial and continuing education of professionals who assume leadership roles, as well as for strengthening the area as a whole.

The integrated analysis of the two manager profiles points to the need to overcome the fragmentation between theory and practice, strengthening supervised internships from the early years of the course. This recommendation appears consistently in both data sources, reinforcing that managers see practical experience as an indispensable axis of professionalization.

Another recurring aspect concerns curriculum updates. In the open-ended questions, criticisms arise regarding the relevance of the content and its outdatedness in relation to contemporary demands; in the Likert scale responses, curriculum adequacy also received median evaluations, confirming the perception of misalignment.

The ethical dimension and social commitment, as well as the appreciation of diversity, emerge as central points. In the open-ended questions, managers highlighted the importance of consolidating this perspective in disciplines, internships, and outreach programs. On the Likert scale, the evaluation was less favorable, indicating that, although present, the dimension is not yet perceived as sufficiently solid.

Finally, the pedagogical and professional use of digital technologies emerges as a significant weakness in both sources: in open-ended responses, managers emphasize the lack of preparedness of graduates to handle digital tools; in the scales, items related to the topic received low ratings.

Specific recommendations from Brazilian educational/school field managers.

In the school setting, administrators acknowledge significant progress in ethics, social commitment, and the integration of theory and practice, but point out that these attributes often result more from daily practice than from

initial training. This observation is supported primarily by open-ended questions, in which administrators insist on greater investment in teaching methods, active learning methodologies, classroom management, and formative assessment.

Based on the Likert scale responses, it became evident that supervised internships still lack greater consistency and diversity of experiences, with average and scattered evaluations. Therefore, it is recommended that undergraduate programs increase internship hours, diversify school contexts, and strengthen partnerships between universities and basic schools.

Furthermore, content related to school management and knowledge of public policies was strongly suggested in the open-ended questions, highlighting that teaching practice goes beyond the classroom and requires coordination and pedagogical leadership skills.

Specific recommendations from Brazilian managers of physical activity and sports programs outside of school.

Among courses geared towards the gym, club, health, and fitness market, the criticisms were more severe. In both open-ended questions and the Likert scale, managers negatively evaluated the relevance of the curriculum content, practical preparation, and ethical dimension.

The need for greater curricular integration with market demands is a recommendation supported by both data sources: managers advocate for stronger partnerships with academies, hospitals, clubs, and social organizations, in order to anticipate practical and management experiences.

The shortcomings in ethical training and the lack of appreciation for diversity emerged prominently in the open-ended questions, indicating that undergraduate education is still excessively technical and lacks sensitivity to social dimensions.

Furthermore, the items on infrastructure, innovation, and technologies applied to fitness and health received average or negative ratings on the Likert scale, reinforcing the need for curriculum updates that encompass not only physiological and training aspects, but also management, entrepreneurship, and the critical use of technologies.

In summary, the findings from both sources converge on a clear diagnosis: initial teacher training in Physical Education needs to be closer to the concrete realities of professional practice. At the undergraduate level, this requires deepening pedagogical preparation, expanding and

diversifying internships, and strengthening the university-school relationship. At the bachelor's level, the challenge is to articulate the scientific basis with practical experiences in real-world contexts, incorporating ethics, management, and technological innovation as structuring axes of the training.

Chilean managers

The questionnaire included the participation of **29 Chilean managers** who work directly with Physical Education professionals. This group is composed of school administrators, principals, coordinators, and public sports managers.

The group of managers is predominantly male, with **18 men (62.1%)** and **11 women (37.9%)**. Regarding age, there is a significant representation of experienced professionals: 10 managers (34.5%) are in the 50-59 age range, followed by 9 (31.0%) in the 30-39 age range and 6 (20.7%) in the 40-49 age range. The presence of 3 managers (10.3%) aged 60 or older and 1 (3.4%) under 30 completes a spectrum that combines consolidated experience and more recent perspectives.

The vast majority of managers (23, 79.3%) work in School Management (pedagogical coordination, direction, inspection), reflecting that the main field of absorption for graduates is the education system. Other areas of activity include Public Sports Management (2 managers), Management in Sports Clubs (2), Coordination of Extracurricular Activities (1) and Management in Gymnasiums (1).

The backgrounds of the managers are diverse, including Physical Education Professionals (8 managers), Pedagogues from other areas (History, Science, Basic Education), and other backgrounds. This diversity enriches the analysis, allowing for both specialized and cross-cutting perspectives on teaching performance.

The group is characterized by solid experience in management and supervisory roles. 10 managers (34.5%) have been in the role for 7 to 10 years, and 8 (27.6%) for more than 16 years. This length of experience lends great authority to their evaluations, as they possess a broad repertoire to compare different generations of graduates and their performances.

Analysis of issues on a Likert scale: Chilean managers

Analyzing the responses to questions on a Likert scale (1 to 5) by managers allows for an evaluation of initial training based on the demands and expectations of the job market. This perspective is crucial for identifying whether the

skills developed at university are aligned with the real needs of institutions.

Managers rate the overall preparedness of graduates as moderately positive, but with significant reservations. The median for most questions in this section is 4, but frequency analysis reveals a high degree of dispersion and a considerable number of neutral and negative assessments.

Only 45% of managers fully or partially agree that training enables professionals to face the challenges of the context (Q1). The coherence between training and expected performance (Q2) and the relevance of the content to the target audience (Q3) also received similar evaluations, with approximately 70% positive responses, but with 25-30% neutral or negative responses. This indicates that, for a significant portion of managers, there is a perceptible deficit in the adequacy of training to the practical reality of schools and other work environments.

The question about practical experience consistent with expectations (Q5) and the integration between theory and practice (Q6) obtained the lowest medians (3) and the highest percentages of negative responses.

Only 39% of managers agree that graduates demonstrate adequate practical experience, and a third (32%) negatively assess the integration of theory and practice. This data is alarming and suggests a fundamental gap perceived in graduates: the ability to translate academic knowledge into effective actions and solutions in their daily professional lives. Theoretical-conceptual mastery (Q4) is better evaluated (median 4), indicating that the knowledge base is recognized, but its application is not.

Managers strongly recognize the ethical and social commitment of professionals (Q8, Md=4), with 75% giving positive evaluations. However, preparation for acting inclusively and with respect for differences (Q9) and training in sustainability and democratic values (Q10) receive more modest evaluations (Md=4), with approximately 25% of managers expressing disagreement or neutrality. This perception corroborates the findings among students and professors with degrees, reinforcing that training for diversity is a weak point that needs to be strengthened.

Preparedness for the use of applied technologies (Q11) received the worst evaluation of the entire questionnaire, with only 50% of managers expressing a positive opinion and 29% expressing disagreement. This is a clear deficiency consistently highlighted by all surveyed groups.

The skills of planning, executing, and evaluating classes (Q12) and the ability to collect and use information for self-improvement (Q13) were also evaluated with medians of 4, but with a significant portion (17% to 28%) of negative evaluations, indicating room for improvement in didactic-pedagogical training and in the development of reflective professional autonomy.

Despite the specific criticisms, overall satisfaction with the level of preparation of graduates (Q14) and the perception that the training meets the institution's needs (Q15) obtained medians of 4. However, it is significant that about 25% of managers are not satisfied or are neutral regarding overall preparation. This demonstrates that, while one group sees value in the training, a significant portion of employers sees the need for significant evolution in Physical Education courses.

Thematic Analysis of Open-Ended Questions: Chilean Physical Education Managers

Question 1 - Essential skills, abilities and knowledge

The thematic analysis of the first open-ended question, which sought to identify the essential skills, abilities, or knowledge for the work of Physical Education professionals according to Chilean managers, revealed the following final themes:

Final Themes: Socio-emotional and interpersonal skills ; adaptability and problem-solving abilities.

The answers to this question reveal that Chilean managers expect a professional who transcends the mere executor of physical activities. The desired profile is that of a well-rounded teacher .

The socio-emotional and relational dimension emerges as an indispensable foundation. Competencies such as "teamwork," "empathy," "soft skills," "emotional commitment," and "good treatment of students and administrators" are repeatedly emphasized. This indicates that the ability to build a positive work environment and to relate positively to the educational community is perceived as being as crucial as disciplinary knowledge.

At the same time, managers highly value adaptability and problem-solving skills. Terms such as "flexibility to the context," "resolute," "adaptability," "proactivity," and "ability to manage different situations" paint a picture of an agile professional who does not limit themselves to applying pre-established formulas, but who is able to read the environment and respond creatively to unforeseen events and challenges in daily school life.

Finally, the didactic-pedagogical domain is explicitly defined as a non-negotiable technical competence. Managers are not just looking for a sports specialist, but a teacher. This is clear in the mention of skills such as "planning," "adapted teaching," "contextualizing the curriculum," "teaching methodologies," and "evaluation." The expectation is that the professional will know how to translate the knowledge of Physical Education into meaningful and well-structured learning experiences for all students.

Question 2 - Main qualities of the professionals you currently work with

The second open-ended question, focused on the most prominent qualities in professionals in the field, yielded a set of responses that reveal a strong alignment with the skills considered essential.

Final Themes: Commitment and work ethic ; positive attitude and energy ; relational and collaborative skills.

There is a continuity with the findings from the previous question: the qualities recognized in practicing professionals correspond precisely to the competencies identified as indispensable. This suggests that, despite criticisms of the training, many graduates manage to develop, in practice, virtues that are highly valued in the professional field.

Commitment and work ethic are the most celebrated qualities. Words like "commitment," "responsibility," "sense of belonging," and "willingness" appear frequently, indicating that reliability and dedication are attributes that distinguish good professionals in the perception of managers.

A positive attitude and energy are perceived as a catalyst for the learning environment. "Joy," "enthusiasm," "dynamism," "motivation," and "positive attitude" are described as qualities that inspire students and create a climate conducive to participation and engagement in class.

Finally, relational and collaborative skills are reiterated as a fundamental quality. "Buena disposición" (good disposition), "trabajo en equipo" (teamwork), "colaborativos" (collaborative), "buenas relaciones interpersonales" (good interpersonal relationships), and "cercanía" (closeness) demonstrate that the ability to work harmoniously with colleagues, students, and families is a marker of professional quality in the Chilean school context.

Question 3 - Weaknesses that you most frequently identify in your training and/or performance

The third question sought to identify the most common weaknesses perceived in training and performance, revealing a critical picture consistent with the gaps indicated in the Likert scales.

Final Themes: Deficiencies in training for inclusion and diversity ; weaknesses in pedagogical and administrative management ; insufficient leadership and reflection skills.

The responses from the administrators reveal weaknesses that directly impact the effectiveness of teaching practice. The deficiency in training for inclusion is the most prominent and specific criticism. Administrators observe that professionals arrive without the tools to "approach students with ASD," "work with children with disabilities," or "attend to diversity." This is a gap that, according to the administrators, severely limits the ability to guarantee a truly inclusive physical education.

Weaknesses in pedagogical and administrative management constitute another area of criticism. Difficulties in "planification," "evaluation," "group management," "time optimization," and knowledge of "public education policies" are frequently mentioned. This points to a training that has failed to consolidate the basic competencies of planning, executing, and evaluating teaching work, as well as its integration into the normative framework of the education system.

Finally, a deficiency in leadership and reflection skills is cited. Managers identify "lack of leadership," "poor critical reflection on their practice," "poor participation in general councils," and "scarce argumentative capacity." This weakness suggests that initial training may be producing professionals more focused on task execution than on assuming a reflective and leadership role within the school institution.

Question 4 - Gaps in initial training to be addressed in continuing education

Finally, the fourth question asked managers to identify gaps in initial training that could be addressed in continuing education programs, pointing to very specific updating needs.

Final Themes: in -depth study of inclusion, neuroscience and diversity ; consolidation of specific teaching methods and assessment ; management and leadership in the school context.

The responses were emphatic in highlighting the need for a deeper understanding of contemporary themes, with an absolute focus on inclusion. "Attention to diversity,"

"tools for students with special educational needs," "inclusion," "neuroscience," and "neurodivergence" are the most requested topics. This shows that managers perceive these as the most dynamic areas of knowledge and in which initial training is most outdated in relation to the demands of the classroom.

The consolidation of specific teaching methods is also a priority. Administrators are requesting training in "inclusive teaching design," "formative assessment," "active methodologies," and "diversified strategies." There is a clear call for continuous training that goes beyond theory and offers practical and applicable tools to improve the daily classroom experience.

Finally, the need to develop management and leadership skills in the school context is reiterated. "Project management," "pedagogical leadership," "collaborative work," and "school coexistence" are mentioned as areas where professionals need to strengthen themselves to broaden their impact beyond the schoolyard and actively participate in institutional life.

Recommendations from Chilean Administrators for Initial Teacher Training in Physical Education

Chilean managers outline an ideal professional profile marked by a balance between knowing how to be (commitment, ethics, relationships), knowing how to do (teaching skills, adaptation, problem-solving), and knowing (curricular knowledge, inclusion).

The most unanimously identified weakness, and the main demand for ongoing training, is training to work with diversity and inclusion. This is not a gap among others, but rather the main perceived gap between training and the reality of schools.

Administrators do not differentiate between "physical education teacher" and "teacher." They expect a professional with expertise in classroom management, planning, assessment, and school coexistence—competencies traditionally associated with teaching in general.

Weaknesses in the practical application of knowledge, in group management, and in solving real-world problems indicate an initial training that may be excessively theoretical or disconnected from real-world educational contexts.

In summary, Chilean administrators indicate that initial training in Physical Education needs improvement in the following areas:

Incorporating Inclusion: Training should prepare professionals for the real diversity of the classroom, with

concrete tools for students with special educational needs, autism spectrum disorder, disabilities, and other conditions.

Strengthening the teaching-learning core: It is necessary to consolidate skills in planning, formative assessment, and classroom management, forming a reflective teacher and not just a sports technician.

Developing socio-emotional and leadership skills: Training should go beyond technical skills and invest in the development of soft skills, such as teamwork, communication, conflict resolution, and leadership, which are essential for success in the 21st century.

Expanding training in management and regulations: Knowledge of public policies, educational legislation, and project management is necessary for professionals to act autonomously and with an understanding of the system in which they are involved.

Summary and Recommendations from Managers in Brazil and Chile

Managers from both countries recognize fundamental qualities in graduates, such as commitment, energy, enthusiasm, and a willingness to work in teams. However, they also point out gaps in initial training. The assessment unanimously indicates that Physical Education courses are producing professionals with a recognized theoretical foundation, but insufficiently equipped to face real-world challenges. This mismatch is most acutely manifested in three dimensions:

1. **Inclusion and Diversity.** The inability to effectively address diversity is the most severe and consistently cited weakness. Brazilian and Chilean managers report that graduates arrive without the practical tools to include students with disabilities. Gender and ethnic-racial diversity issues are prominent in Brazil.
2. **Integration of theory and practice.** There is a consensus that training is excessively theoretical and disconnected from reality. Managers observe a weak integration between theory and practice, resulting in professionals who know the "why" but do not master the "how" to solve complex day-to-day problems, such as managing a heterogeneous group, planning and evaluating teaching sequences, or adapting to contexts with limited resources. In Brazil, the criticism is even more pronounced among undergraduate program managers, who negatively evaluate even the ethical dimension and the overall alignment of training with market needs, signaling a deeper crisis of relevance in this segment.
3. **Proficiency in digital technologies.** Preparation for the pedagogical use of technology is assessed as the

weakest competency. In today's world, managers expect professionals who know how to use digital tools to enhance teaching, assessment, and motivation—an expectation that initial training has clearly failed to meet.

To realign initial training with the demands of work contexts, managers from Brazil and Chile point to the need for a curricular reform centered on the following pillars:

- To train professionals capable of planning and delivering truly inclusive lessons, with mastery of adaptation strategies and appreciation for diversity.
- To implement a continuum of supervised and reflective practical experiences from the first semesters, in partnership with schools, clubs and communities, exposing the student to the real complexity of the profession.
- To develop in graduates the ability to apply theoretical knowledge in a critical and reflective manner.
- To incorporate pedagogical digital literacy, teaching the critical use of digital technologies as tools for teaching, assessment, and management in Physical Education.
- To train professionals with the autonomy to lead initiatives, manage resources, and understand the system in which they are embedded, expanding their impact beyond the classroom or the sports field.

administrators argue that initial training in Physical Education needs to evolve from a model that prioritizes the transmission of knowledge to one that prioritizes the development of competencies for action. Universities are challenged to close the gap between theory and practice, training professionals who not only possess solid knowledge but are, above all, competent, inclusive, and innovative agents, prepared for complex educational and social challenges. Implementing these recommendations constitutes a strategic path to raise the quality and relevance of Physical Education training in Brazil and Chile.

BRAZIL ANALYSIS OF INFORMATION COLLECTED IN FOCUS GROUPS (STUDENTS, GRADUATES AND MANAGERS)

Four focus group meetings were held: one with former teachers, one with administrators, and two with students. The meetings lasted between 55 and 90 minutes.

The group of professionals (graduated teachers and managers) participating in the focus groups totaled 11 subjects, with 4 graduates from Physical Education courses

and 7 managers. From the point of view of gender distribution, there was a predominance of male participants (n=7), compared to the number of women (n=4).

Regarding age range, the graduating teachers ranged from 25 to 54 years old, forming a heterogeneous group that articulates formative and professional trajectories at different stages of their career development. Among them, two participants are in the 45-54 age range, one in the 35-44 age range, and one between 25-34 years old. This generational diversity allows access to formative perceptions influenced by distinct contexts of educational policy and curricular reforms in the field, as well as different levels of insertion into the world of work.

Educational managers, in turn, are mostly situated in the 50-59 and 30-39 age ranges, suggesting an experienced group composed of both more senior professionals and younger, rising technical staff, forming distinct administrative generations within the educational bureaucracy. The more significant presence of managers in the 50-59 age range indicates a profile of long institutional experience and participation in the cycle of public policies and decision-making processes of the network. Managers in the 30-39 age range tend to represent technical staff undergoing renewal, with strong operational experience and close involvement in the implementation of programs and training at the network level.

Regarding professional experience, graduates demonstrate work directly linked to daily school life and pedagogical practices, with experience in different contexts—public schools, academies, and sports projects—which highlights a formative path sustained mainly by work experience. Among them, there is a noticeable presence of professionals who combine experiences in School Physical Education (SPE) and in non-school environments (MPE), reinforcing the multiplicity of typical teaching insertions in Physical Education in the country.

The managers, on the other hand, have consolidated experience in the area of public education policies and in the coordination of educational programs, training, and equipment, both at the central (secretariat) and territorial levels.

The group of participating students consisted of nine undergraduate students in Physical Education, organized into two distinct stages of their initial training. Of this total, two students were in their eighth semester, aged 20 and 21, representing the group about to complete the course and experiencing their final internships and the process of

professional insertion. The other seven participants, aged between 20 and 25, were in their sixth semester, an intermediate phase of their training, marked by the deepening of pedagogical curricular components and the beginning of supervised teaching experiences.

The group's composition is predominantly male, which is consistent with the historical distribution of men in Physical Education courses. In generational terms, it is a homogeneous group, composed of young adults in transition between academic training and the construction of their professional identity.

FOCUS GROUP OF BRAZILIAN STUDENTS

The analysis of the focus group data with students resulted in the emergence of the following themes:

1. Curriculum imbalance

This theme captures students' dissatisfaction with the distribution of content and the excessive focus on areas that do not correspond to their professional aspirations, especially the lack of content geared towards the academic and high-performance sectors.

Students perceive that the curriculum emphasizes working with children and adolescents and playfulness in sports initiation, but has little content geared towards the fitness industry, high-performance sports, and special needs groups.

There is a consensus among the students who participated in the two focus groups conducted with them regarding the lack of practical and theoretical subjects and content focused on the academic field, a professional sector in which students can undertake paid internships. Despite acknowledging the presence of "a lot of practice" and "a lot of theory," and positively evaluating the course, the students identified an "imbalance" in the way the content is presented, as, according to their aspirations, "learning by doing" is more relevant.

Participants suggest that the bachelor's degree should be "more focused on high performance," acknowledging that "there are also people who prefer the higher-level sports aspect, more physical preparation," while the didactic and recreational aspects are more emphasized.

2. Practice as the driver of learning.

This theme encompasses students' perception that meaningful learning and professional development occur primarily through practice and active interaction, contrasting with a monotonous, theoretical teaching model,

and understanding internships as a primary source of preparation for professional practice.

The students agree that the experience gained in a real-world environment of sports projects with children, academies, and practical situations offered by the University contributes more to professional preparation than classes, even those that focus on practical aspects.

Practice is seen as the "start, the turning point" and the driving force behind the evolution of physical education, with a decisive role played by teachers who supervise the internship in professional learning.

classes are criticized for being "monotonous," essentially consisting of the professor "entering with the slide, talking, talking, talking, talking, closing the slide, taking a break, opening the slide, talking, talking, talking, closing the slide, and the class is over."

Students value "interaction in learning" and interaction with the teacher, as this "sometimes also brings the desire for the student to want to study." They seek a "more open relationship where the teacher is willing to listen" and the possibility of "giving their opinion," indicating that classes without dialogue with students are not effective.

There is an explicit request for "more practical classes" and a need to "go to different places to gain more experience." The lack of this contact with real-world work contexts leaves students vulnerable when they undertake paid internships, as they depend on professionals in real-world settings to advance their professional skills.

3. Gaps in the interaction between the university and the world of work.

This topic addresses criticism of universities for failing to provide adequate support in connecting students with the job market (internships), delegating almost all responsibility to the student.

Students feel the lack of "another internship bridge" and suggest there should be a "better bridge" between the university and clubs or academies. They report having to "chase after" internships. The need for paid internships is a critical point. Although "voluntary internships" are possible, students need "paid internships" to "pay for college, pay bills, and survive." It is suggested that the university "could establish agreements so that students could do paid internships."

The lack of support for internships can lead the college to lose students to universities that offer a bridge to the professional field through paid internships.

Students also point to the crucial importance of dialogue and more individualized attention from the course coordinator to their needs, even indicating risks of dropping out of the course due to a lack of support from the coordinator.

4. Taking ownership of one's own education.

This theme highlights the students' perception that, despite the university's shortcomings, the ultimate responsibility for their education and preparation rests with their individual effort and active pursuit of knowledge and experience.

THE The student acknowledges that "we also have to seek out" the subjects themselves, because if they depend solely on the university, they will be "a professional who just repeats the same recipe." Personal commitment to one's own education is highlighted as an important quality for making the most of the course and the learning opportunities during the internship.

The search for information and experience, such as that gained during internships, was crucial for preparation. A student seeking to work with children took extra courses at other institutions and sought information in the literature of the field to meet the demands of the internship involving sports activities for children. The students recognize that the university course provides a broad foundation for them to study and seek information autonomously, but understand that individual aspects and personal commitments are more relevant for adequate professional preparation.

Analysis of the focus group results reveals a paradox in the training of USJT students in Physical Education. On the one hand, participants express a strong sense of autonomy and protagonism in their pursuit of training, actively complementing their university experience with internships and external courses. On the other hand, they express significant criticism of the curricular structure and institutional support.

The main point of tension lies in the misalignment between the curricular emphasis (very focused on play/childhood) and the demands of the job market (need for a focus on academia/high performance and special groups) , coupled with the fragility of the bridge between the

university and the world of work (internships) , especially regarding remuneration and the facilitation of partnerships.

The findings suggest the following implications:

1. Evaluate the balance between areas, considering the suggestion of a more segmented curriculum or the expansion of mandatory/elective subjects focused on training, exercise prescription, and high performance.
2. Transform the classroom model by investing in active, interactive methodologies that allow for student input, minimizing the "monotonous class" format.
3. Prioritize the creation of agreements for paid internships and establish closer and more facilitative communication with clubs and gyms, recognizing internships as a critical factor for employability.
4. Increase contact and support from the course coordinator to mitigate the perception of a lack of "support" and the feeling of being disregarded in the training process.

Focus Group of Brazilian Teachers

The analysis of data from the focus group with former inmates resulted in the emergence of the following themes:

1. Devaluation of Physical Education in the School Curriculum

This theme focuses on the perceptions of former teachers regarding the structural, social, and political challenges that directly impact the practice of teaching Physical Education in schools . The narrative reveals a complex professional field, marked by persistent obstacles, but also by a notable sense of resilience and an ethical-political commitment to the area .

The core of the criticism lies in the devaluation of Physical Education compared to other curricular components considered in school performance evaluations. Graduates denounce that the centrality of achievement indices and external evaluations, which explicitly prioritize Portuguese Language and Mathematics, reinforce a curricular hierarchy that marginalizes Physical Education in the school curriculum.

This devaluation is not only manifested in the perception of management or parents, but also in the material and structural conditions of the school environment. Complaints about the lack of materials and adequate physical structure are a real obstacle that limits pedagogical possibilities, preventing the offering of diverse and rich

bodily experiences, as conceived and studied in initial teacher training . The teacher, then, needs to be an "artisan" of teaching, creatively adapting to the deficiencies, which, as a rule, is not addressed in initial university teacher training.

A significant challenge is the management of prescribed and rigid curricula , particularly in the State of São Paulo . This curricular rigidity leaves little room for teacher autonomy, which is essential for teachers to connect their Physical Education classes with local realities, needs, and student cultures. Teachers trained to be critical and reflective agents are faced with a structure that forces them to be mere protocol-followers.

The sportification of the practice is another symptom of this rigidity . Although initial teacher training has problematized and criticized the view of Physical Education focused solely on sports performance (traditional approach), the reality for many colleagues still working in schools shows this practice as dominant. Therefore, teachers need to undertake a process of pedagogical deconstruction so that Physical Education is seen in its entirety and not just as sports training or recreation.

The effects of the pandemic , and particularly the experience of distance learning in Physical Education , emerge as elements of complexity . The distance learning modality, by its very nature, imposes challenges on a field whose pillars are bodily experience and practical interaction. Although not detailed in the excerpts, it is presumed that the experience of teaching in a post-pandemic context, where student dropout rates and socio-emotional challenges are heightened, adds a layer of difficulty to current teaching practice.

2. Training with Praxis

This topic addresses the critical evaluation by graduates of their initial training and proposes concrete ways to overcome its limitations, with an emphasis on teaching practice - reflective and transformative action based on reality .

Graduates highlight that the main gap in initial teacher training lies in the difficulty of establishing a clear connection between the theoretical-critical framework

learned in the classroom and the complexities of daily school life . Theory, when detached from practice, risks becoming abstract or inoperative, leaving the teacher vulnerable to recreational or sport-oriented practices.

Overcoming this limitation requires a closer and more meaningful connection between theory and practice , integrating the University and the School more fully, in training programs that consider the contemporary challenges of teaching.

The participants in the working group proposed a set of strategies that could have strengthened their training, transforming it into a process more coherent with social and school reality:

- The quality of the internship is seen as crucial . A "meaningful internship" implies not only superficial observation or teaching practice, but reflective and supervised immersion, allowing the student to experience the entirety of the school routine, the tensions, conflicts, and pedagogical opportunities.
- Extension projects that take students into the field and into social realities are seen as an essential mechanism . Extension fulfills the role of opening up the university to its walls, exposing future teachers to a diversity of individuals and contexts, which is vital for an education that values the diversity of students attending schools.
- Curricular activities, such as study groups to promote collective and critical reflection on practice . These spaces function as *loci* of praxis, where the student can process field experiences in light of theory, with the support of peers and professors.

3. Continuing education

This topic explores the post-graduation period and reveals a mindset among graduates who view continuing education not as a bureaucratic obligation, but as an ethical commitment to the quality of their own teaching practice .

The graduates' career paths are marked by a relentless pursuit of self-improvement. They report participating in courses, academic events, and pursuing postgraduate studies. This suggests that initial training, while important, is seen as a starting point, not the finish line.

Participation in academic events demonstrates a desire to stay up-to-date with the knowledge produced in the field, reinforcing professional identity.

Crucially, continuing education manifests itself as a space for sensitivity to new social demands . Teachers seek reflection on: the use of technologies, social markers of difference, diversity, and inclusion.

This openness to emerging themes reflects the understanding that the school is a microcosm of society and that the teacher, to be relevant and transformative, needs to be prepared to deal with the complexity of identities and inequalities that permeate the educational environment.

Underlying the pursuit of continuing education is a deep understanding of education as a human process that brings students and teachers closer together . The graduating teacher values the relational dimension of teaching, seeing it as an exchange that nurtures mutual growth. The discourse concludes with the reaffirmation that training needs to be critical .

thinking is defined as the ability to develop individuals who can interpret and act upon different realities . The teacher's ethical commitment, therefore, is to educate for critical reading and intervention in reality. Continuing education is seen as the mechanism by which the teacher ensures the maintenance of their own critical thinking and relevance.

The results of this Focus Group outline a picture of professional resistance amidst a context of structural and curricular weaknesses . The main tension identified lies in the disparity between idealized training and school reality .

The complaint about the devaluation of Physical Education in the school curriculum. This is not a personal lament, but a denunciation of educational policy that, by prioritizing ranking by indices to the detriment of holistic education, empties the potential of Physical Education to act in body culture and health. In this scenario, the teacher is forced into a daily act of resistance , striving to be creative and remain true to their ethical commitment, even with the lack of materials and the rigidity of the prescribed curriculum . This resistance, as an act of commitment, resonates in the vision of continuing education as an active choice to avoid surrendering to inertia or the professional "recipe."

Graduates do not criticize the theory itself, but rather its disconnect from reality. They suggest more meaningful internships and the inclusion of community outreach projects. These are key elements for anchoring education . This implies a training model that embraces the "pedagogy of praxis," where theory illuminates practice, and practice

feeds back into theory in a cyclical and reflective way, overcoming the theory-practice dichotomy. The university should act as an active mediator, leading the student to experience diversity and social issues *in situ*, transforming the classroom into a laboratory for critical reflection, and not just a repository of information.

The relevance of continuing education demonstrates that graduates have internalized the vision of a Physical Education professional as a transformative intellectual. By actively seeking knowledge in emerging areas such as technology, diversity, and social markers, they demonstrate that critical training (the ultimate goal of the teaching degree) does not end with the diploma, but is perpetuated as an ethical professional stance. This stance ensures that the teacher will not merely be a repeater of content, but rather an agent capable of interpreting social complexity and acting within it.

The information gathered from graduates of undergraduate teacher training programs demonstrates the need for the university to review the role of internships and extension programs. It is in these areas that praxis is built. The creation of "study groups that promote collective and critical reflection," suggested by the graduates, could be institutionalized to guarantee a continuous space for dialogue between curricular theory and experiences gained from internships, transforming the teacher into a researcher of their own practice.

Teacher training must therefore be restructured not only in its content, but also in its pedagogical and political structure, to ensure that graduating teachers are able to be agents of change, resistant to devaluation and committed to a critical, inclusive education that interprets new realities.

Recommendations:

1. To promote critical reflection on prescribed curricula, emphasizing strategies for de-sportification and dialogue with the social markers of difference, preparing teachers to work in diverse realities, overcoming the curricular rigidity perceived in the field.
2. Strengthen the Internships and Extension area, ensuring that internships are more meaningful and that extension projects take students into the field. The university should create mechanisms to theoretically process these field experiences, such as mandatory reflective study groups.

3. To actively create and promote postgraduate and extension courses on technology in education, inclusion, and diversity. , recognizing the graduate's desire for continuous improvement as an ethical commitment to the field .

For the graduates who participated in the focus groups, the University, in responding to these demands, will not only improve the quality of initial training, but will also align itself with the ideal of critical training, capable of forming individuals who interpret and act in different realities , preparing the Physical Education teacher to be an agent of social transformation.

FOCUS GROUP OF BRAZILIAN MANAGERS

The analysis of data from the focus group with managers resulted in a description of competencies considered essential for professional performance.

1. Learning how to learn

The most valued skill is learning how to learn . Managers state that old "formulas" and methodologies are no longer successful, given the diversity... It has taken over all fields . Consequently, the ideal professional must have a profile capable of moving through different areas and adapting, since it is no longer a matter of applying a fixed method .

For managers, it is necessary to train professionals capable of To better connect theory with practice. and to possess contextualized knowledge. The ability to "deconstruct in order to construct" new knowledge and practices .

Managers highlight the value of skills that go beyond technical content, such as the ability to adapt to new challenges and theoretical-methodological perspectives. In addition, they emphasize attitudinal aspects such as establishing stronger connections with the target audience of the professional intervention and demonstrating empathy. , understood as the ability to put oneself in another's shoes in order to avoid being rigid in practice .

Managers conducted a critical assessment of the training of those entering the market, pointing out weaknesses in the structural and methodological foundations of the courses .

2. Learning through in-person activities

online (distance learning) Physical Education course "does not advocate for" and, in the view of administrators, advocates against the nature of the field . Physical Education training requires a structure that enables professionals to reflect and experience/live . The criticism lies in the fact that distance learning does not offer the necessary practical experience and interaction for the field, which reinforces the difficulty teachers face in translating knowledge into reality .

3. Understanding the context of action using academic background.

Managers acknowledge the importance of initial training, but point to the disparity between theoretical knowledge and the real-world challenges of the field: A major challenge for recent graduates is dealing with students in formal education who are "obligated" to be in school. , unlike students in projects, academies or clubs, who demonstrate an intrinsic interest .

Managers realize that physical education professionals have historically shied away from producing academic knowledge , believing that "practice was enough ." This has contributed to the identity crisis in physical education, leaving the field vulnerable to external judgments. Therefore, training needs to go beyond technique to produce professionals with an academic foundation and the capacity for critical reflection to face a rapidly evolving job market .

Common ground between the three audiences (students, alumni, and administrators)

Based on the thematic analysis of the three Focus Groups (students, graduates , and managers) , we highlight the points of convergence and recommendations for improving professional training courses in Physical Education.

The main and most emphatic point of convergence among the three groups is the inadequacy of their training in connecting theory and practice with the complex reality of professional practice .

Students complain that theoretical classes are "monotonous" and feel that meaningful learning, the "start" and the "turning point," occur almost exclusively during the internship, which is seen as the "engine of learning."

You Graduates criticize the main gap in their training: the disconnect between theory and the complexities of daily professional life , which leaves them vulnerable to traditional practices.

Managers reinforce this criticism, pointing out that distance learning "advocates against" the nature of the field (which requires experience and reflection) and that professionals entering the market lack contextualized knowledge and the ability to "deconstruct in order to build" new practices.

The groups converge in favor of an education that abandons the pedagogy of transmission and adopts active and reflective models, where practice and critical discussion about it are at the center.

All three groups identify a mismatch between the course content and the real demands of the professional context, which manifests itself in an identity crisis regarding the role of Physical Education.

The students They point to a curricular imbalance focused on play/childhood activities, with a lack of employability areas (academias, high-performance sports, special groups), which are sources of paid internships and professional aspirations.

The graduates They criticize the rigidity of "prescribed and inflexible curricula" and the need to desportify school practice, while at the same time the training should enable them to deal with diversity (social markers of difference) and the new social demands of the different audiences in Physical Education classes.

Managers demand a professional with a generalist profile and academic background who is able to combine theory and practice, that is, who masters the essential technique but applies it in a contextualized and reflective way.

The current curriculum is considered inadequate because it does not prepare professionals to work in multiple realities (compulsory schooling, academia, social projects) with the necessary theoretical and technical depth.

Despite criticisms of the university, all groups agree that professional success fundamentally depends on the attitude and proactivity of the individual, who must be autonomous in the pursuit of knowledge.

The students state: "we also have to seek out" the subjects and the experience, so as not to be a professional who "just repeats the same recipe".

Graduates transform "Continuing Education" into an "ethical commitment" and an act of resistance, actively seeking complementary training in emerging themes such as technology and inclusion .

Managers consider "learning to learn" to be the most valued skill. They seek professionals who can make the necessary "connections" to engage formal students and navigate a constantly evolving job market.

The analysis of the information collected in the focus groups demonstrates that physical education training is at a critical juncture, where the lack of institutional support and curricular misalignment force professionals to individually seek the quality and relevance of their practice. The university must urgently move from a teaching-transmission posture to an institution that mediates praxis

Below is a set of recommendations, based on the points of convergence and proposals from the participants:

1. Reform the teaching model, requiring active, interactive methodologies that allow for dialogue and student input, minimizing the "monotonous class" format.
2. To provide study activities, groups, and projects within the curriculum that function as a *locus* of praxis, allowing students to critically process field experiences in light of theory.
3. To assess the inadequacy of distance learning for the field of Physical Education, arguing for the need for contextualized practical experiences during training.
4. Create an active support structure for paid internships (according to student demand) and meaningful internships (according to graduate demand). The university should act as a "better bridge" for partnerships with academies, clubs, and educational networks.
5. To ensure dialogue and more individualized attention from the course coordinator in order to mitigate the perception of a lack of "support" and the risk of dropping out of the course, as warned by the students.
6. segmented curriculum or the expansion of elective/required subjects that cater to different market areas (High Performance, Special Groups, Fitness), without neglecting a critical perspective.
7. Training should go beyond technique, providing "academic grounding and critical thinking skills," forming a professional capable of interpreting and acting in different realities, and of combining mastery of specific content in the field with the ability to read and act in diverse contexts.

CHILE ANALYSIS OF INFORMATION COLLECTED IN FOCUS GROUPS (STUDENTS, GRADUATES AND MANAGERS)

STUDENT FOCUS GROUP

The Chilean diagnosis, based on the SWOT matrix (Strengths, Weaknesses, Opportunities, and Threats) with students in their final year of Initial Teacher Training in Physical Education Pedagogy, reveals a scenario with solid pedagogical foundations, but with specific intervention focuses on the practice of inclusion and curricular diversity.

Strengths: Academic Climate and Solid Pedagogical Foundations

The Chilean narratives highlighted the positive aspects of coexistence and curriculum guidance.

Close Teacher-Student Relationship: The training is valued for its human touch, accessibility, and willingness to engage in dialogue among teachers. This relationship is seen as crucial for creating a positive learning environment.

Focus on School Didactics: The curriculum is recognized for providing good foundational tools and focusing on sports didactics rather than technique, guiding training in a way that is appropriate for use in school settings.

Effective Preparatory Resources: "Mini-classes" are explicitly cited as a useful resource for simulating teaching, practicing planning, and building initial confidence.

Weaknesses: The Inclusion Gap in Practice and the Imbalance of Content

The weaknesses identified highlight flaws in the translation of knowledge into practice and in the equitable distribution of topics.

Theory-Practice Gap in Inclusion: This is the most serious weakness. Although there is theoretical knowledge,

students report insufficient preparation to intervene in real-life situations of diversity, such as cases of ASD, disability, and functional diversity. The lack of practical experience in inclusion is a factor that increases insecurity in teaching.

Imbalance in Sports Coverage: The curriculum presents disparate training and limited coverage of subjects. Some sports receive an excessive amount of teaching time (e.g., basketball), while others are addressed superficially, affecting the preparation of future teachers.

Insufficient Training in Body Expression: The lack of time and content dedicated to body expression, specifically the national dance (cueca), was highlighted, affecting the confidence and ability to teach this cultural manifestation.

Lack of Key Subjects: There is a perceived lack of specific branches in vital pedagogical areas, such as assessment and teaching methodology, which, when offered, are taught by teachers who are not specialists in Physical Education.

Opportunities and Threats: Modernization and Response to System Demands

The opportunities and threats identified guide the innovation agenda of FID Chile.

Need for Practical Inclusion and Conflict Management: The clearest opportunities are the incorporation of real-world inclusion experiences (adapted sports, cases of ASD), and the strengthening of school coexistence through specific subjects that address classroom management, gender biases, and conflict resolution.

Updates and Technology: There is a demand for technological updates, including the integration of themes such as Artificial Intelligence (AI), gamification, and active methodologies to respond to students' interests and avoid the risk of falling behind more innovative schools.

Threats to the School System: External threats are dominated by the rapid and ever-changing demands of the school system, especially the increase in diagnoses and special educational needs, requiring constant updating that initial training is not yet able to fully provide.

Focus Group for Teachers and Managers in Chile

The analysis of Focus Groups with Graduates and Employers in Chile complements the students' diagnosis, offering a retrospective view of the effectiveness of Initial Teacher Training (ITT) in Physical Education Pedagogy and the expectations of the job market.

Teachers

The group of teachers, already integrated into the Chilean school context, corroborates the perceptions of pedagogical and human strengths, but points out crucial weaknesses related to administrative preparation and adaptation to the new realities of inclusion.

Strengths: Human Differentiation and Flexible Methodologies

- **Institutional Seal Focused on Human Beings:** The program is seen as having a positive differentiating factor compared to other institutions, notably due to its "human approach" and the approachability and accessibility of its faculty, fostering a highly skilled professional profile.
- **Methodologies and Innovation:** There is a recognition of flexible and contextualized methodologies, with dynamic classes that adapt to the reality of the session. Graduates value the incorporation of emerging sports and innovative activities (such as the adaptation of popular games and video games) that enhance the connection with students' interests.
- **Basic Tools:** Despite the adverse contexts (pandemic and social upheavals), graduates feel they have acquired the essential skills and basic tools necessary for the initial practice of teaching.

Weaknesses: Inclusion, Administration, and Career Transition

- **Gap in Current Inclusion:** Preparation for inclusion is considered insufficient. Previous training focused on populations with chronic diseases (obesity, diabetes), but fails to provide tools to address the special educational needs prevalent today, such as ASD (Autism Spectrum Disorder) and ADHD.
- **Administrative Training Deficit:** A serious gap is the insufficient administrative training, with graduates unprepared for essential tasks such as filling out class books, assuming the role of head teacher, or planning school guidance.

- **Uncertainty in Labor Market Entry:** The lack of advance guidance and transition modules to the real world of work means that the transition from student to teacher is experienced with uncertainty and a learning process "on the fly" .

Opportunities: Context and Support Modules

- Graduates suggest creating a branch called "Adaptation to context and generations" to prepare teachers for cultural changes and youth trends.
- The inclusion of a "Job Placement" module is seen as essential for training in administrative tasks and organizational culture.

Employers (Managers):

Employers, representing the perspective of the school system and its practical demands, confirm the positive attitude and aptitude of graduates, but point out significant flaws in group management and organizational structure .

Strengths: Vocation, Research, and Adaptability

- **Vocation and Proactivity:** A strong willingness to serve , proactivity , and receptiveness to suggestions are the greatest qualities of the student body and alumni.
- **Solid Research Foundation:** A solid research foundation is recognized , with an emphasis on knowledge creation and a scientific perspective, differentiating FID from other institutions.
- **Sports Diversification:** Emphasis is placed on training in emerging sports (calisthenics, slacklining , kinball) alongside the practice of classic sports.
- **Curriculum Preparation:** Graduates demonstrate mastery of the curricular foundations and an understanding of the requirements of the national curriculum.

Weaknesses: Group Management, Inclusion, and School Organization

- **Lack of Group Management Skills:** This is the most challenging aspect for practitioners. There is a lack of training in group management and conflict resolution, which is essential for day-to-day classroom practice.
- **Limited Inclusion:** Employers confirm limited training in inclusion tools , which exposes the school system to the risk of facing unexpected situations (e.g., students with ASD) without prior teacher preparation.

- **Organizational and Academic Deficit:** There is a lack of knowledge regarding the school's organizational structure (functions of the UTP, school coexistence, management teams) and a lack of preparation for leadership/mentoring roles . Deficiencies in formal academic competencies (writing, APA style) and research methodology are also noted .

Threats and Opportunities: Strategic Alignment

- **Threats:** The mismatch between training and the demands of the system (especially in inclusion) and the devaluation of research at the undergraduate level are the main threats.
- **Opportunities:** Managers suggest strengthening project formulation (fundraising), restructuring the curriculum to include branches on school guidance and leadership skills , and including practical role-playing branches to train project and group management.

The final synthesis aligns the demands of the three Chilean audiences into six strategic axes, which should guide the modernization of Initial Teacher Training:

Strategic Axis	Focus of the Action (Curriculum Implementation)	Target Audience for the Improvement
1. Inclusion and Attention to Diversity	Mandatory modules on ASD, SEN, and disability, with specific strategies for Physical Education and practical simulations of motor adaptation.	Students and Graduates
2. Group Management and Leadership	Areas of expertise include classroom management, conflict resolution , and school leadership . Explicit training in the roles of course head and socio-emotional support .	Titleholders and Employers
3. Academic and Research Skills	Strengthening research methodology, academic writing, and APA style guidelines . Creating pathways for in-depth research and workshops on database usage.	Employers
4. Connection with School Structure	Specific module on the internal organization of colleges (functions of the UTP, management teams) and training in project formulation and management (fundraising) .	Titleholders and Employers

5. Innovation and Diversification in Sports	Expanding the range of emerging and adapted sports. Integrating gamification and innovative motor experiences.	Students
6. Link to Public Policies	Constant alignment of the curriculum with current laws and regulations (e.g., the Law on Autism Spectrum Disorder) and creation of an educational policy observatory that provides feedback to the career path.	Titleholders and Employers

FINAL CONSIDERATIONS

This diagnosis, based on the collective perceptions of students, graduates, and administrators from the Brazilian and Chilean contexts, achieved its central objective by outlining a multifaceted and critical overview of initial teacher training in Physical Education. The convergence of the collected data, despite regional specificities and curricular distinctions between the Bachelor's/Licentiate degree (Brazil) and the unified training (Chile), reveals a set of recurring challenges and thematic axes that impose themselves as an imperative for pedagogical innovation in universities in both countries.

The Theory-Practice Gap

The weakness consensually pointed out by managers and graduates in both nations lies in the profound gap between theoretical-academic knowledge and competence for professional action in real-world contexts. These professionals recommend that initial training evolve from a model that has historically prioritized the transmission of content to a paradigm centered on the development of reflective competencies. The graduating professional needs a solid framework that allows them not only to "know," but fundamentally to "know how to do" and "know how to be" in the face of the inherent complexity of the work environment, whether in school, academia, or the community.

Basic Principles for Curriculum Innovation in Brazil and Chile

Innovations in initial teacher training for Physical Education in Brazil and Chile should therefore be structured around four axes, which represent the recurring themes and main demands identified by the study:

1. Inclusion, Diversity, and Equity: Mastering strategies for planning and delivering truly inclusive classes has emerged as an indispensable and often deficient skill. New curricular frameworks should formalize the capacity for adaptation and appreciation of diversity (including ethnic-racial and gender issues) as a central pillar, preparing future professionals to work in heterogeneous environments and ensure equitable access to physical culture.
2. Practical and reflective immersion: It is urgent to break with the model of late and isolated internships. The implementation of a continuum of supervised and reflective practical experiences from the initial semesters is recommended. This immersion, in strategic partnership with schools, clubs, and communities, should expose the student to the real complexity of the profession, using practice as a laboratory for the critical application and constant reconstruction of theoretical knowledge.
3. Developing autonomy: Managers in both countries demand professionals who are not merely instructors. Training must equip graduates with the autonomy to lead initiatives, manage resources (material, temporal, and human), and understand the socio-political-institutional system in which they operate. The curriculum should therefore incorporate the development of management and leadership skills that broaden the professional's impact beyond their immediate area of activity.
4. Pedagogical digital literacy and the critical use of technologies: In a scenario of digital acceleration, the inclusion of pedagogical digital literacy is unavoidable. This is not limited to the instrumental use of software, but rather to teaching the critical use of digital technologies (and Artificial Intelligence) as innovative tools for teaching, assessment, information processing, and communication, enhancing learning management in Physical Education.

The implementation of these recommendations guides a strategic path for higher education institutions in Brazil and Chile. The challenge is to train professionals who, in addition to possessing solid scientific knowledge, are above



all competent, inclusive, and innovative agents, capable of bridging the gap between the university and the complex demands of contemporary society.

PARTICIPANTS



FUNDING

