Educação em Análise

Article

Integrative project in Professional and Technological Education: students' perceptions of learning process[1]

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Abstract

This article analyzes the perceptions of students enrolled in the Integrated Technical Course in Information Technology at the Federal Institute of Piauí (IFPI), Campus Piripiri, regarding the contributions of the Integrative Project to the learning process. This is a qualitative study whose data were collected through an online survey composed of closed-ended and open-ended questions answered by students from all three years of the course. A total of 44 students participated in the study. The discursive responses were analyzed using Content Analysis. The study is situated within the field of Professional and Technological Education (PTE) and is grounded in the principles of Integral Human Education, curricular integration, and extension practices. The results indicate that students recognize the Integrative Project as a relevant proposal for articulating theory and practice and for connecting school content with real-world problems. However, they also point out limitations related to methodological clarity, teacher guidance, time organization, and difficulties in teamwork. It is concluded that the Integrative Project contributes partially to the learning process, highlighting the need to strengthen interdisciplinary planning, teacher education, and institutional conditions in PTE.

Keywords: Professional and Technological Education; integral human education; curricular integration; integrative project.

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Projeto integrador na Educação Profissional e Tecnológica: percepções de estudantes sobre o processo de aprendizagem

Resumo

Este artigo analisa as percepções de estudantes do Curso Técnico Integrado em Informática do Instituto Federal do Piauí (IFPI), Campus Piripiri, acerca das contribuições do Projeto Integrador para o processo de aprendizagem. Trata-se de uma pesquisa de abordagem qualitativa, cujos dados foram produzidos por meio de uma enquete virtual composta por questões fechadas e abertas, respondida por estudantes dos três anos do curso. Participaram da pesquisa 44 estudantes. As respostas discursivas foram analisadas à luz da Análise de Conteúdo. O estudo insere-se no campo da Educação Profissional e Tecnológica (EPT) e dialoga com os princípios da Formação Humana Integral, da integração curricular e das práticas extensionistas. Os resultados indicam que os estudantes reconhecem o Projeto Integrador como uma proposta relevante para a articulação entre teoria e prática e para a aproximação dos conteúdos escolares com problemas reais. Contudo, apontam limites relacionados à clareza metodológica, ao acompanhamento docente, à organização do tempo e às dificuldades no trabalho em equipe. Conclui-se que o Projeto Integrador contribui de forma parcial para a aprendizagem, evidenciando a necessidade de fortalecer o planejamento interdisciplinar, a formação docente e as condições institucionais na EPT.

Palavras-chave: Educação Profissional e Tecnológica; formação humana integral; integração curricular; projeto integrador.

Proyecto integrador en la Educación Profesional y tecnológica: percepciones de los estudiantes sobre el proceso de aprendizaje

Resumen

Este artículo analiza las percepciones de estudiantes del Curso Técnico Integrado en Informática del Instituto Federal de Piauí (IFPI), Campus Piripiri, acerca de las contribuciones del Proyecto Integrador al proceso de aprendizaje. Se trata de una investigación de enfoque cualitativo, cuyos datos fueron obtenidos mediante una encuesta virtual compuesta por preguntas cerradas y abiertas, respondida por estudiantes de los tres años del curso. Participaron en la investigación 44 estudiantes. Las respuestas discursivas fueron analizadas a la luz del Análisis de Contenido. El estudio se inserta en el campo de la Educación Profesional y Tecnológica (EPT) y dialoga con los principios de la Formación Humana Integral, la integración curricular y las prácticas extensionistas. Los resultados indican que los estudiantes reconocen el Proyecto Integrador como una propuesta relevante para la articulación entre teoría y práctica y para la aproximación de los contenidos escolares a problemas reales. Sin embargo, señalan limitaciones relacionadas con la claridad metodológica, el acompañamiento docente, la organización del tiempo y las dificultades en el trabajo en equipo. Se concluye que el Proyecto Integrador contribuye de manera parcial al aprendizaje, evidenciando la necesidad de fortalecer la planificación interdisciplinaria, la formación docente y las condiciones institucionales en la EPT.

Palabras clave: Educación Profesional y Tecnológica; formación humana integral; integración curricular; proyecto integrador.

Introduction

Professional and Technological Education (EPT) in Brazil began its generational cycle in 1909 with Decree No. 7,566 of September 23, which established the then Schools of Apprentices and Artisans (*Escolas de Aprendizes e Artífices*). The context surrounding the creation of these institutions reflected the sharp social division of the time, reinforcing a historical dualism: while a segment of the population accessed broader academic education, the working classes were relegated to technical training practices aimed at preparing them to meet the immediate demands of the labor market.

Despite some specific changes over time, Professional Education in Brazil maintained this assistance-oriented character, aligned with productive needs, for decades. As Carvalho and Lopes (2023) observe, the governmental priority was to establish a public system focused on training qualified workers to supply the craft and manufacturing sectors. A more significant shift occurred only in the first decade of the 2000s, marked by the creation of the Federal Institutes of Education, Science, and Technology (IFs) through Law No. 11,892/2008. The IFs introduced a new proposal for EPT aimed at the comprehensive education (*formação integral*) of students and regional development, breaking with the traditional logic of rapid and segmented workforce preparation.

In this movement, the Federal Institutes came to represent a form of resistance against the neoliberal educational project, which advocates for weakened and low-cost technical education. As highlighted by Carvalho and Lopes (2023), this resistance is expressed in creating conditions for a socially referenceable, high-quality education. Thus, EPT has been remodeled and has begun building its own identity, expanding its offerings across basic, technical, and higher education levels nationwide.

The Federal Institute of Piauí (IFPI) is part of this reconfiguration. As a multi-campus institution, it commits to offering technical professional education at the high school level, primarily in the integrated form (Brasil, 2008). The

Piripiri Campus, established during the second phase of the Federal Network's expansion in 2010, is part of this structure. Among its programs, the Integrated High School Technical Course in Information Technology stands out, whose Pedagogical Project (IFPI, 2019) emphasizes the development of technical, practical, and cognitive competencies that enable students to understand the world of work, act critically, and pursue new learning opportunities.

In this context, the Integrative Project gains relevance as an active methodology. Although discussed for years, it was systematically implemented at IFPI starting in 2018 with the adoption of the National Common Curricular Base (BNCC) (Brasil, 2018). Aligned with the principles of EPT, the Integrative Project seeks to promote holistic education by articulating different fields of knowledge and engaging students in investigating and solving real-world problems. The perspective advocated by Saviani (2003)—to educate individuals capable of understanding the foundations of modern production beyond simple technical training—finds resonance in this proposal.

Given this background, this article analyzes the perceptions of students enrolled in the Integrated Technical Course in Information Technology at IFPI, Piripiri Campus, regarding the contributions of the Integrative Project to their learning process. The objective is to identify the elements that favored or hindered the development of the projects, as well as the knowledge constructed throughout the experience.

The discussion initiated in the following section theoretically grounds this analysis, presenting the principles that guide Comprehensive Human Formation (*Formação Humana Integral*), the role of community extension practices, and the importance of teacher education for consolidating integrative methodologies. This theoretical framework will allow for a broader understanding of the place of the Integrative Project in EPT and its impacts on student learning.

Theoretical Framework

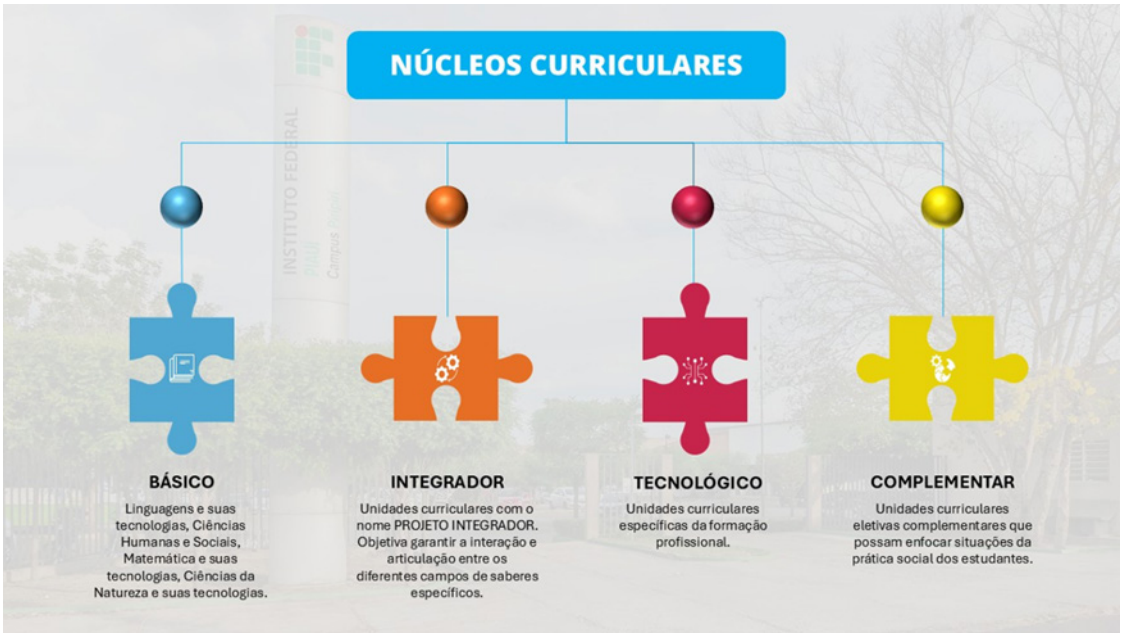
Professional and Technological Education (EPT) plays a central role in the education of young Brazilians, particularly those who historically have had limited access to scientific and cultural knowledge. Its trajectory is marked by disputes between educational projects that, at times, favor training geared exclusively toward the immediate demands of the market, and at other times defend an education capable of fostering a critical understanding of reality and the full exercise of citizenship. The creation and expansion of the Federal Institutes reinforce this second horizon by proposing integrated education that articulates science, culture, work, and technology within a socially referenceable perspective.

The legislation guiding integrated EPT, such as Decree No. 5,154/2004 (Brasil, 2004), sought to break with the historical separation between high school and professional education. For decades, this fragmentation limited the educational possibilities of a large portion of young workers by concentrating professional education on instrumental learning and restricted training. By advocating for curricular integration, EPT seeks to overcome the dichotomy between intellectual labor and manual labor, broadening the meaning of school education and ensuring that students have access to the scientific and technological foundations that structure contemporary social life. It is, therefore, a pedagogical and political movement that affirms the right to comprehensive education.

At the Federal Institute of Piauí, these guidelines are adopted in its institutional documents, which define Comprehensive Human Formation (*Formação Humana Integral*) as a guiding principle of pedagogical practice, committed to the democratization of knowledge and the articulation among science, culture, technology, and work. The Piripiri Campus, embedded in IFPI's multi-campus structure, plays a relevant role in this regional context. Among the programs offered, the Integrated Technical Course in Information Technology

stands out, articulating general education and technical training based on a curricular project organized into core components: basic, technological, complementary, and integrative. Its Pedagogical Project highlights the importance of developing knowledge that allows students to understand the contemporary world, act critically in the workplace, and expand their social participation, taking research and interdisciplinarity as fundamental educational principles.

Figure 1 – Organization of the curricular core components of the integrated technical course in information technology**:**



Source: Adapted from IFPI (2019, p. 13).

The Integrative Core component plays a decisive role by establishing connections between the different curricular core components and promoting practices that articulate theory and practice. Its development throughout the academic year encourages investigation, creativity, and the analysis of real-world problems, bringing students closer to the territory in which they live and to situations that require a multidimensional understanding. For this reason, the Integrated Technical Course in Information Technology at the Piripiri Campus

constitutes a pertinent setting for understanding how students perceive their learning process when engaged in integrative practices.

At the same time, there is growing recognition in Brazilian education that schools need to dialogue with the context in which they are embedded and address the inequalities that permeate students' lives. Interdisciplinarity, contextualization, and community extension practices thus become paths to producing more meaningful and socially relevant learning. This orientation is reinforced in recent normative frameworks, such as the National Common Curricular Base and the Curriculum Guidelines for High School Education, which emphasize the need to overcome curricular fragmentation and articulate knowledge in broad educational projects (Brasil, 2018; 2024).

This set of elements sustains the debate presented in the following sections, which delve into the principles of Comprehensive Human Formation, the role of community extension practices and the Integrative Project, and the challenges of teacher education in EPT. From this overview, it becomes possible to achieve a more solid understanding of students' perceptions regarding the learning process within the specific context of the Piripiri Campus and the program in which this research was conducted.

Principles of integral human formation

Comprehensive Human Education emerged in response to historical forms of education that fragment students and restrict their educational experience to technical training. Within the field of Professional and Technological Education (PTE), this debate has gained particular importance because professional education in Brazil has traditionally been marked by a separation between conception and execution, providing working-class youth with an education that is limited and oriented toward market demands. This logic, which remains present in various educational practices, creates tensions surrounding the role of public education in a profoundly unequal country.

Thinking about comprehensive education means confronting this dilemma. Ciavatta (2005) emphasizes that, although education alone cannot transform deeply unequal social structures, it can help individuals understand the mechanisms that sustain such inequality and open pathways toward new institutional arrangements. Comprehensive education is therefore not merely a pedagogical principle, but also a political stance in opposition to a historical project that has consistently reserved for the poorest sectors of society a mechanistic and disciplinary form of education that denies them full access to knowledge.

In light of this, particularly following the establishment of the Federal Institutes, PTE began to advocate an educational approach that integrates science, culture, work, and technology, recognizing students as historical and social subjects rather than as mere performers of prescribed tasks. This approach breaks with the model of technical conditioning and seeks to develop the intellectual, social, and cultural capacities that enable young people to interpret the world critically and act upon it. Although this movement does not eliminate the internal contradictions within these institutions, it broadens the scope of education and strengthens a socially grounded educational project.

Comprehensive education entails overcoming the dichotomy between practical and theoretical knowledge. Rather than reducing the curriculum to utilitarian content, it integrates scientific, technological, and humanistic foundations, enabling students to understand both why they learn and the purposes their learning serves. This understanding enhances their intellectual autonomy and helps them construct meaning in relation to their studies, an essential aspect in schools that primarily serve young people who have historically been excluded from spaces where knowledge is produced and circulated.

Another central principle of comprehensive education is the inseparability of work, science, and culture. Work is no longer viewed solely as employment or occupation, but is understood as a human practice that organizes social life.

Science, in turn, is not treated as a neutral body of knowledge, but as the product of disputes, interests, and historical processes. Culture encompasses ways of living, expressing oneself, and interpreting the world. Integrating these three elements means recognizing that learning involves establishing connections among experiences, forms of knowledge, and diverse social realities.

Interdisciplinarity is also part of this set of principles. Rather than merely bringing different content areas together, it seeks to overcome the fragmentation associated with modern schooling, which prevents students from recognizing the complexity of contemporary problems. When different fields of knowledge are integrated, a learning environment is created that fosters inquiry, contextualization, and critical reflection—fundamental aspects of an education committed to intellectual emancipation.

Comprehensive Human Education requires pedagogical practices capable of putting these principles into effect in everyday school life. Within PTE, the Integrative Project represents one such practice because it creates conditions for students to mobilize diverse forms of knowledge, investigate real-world problems, and develop collective solutions. By integrating theory and practice, as well as inquiry and intervention, this methodology approaches the Freirean ideal of education as an act of freedom, in which students are encouraged to understand their place in the world and act upon it critically.

Extension activities and the integrative project

Extension activities within Professional and Technological Education have become established as a means of connecting educational institutions and society. They bring students into contact with real-world problems and broaden their understanding of the social role of public education. This movement breaks with a teaching tradition centered on content transmission and reinforces the idea that school education must engage with the concrete needs of the communities in which institutions operate. At the Federal Institutes, this perspective is reinforced by institutional documents, which

define Comprehensive Human Education as a guiding principle of pedagogical practice, integrating science, culture, work, and technology.

Extension practices create opportunities for students to become familiar with their local context, identify community needs, and develop initiatives that combine technical knowledge with social awareness. By participating in projects that require assessment, planning, and intervention, young people come to understand that learning is not confined to the physical boundaries of the school. Rather, it takes shape through the relationships they establish with the community and their ability to apply school-based knowledge to everyday problems. This process often strengthens autonomy and a sense of responsibility, although it does not always occur without challenges.

Within this context, the Integrative Project serves as a bridge between the curriculum and extension practices. By requiring collaboration among different fields of knowledge and the investigation of real-world situations, it introduces students to the dynamics of interdisciplinary work. The initiative goes beyond the completion of tasks: it seeks to understand phenomena, formulate hypotheses, and propose solutions that engage with the social context. As established in the Pedagogical Program of the Technical Program in Information Technology, the Integrative Project should serve as a link between the Technological Core and the Basic Core, creating ongoing opportunities for interaction among different fields of knowledge.

The institutionally established organizing axes further strengthen this connection between extension and technical education. They guide projects that simultaneously develop specific skills in the field of information technology and broaden students' critical understanding of reality. The literature indicates that this type of experience contributes to overcoming the fragmentation of education by encouraging students to establish connections among different forms of knowledge and adopt an investigative approach (Amazonas-Passos; Anglada-Rivera, 2023).

Furthermore, the extension-oriented nature of the Integrative Project enables students to recognize themselves as individuals capable of intervening in the world. The Freirean approach, centered on problem-posing education, helps explain this process: by analyzing concrete situations, students are challenged to understand their causes, consequences, and possibilities for action, thereby developing a less naïve and more critical interpretation of their reality. This experience, however, is not uniform. Its outcomes depend on faculty engagement, methodological clarity, and the material conditions available at each campus.

Therefore, by connecting educational institutions, communities, and the curriculum, extension practices strengthen the educational significance of the Integrative Project. They enable integrated technical education to move beyond instrumental training and contribute to the education of students who are capable of analyzing problems, proposing alternatives, and acting consciously within their social and professional environments. This movement reinforces PTE's commitment to Comprehensive Human Education and the democratization of knowledge, which are central principles for understanding students' perceptions of their learning experiences.

Teacher education in PTE and integrative practices

A Teacher education for Professional and Technological Education (PTE) involves challenges specific to a field that has historically combined school traditions, demands from the world of work, and distinct social purposes. Faculty members often enter the Federal Network with strong training in their respective areas of specialization but limited experience with integrative pedagogical practices or projects that connect science, culture, work, and technology. This dilemma affects curricular organization and classroom dynamics, particularly when institutions seek to overcome the fragmented teaching models that still persist in Brazilian education.

At the Federal Institutes, the principle of Comprehensive Human Education requires teaching practices grounded in an interdisciplinary perspective capable of connecting theoretical foundations, professional practices, and the historical and social dimensions of knowledge. However, initial teacher education does not always provide this background. Many teachers were educated within discipline-based models centered on specialization and relatively disconnected from collective planning processes. This legacy contributes to difficulties in developing projects that address real-world problems and promote integration among different areas of the curriculum.

PTE also requires teachers to understand work as an educational principle rather than merely as a technical component. This perspective, reflected in institutional documents and national guidelines, entails recognizing that teaching is not limited to content transmission. It also involves creating conditions for students to understand the social, cultural, and technological foundations that structure their professional education. Pedagogical practice must therefore move beyond technical instruction and incorporate critical analysis and social intervention as constitutive dimensions of the educational process.

Within this context, integrative practices require collaborative teaching. The development of collective projects involving different teachers and fields of knowledge challenges the culture of isolated work and requires joint planning, dialogue, and a willingness to reconsider methods and content. Although this approach can strengthen student learning, it is not always easy to implement. Work overload, insufficient time for pedagogical meetings, and the lack of specific continuing education opportunities are among the factors that hinder the consolidation of integrative practices.

Nevertheless, when collaboration among teachers is established, the Integrative Project can become a space for pedagogical innovation. It enables teachers to experiment with alternative ways of organizing instruction and to connect theory and practice more meaningfully. By facilitating

investigative processes and supporting student groups, teachers develop a broader understanding of the educational trajectory while also expanding their own pedagogical practice. This experience, however, depends on the institutionalization of continuing education policies that value collective work and support pedagogical initiatives focused on interdisciplinarity.

It is important to recognize that teacher education in PTE is shaped by ongoing tensions. It takes place within institutions marked by historical contradictions between pressures for immediate results and the defense of an emancipatory educational project. These tensions are reflected in everyday school life and directly affect the implementation of integrative practices. Nevertheless, the experience accumulated by the Federal Institutes and the advances achieved in recent years demonstrate that it is possible to build more collaborative learning environments capable of supporting initiatives such as the Integrative Project and enhancing the quality of the education provided to students.

Methodological procedures

A The study adopted a qualitative approach to understand how students enrolled in the Integrated Upper-Secondary Technical Program in Information Technology at the IFPI Piripiri Campus perceive their experience with the Integrative Project. This methodological choice made it possible to explore the meanings, evaluations, and experiences constructed throughout the development of the initiative, prioritizing the interpretation of participants' accounts within their educational context.

Data were generated through an online survey consisting of ten closed-ended questions and two open-ended questions. Data collection was conducted during the second semester of 2025. The closed-ended questions made it possible to identify general trends in students' experiences, whereas the open-ended questions provided space for them to express their perceptions, criticisms, and suggestions more freely.

The questionnaire was made available to students in the first, second, and third years of the Integrated Upper-Secondary Technical Program in Information Technology at the IFPI Piripiri Campus. A total of 44 students participated in the study. Participation was voluntary and anonymous, which contributed to more spontaneous responses that were less affected by social pressure or embarrassment.

Table 1 – Distribution of study participants

Year	Number of Participants	Percentage
1st Year	13	29,5%
2nd Year	18	40,9%
3nd Year	13	29,5%
Total	44	100%

Source: Research data (2025).

After data collection, the data were organized in spreadsheets, and the responses to the open-ended questions were subjected to Content Analysis in accordance with the procedures proposed by Bardin (2016). Initially, the material was read in order to grasp the overall meaning of the participants' statements and identify recurring ideas. The responses were then organized into recording units, considering expressions, evaluations, and comments related to students' experiences with the Integrative Project. This procedure enabled the development of thematic categories that summarized the main meanings attributed to the experience under investigation.

During the interpretive stage, the categories were analyzed in light of the theoretical framework underpinning the study, with the aim of understanding the meanings expressed in the participants' statements and their relationship to the principles of Professional and Technological Education and Comprehensive Human Education. The analysis was not limited to the frequency of the themes but also sought to identify tensions, convergences, and limitations indicated by the students themselves.

Based on the Content Analysis, four thematic categories were developed: (1) integration of theory and practice; (2) methodological clarity and faculty guidance; (3) time management and institutional conditions; and (4) teamwork and collaboration. These categories guided the presentation and discussion of the results, making it possible to understand the main meanings students attributed to their experience with the Integrative Project.

Results and discussion

The analysis of students' responses reveals a set of perceptions that helps explain how the Integrative Project has been experienced within the Integrated Upper-Secondary Technical Program in Information Technology at the IFPI Piripiri Campus. Although these experiences are not homogeneous, several patterns stand out and provide insight into the challenges and potential of this methodology within the context of PTE.

Responses to the closed-ended questions indicated that students held a predominantly positive view of the Integrative Project. Among the participants, 77.3% stated that the initiative made a significant contribution to the integration of theory and practice, while 68.2% reported that the activities helped connect school content with real-world situations. Conversely, 59.1% of the students identified difficulties related to time management and teamwork, highlighting limitations in the implementation and supervision of the activities.

Overall, students recognize the importance of the Integrative Project as a space for integrating theory and practice. However, this recognition coexists with recurring criticism regarding the way the activities were conducted, particularly in relation to the clarity of instructions, faculty guidance, and time management. Several responses conveyed the feeling that the groups had been "left on their own" or had not received sufficient direction to help structure their work. These accounts suggest a gap between the pedagogical proposal established at the institutional level and its implementation in the everyday experience of the classes.

This perception is directly related to the issues discussed in the theoretical framework, according to which integrative practices require shared planning, continuous guidance, and methodological clarity. When these elements are not firmly established, interdisciplinarity tends to lose its substance, and the Integrative Project may be perceived more as a "burden" within the curriculum than as a meaningful educational opportunity. Criticism regarding the lack of clear instructions reinforces this point. Many students stated that they did not fully understand what was expected of their groups, which hindered the development of a pedagogical practice based on student autonomy.

Another recurring issue in the students' responses was the insufficient time available to develop the project. According to the participants, the tight schedule and the lack of designated guidance periods within the school routine compromised the quality of the work. Complaints about limited time reinforce the understanding that interdisciplinarity requires concrete institutional conditions rather than merely the goodwill of faculty members. This finding is consistent with studies emphasizing the need to reorganize school schedules and spaces so that integrative practices can be effectively sustained.

The responses also highlighted difficulties related to teamwork. Although some students reported positive experiences of cooperation, many mentioned an unequal distribution of tasks, internal conflicts, and limited engagement among some group members. These factors indicate that collaboration has not yet been fully incorporated into the school culture, thereby limiting its educational potential. At the same time, they demonstrate the importance of faculty mediation in supporting groups and guiding processes of collective organization.

Despite these criticisms, students recognized that the Integrative Project contributed to their learning, although to a moderate extent. The scores assigned to the impact of the activity varied considerably but tended to cluster around intermediate values. This suggests that, despite the difficulties encountered, the project enabled some degree of practical understanding of the content, the

development of autonomy, and engagement with real-world problems. In other words, students perceive value in the initiative but believe that its full potential has not been achieved under the current conditions.

The responses to the open-ended questions reinforce the duality observed in the data: students value the existence of the Integrative Project but expect a more structured approach, more consistent guidance, and greater coordination among the faculty members involved. When these elements are absent, the ideal of curricular integration discussed throughout this study is weakened.

The results therefore indicate that the Integrative Project only partially fulfills the role assigned to it within Professional and Technological Education. Although it contributes to meaningful learning, it faces practical limitations that reduce its effectiveness. This finding reinforces the need to strengthen interdisciplinary planning, guidance strategies, and dialogue among faculty members, as well as to reconsider the allocation of school time so that the project can be implemented consistently.

Final considerations

This study analyzed the perceptions of students enrolled in the Integrated Upper-Secondary Technical Program in Information Technology at the IFPI Piripiri Campus regarding the Integrative Project, seeking to understand the extent to which this initiative contributes to the learning process within the context of Professional and Technological Education. The results indicate that students recognize the project's educational value, particularly because it enables the integration of theory and practice and engagement with concrete problems. At the same time, they reveal limitations that must be addressed for the initiative to achieve greater pedagogical consistency, especially with regard to implementing curricular integration beyond the formal level, as discussed by Saviani (2003) in his analysis of the relationship between work and education.

The participants' accounts demonstrate that the potential of the Integrative Project is not fully realized when methodological clarity, continuous

faculty guidance, and adequate institutional conditions are lacking. The absence of more systematic instructions, the perception of limited support during the development of the activities, and the inadequate organization of school time weaken the experience and generate uncertainty among students. These findings are consistent with Ciavatta's (2005) argument that integrated education initiatives require concrete conditions for organizing pedagogical work so that they do not become reduced to fragmented practices.

Another relevant aspect concerns teamwork. Although collaboration is one of the central components of the Integrative Project, the participants' accounts indicate recurring difficulties in the division of tasks and group engagement. This demonstrates that collaborative learning does not develop spontaneously and requires pedagogical mediation, ongoing guidance, and clear assessment criteria that consider collective processes rather than only final products.

Despite these limitations, the study indicates that the Integrative Project contributes, albeit to a moderate extent, to the development of autonomy, responsibility, and a practical understanding of the content addressed in the program. Students perceive value in the initiative and identify ways in which it can be improved, reinforcing the importance of listening to them as active participants in the educational process, in accordance with the perspective of Comprehensive Human Education advocated within PTE.

It is therefore evident that strengthening the Integrative Project requires investment in interdisciplinary planning, continuing faculty development, and the reorganization of school schedules and spaces. Without these conditions, curricular integration is likely to remain more prominent in institutional discourse than in everyday practice. This study does not seek to conclude the debate, but rather to contribute to reflection on how integrative practices can be improved on the basis of students' concrete experiences, while acknowledging institutional limitations and the contradictions inherent in Brazilian public education.

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Note

1 Statement on the Use of Artificial Intelligence – Gemini, an artificial intelligence tool developed by Google, was used to assist in translating this article into English. The translated version was fully reviewed and adjusted by the editorial team to ensure fidelity to the original text, terminological accuracy, and compliance with the journal's editorial standards. The tool was not used to generate the article's arguments, analyses, or academic content.

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