Collaborative practices with TDIC: curricular innovation in experiences in the teaching internship

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Abstract

Advancing teacher formation through innovations in times of digital information and communication technologies (TDIC) and digital interconnection can be a revolutionary act. In this sense, this article describes the experience of implementing TDIC in the teaching assistantship with a Pedagogy class. We use TDIC as mediating resources in the context of hybrid spaces. The research question is: How the didactic sequence was organized and experienced in a collaborative perspective with students in the curricular component "Research and pedagogical practice 3?" The qualitative study was developed through the Lewinian model of experiential *learning*. The data are the result of the researchers' descriptions and narratives about the teaching practice. Based on the inferences from the experience, we realized that TDIC can reduce margins and dualities. However, the relationships mediated by technologies are intensified by the affective, communicational, coordinated, and interactional intention of co-responsibility between individuals.

Keywords: Hybrid education. Digital information and communication technologies. Pedagogical practices. Teaching assistantship.

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Práticas colaborativas com TDIC: inovação curricular em vivências no estágio de docência

Resumo

Avançar na formação de professores por meio de inovações em tempos de tecnologias digitais de informação e comunicação (TDIC) e interconexão digital pode ser um ato revolucionário. Nesse sentido, este artigo descreve a experiência da implementação de TDIC no estágio de docência com uma turma de Pedagogia. Utilizamos as TDIC como recursos mediadores em contexto

de espaços híbridos. A questão de pesquisa é: Como foi organizada e experienciada a sequência didática em perspectiva colaborativa com estudantes no componente curricular "Pesquisa e prática pedagógica 3?" O estudo de natureza qualitativa se desenvolveu por meio do modelo *lewiniano* de aprendizagem experiencial. Os dados são resultados de descrições e narrativas dos pesquisadores sobre o fazer docente. Com base nas inferências desde a experiência, percebemos que as TDIC podem reduzir margens e dualidades. No entanto, as relações mediadas por tecnologias são intensificadas pela intenção afetiva, comunicacional, coordenada e interacional de corresponsabilidades entre os sujeitos.

Palavras-chave: Educação híbrida. Tecnologias digitais de informação e comunicação. Práticas pedagógicas. Estágio em docência.

Prácticas colaborativas con TDIC: innovación curricular em vivencias de práctica de docencia

Resumen

Avanzar en la formación de profesores a través de innovaciones en tiempos de tecnologías digitales de información y comunicación (TDIC) y de interconexión digital puede ser un acto revolucionario. En este sentido, este artículo describe la experiencia de la implementación de las TDIC en la práctica de docencia con una clase de Pedagogía. Utilizamos las TDIC como recursos mediadores en el contexto de espacios híbridos. La cuestión de la investigación es: ¿Cómo se organizó y experimentó la secuencia didáctica en perspectiva colaborativa con estudiantes en el componente curricular "Investigación y práctica pedagógica 3?" El estudio de naturaleza cualitativa se desarrolló por medio del modelo *lewiniano* de aprendizaje experiencial. Los datos son el resultado de las descripciones y narrativas de los investigadores sobre el hacer docente. Con base en las inferencias desde la experiencia, percibimos que las TDIC pueden reducir márgenes y dualidades. Sin embargo, las relaciones mediadas por tecnologías son intensificadas por la intención afectiva, comunicacional, coordinada e interaccional de corresponsabilidad entre los sujetos.

Palabras clave: Educación híbrida. Tecnologías digitales de información y comunicación. Prácticas pedagógicas. Prácticas em docencia.

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Introduction

The expansion of digital information and communication technologies (TDIC, in Portuguese abbreviation) preceded by the process of globalization of historical, material and social relations (Castells, 2005; Charlot, 2007) has been approaching processes, formation and practices in education in an imperative way, maximized by the intertwining in the daily life of hyperhybrid spaces (Santaella, 2021). This situation challenges educators and education program students to adapt to teaching and learning contexts enriched by TDIC while demarcating environments without interactional and collaborative margins.

in this respect, the development of practical knowledge (Charlot, 2007) with the TDIC in a curricular component with 54 hours during the 2022.2 academic period, between January and May 2023, from a didactic sequence, was challenging. The difficulty, however, did not occur due to the use of TDIC in an instrumental character, but due to the preparation and production of digital educational materials in a collaborative context, used, at the same time, in different times and spaces or in the classroom.

In addition, it is a formative situation that is part of the daily lives of researchers and teachers. The locus of experience in a curricular component focused on the scientific literacy of undergraduates in Pedagogy does not only impact relations and processes with TDIC. It also dialogues with the development of skills and competencies related to teacher formation from practice with teaching profession.

Finally, we report the experience as protagonists provided by the Teaching Internship held in 2023 as part of the curriculum for the doctoral course of the Graduate Program in Education and the Doctorate in Education Network (Renoen). This process took place in the in-person Pedagogy course, with students from the 3rd period.

The learning experience took place with the didactic sequence "Pedagogy as space: expanding the methodological boundaries," based on the contributions of Nind, Curtin and Hall (2019) on research methods for Pedagogy. The thematic approach aimed to understand spaces as subjective manifestations and agencies of multidimensional places - school, extra-school and digital.

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On the occasion, we proposed the intertwining of digital and in-person as mobilizers for the study of space as an exploration of the physical, social, temporal, experiential and digital. This experience was possible from the organization and constitution of the previous and construction stages in the classroom.

It is in this context that the research objective is constituted: to describe the experience of implementing a collaborative practice with TDIC and its interface as curricular innovation. In addition, the itinerary understood since the appreciation of spaces and artifacts associated with the development of relations and languages through interaction and collaboration (Bruner, 1960; Piaget, 1970; Neo, 2003). We understand collaborative practices as social situations organized in small interaction groups, focused on problem solving. These groups were conducted based on the categories of student mastery and involvement in the search for solutions, which were supported by theoretical--methodological evidence (Torres; Irala, 2014).

This qualitative study was developed through the Lewinian model of *experiential* learning (Kolb, 2015; Miccoli, 2014). The results of this approach are consequences of the experience lived by the interns in the exercise of teaching guided by the teacher-leader with an attentive, sensitive and judicious look.

Experiential investigation started from the four cycles proposed by Kolb (2015): concrete experience; observations and reflections; concept formation; abstractions and generalizations; and evaluation of the implications of concepts in new learning situations. The dialectical process between the theoretical framework and the experience is effective from the *feedbacks* obtained through observations and inquiries carried out in the in-person and online meetings, validated in the teaching and learning process.

The basis for the analysis and inferences originates from the researchers' descriptions and narratives about the challenging knowledge of practice with TDIC in a collaborative context and mediated interaction (Salvador, 1999).

We bring to the discussion in this article the relationships mediated by TDIC in a pedagogical context as potentialities for situations of interaction, collaboration and contingent support to students. It is a pragmatic structure combined with the affective, communicational, coordinated and interactional intention of co-responsibilities between teachers and students.

Thus, the discussion is structured in four sections. The first, addresses the nuances of the internship and the perceptions of the interns participating in the study regarding teacher formation. In the second moment, we outline the pragmatic path of the didactic sequence with technologies. Next, we expose the students' narratives about the different spaces of aesthetic and social perception. Finally, we discuss the contributions and limitations of the use OF TDIC in collaborative practice environments, as well as the influence of the teacher formation experience.

Formation path in an experiential context in the teaching internship

The path, under the guidance of the professor-leader, took place with sensitivities and expertise in conducting the activities and delegating responsibilities to the interns. As an opportunity for coexistence and sharing, the professor-leader referred us to the teaching reality beyond the in-person and physical classroom, as well as to the structural gaps and the commitment to human and professional formation integrated with the curricular guidelines of the Pedagogy course.

For one of the interns, a graduate student, the environment of reciprocities during the semester was essential for the development of skills and competencies for teacher formation. The cycle experienced in

> […] a curricular component such as "Pedagogical research and practice 3" was innovative as a scientific formation discipline from the perspective of education research. The meetings served us as graduate students, since we were faced with research approaches different from the traditional ones, seen in the doctoral course. In the sense of pedagogical practice by the full professor, he asked us about the need to deepen the practice and experience intertwining between humans, resources, environments and collaborations (Intern 1, 2023).

In this perspective, the novelty did not have an impact on antagonistic perceptions in relation to the tradition of the supervised internship, but on the approach of the professor-leader as a mediator, welcoming and inquiring, characteristics, as stated by Pimenta (2010), of a critical-reflective teaching.

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Although this was the perception during the internship as a formative path, rescuing the debate in Amorim and Duques (2017), the system imposes incompatibilities of action-reflection-action in the face of the reality of teachers and students through a prescribed curriculum.

Faced with this challenge, such overlaps make the internship an essential movement for teacher formation. The act of transgressing the homogenization of individuals and school structures (Dourado, 2015), the development of classes, especially the didactic sequence, object of this study, was significant to support the critical-reflective composure of the professor's spectrum in higher education.

The teaching internship is an opportunity for graduate students to observe the most experienced professor regarding their behavior, their oratory, their interaction and their methodology in class, learning innovative ways for the academic and professional trajectory. In addition, the internship collaborates and returns qualified professionals to society with the capacity to work in any educational spaces. Knowledge provided from the maturation and professionalization of teaching integrated with the convergent realities to the social demands of contemporaneity (Tardif, 2014).

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The internship was carried out in the curricular component PEDL098 – Pedagogical Research and Practice 3, with a workload of 54 hours in the 2022.2 academic period, between January and May 2023. Under the guidance of the professor-leader, the path was experienced by three interns, doctoral students from Renoen and Education Faculty at a public university in the Northeast of Brazil.

The reported activity involved the production of knowledge from the reflective approaches of educational practices and the subjectivities of formal and informal environments. The objectives were: to identify sources of research to explore formal and informal educational spaces; and to develop fundamental skills for the teacher's practice as a researcher in the daily practice of teaching in the various spaces where the pedagogue works.

During the development of pedagogical practice with Pedagogy students of the 3rd night period, we organized the previous stage to support the class through reference materials made available before the in-person meetings. Each intern responsible for their didactic-pedagogical meeting with the class was responsible for organizing the materials previously selected by the

professor-leader and reporting how they would develop their practice in the classroom.

With the formation of the class group via WhatsApp (figure 1), we facilitated the availability and management of the materials to be worked on by the teams, using them as a synonym for Learning Content Management Systems (LCMS) (Filatro, 2015). The System is reduced to interaction with content, general guidelines and objective activities with the sharing of students' productions.

During the communication process, we disseminate hyperlinks, images, gifs, stickers, documents in PDF format, among other possible media to be shared by the multi-platform communication. The dissemination recommended the didactic transposition of the guidelines and learning objectives contained in the discipline blog for students.

Figure 1 – Class group via WhatsApp

Source: the authors (2023).

According to figure 1, the professor-leader also used the communication channel to clarify doubts of the students, especially in relation to the organization of the work to be developed in the in-person moments. In addition, it allowed the sharing of the final productions of each in-person class in the format of a conceptual or mental map, organized by the interns.

As part of collaborative practices and knowledge acquired in practice, following the definition of Charlot (2007), we opted for a logic of training

based on mediation, variations in didactic-pedagogical resources and colla-
boratively constructed knowledge. In this context, in addition to WhatsApp
and the blog, we chose the Padlet digital platform as a resource for authoring
and sharing the productions made by the students before, during and after the
in-person meetings (figure 2).

Figure 2 – Pair Padlets
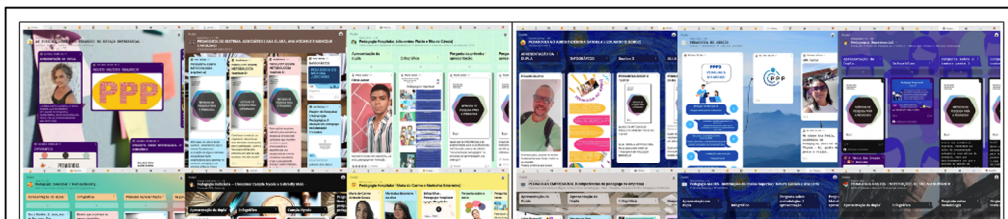
Source: the authors (2023).

As illustrated in figure 2, the Padlet digital mural had a socializing
function in our pedagogical practice (Salvador, 1999). Through it, the stu-
dents were able to record their theoretical findings and constitute them from
the thematic approaches worked in the classroom, using written language and
hypermedia resources (Sales; Albuquerque, 2020).

For Intern 2 (2023) "the sequence of support materials and the number
of digital resources pragmatically explored was surprising on the part of the
professor-leader". In addition, according to Intern 3 (2023) "thinking about all
this and still integrating ourselves into a project-based learning perspective,
delegating leadership to each intern, re-signified my perception of being a
teacher".

The methodological thinking related to the perspective of projects
(Bender, 2014), the context started through the blog of the curricular compo-
nent and the number of resources distributed along the way became elements
of innovation of a supposed digital transformation.

But, as in Medicine, in the automotive industry, in resource manage-
ment, in industrial processes, according to Siebel (2021), this feeling of the
interns and the level of skill and digital competence of the professor-leader
is not related to the resource or generational changes, but is due to the fact
that we are located in this cartography of social demands and techniques

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provided by the different waves: digitization in the 1980s, the internet as a public network at the end of the same decade and the impacts of the emergence of web 2.0, or social network, from the early 2000s.

However, the dominance of disruptive resources of the 4th Industrial Revolution in spaces of formal education does not determine the change of theoretical-methodological approach. It determines the pedagogical intention in progressive practices in digital and analogical environments, through problematization, investigation of learning to learn and encouragement of participation and co-authorship (Almeida, 2008; Moran, 2015).

Even so, such an effort may not ensure the characterization of a curricular innovation or digital transformation without first deciding on a mediating posture of the teacher (Machado; Torres, 2017; Moran; Masetto; Behrens, 2013). These aspects are intertwined in cultural, linguistic and cognitive relations beyond a traditional liberal pedagogy as stated by Silva, Almeida and Ferreira (2011).

Constitution of the didactic sequence with TDIC in collaborative practices

The constitution of the didactic sequence is due, in the first instance, to collaborative learning, an aspect investigated since the 19th century in English and American school contexts (Torres; Irala, 2014). Its resumption in this historical time can occur as innovation from possible simultaneities with digital resources in a hybrid context.

Based on the theory of social interdependence and group dynamics, we support the planned processes of coordination, interaction and co-responsibilities of actions (Ellis; Gibbs; Rein, 1991; Mailhiot, 2013). In addition, it is necessary to understand that collaboration is not synonymous with cooperation, although we return to philosophical ideals about cooperation, collaboration and working in groups as an identity movement of the productivist capitalism of the late 18th century.

However, the meaning of collaborating is in the progressive perspective. Thus, in this study, collaboration is the possibility of promoting environments that favor active and participatory posture in the community (Mukama, 2010). According to Torres and Irala (2014), collaboration is expressed in social

situations organized in small interaction groups, created with the purpose of solving problems in a synergistic way.

This methodological basis was integrated with the previous questions for the construction of knowledge in pairs from questions on the subject. The questions elaborated were also the subject of posts on the pairs' digital murals and were answered by the interns at the end of each theme addressed in the classroom.

In the seminar on the reading of the text "Pedagogy as space: expanding methodological boundaries" (Nind; Curtin; Hall, 2019), we explored spaces as elements of human subjectivity, of the necessary look at issues beyond cognition. With this intent and embedded in readings on learning ecosystems (Brown, 2000), mainly due to the intertwining of resources and environments, we created a hybrid dynamic and simultaneities.

At the time, we constituted a panel (figure 3), a board through the Miro digital platform, to share notes on the theme and provide the experience with hypermedia resources integrated with the analog ones, before, during and after the moment in the in-person and physical classroom.

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Figure 3 – "Pedagogy as space" panel
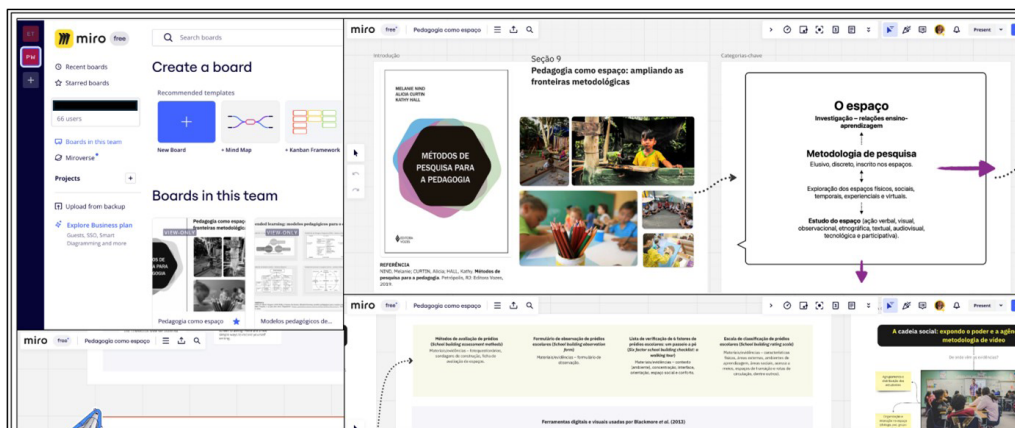
Source: https://miro.com/app/board/uXjVMPWGwU0=/?share_link_id=332893098525

The panel was created to support students in the previous stage with *insights* on concepts, definitions and exemplifications of the theme. From a cognitive approach, the investigative part described in the *frame* "Construction

activity (in-person classroom)" was articulated as guidance and descriptions of the steps to be developed in-person.

This structure was conceived as a shared space of simultaneities. Here, there are no dualities of functions and roles, but relationships of support and collective development, which characterizes, according to Brown (2000), the complex, adaptive and interdependent dynamics of an ecosystem approach.

The communication process via WhatsApp of the class (figure 4) was carried out in three acts. In the first, we recall the need for reading (a requirement for discussions), the elaboration of questions and the construction activity in the classroom. Next, close to the in-person meeting, we reinforced the need for reading and pointed out the deadline for the delivery of questions about the content. These questions were conducted via WhatsApp as part of student participation and autonomy development. The interns were responsible for their elucidation as a prior element to construction in the classroom.

In the last previous communication route, we suggested that students shared up to three photos of university spaces or the Education Center, which brought similarities in relation to the subjectivities of the spaces.

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Figure 4 – Previous dialogues of the class via WhatsApp
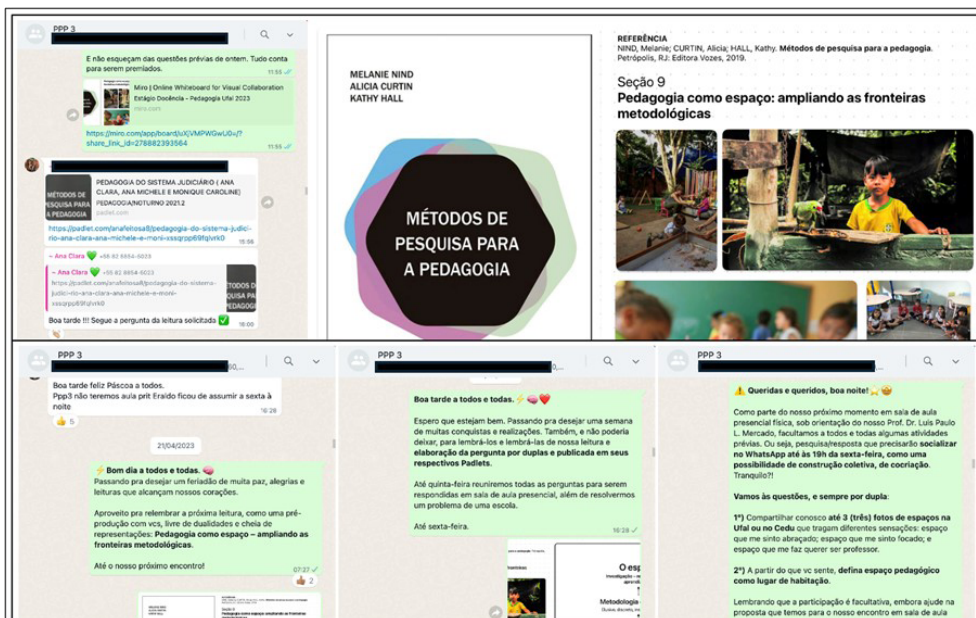
Source: the authors (2023).

With regard to construction in the classroom (figure 5), we structured the first part with a mosaic of words taken from the reference text, which had the purpose of organizing them into phrasal topics. Each team received a set of words in order to constitute the citations, accessing text, guidelines and syntheses in Miro platform.

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Figure 5 – Construction in the classroom

Source: the authors (2023).

The dynamics of the construction activity proposed at the beginning of the in-person class (figure 5) was the object of denaturalize process of the pedagogical model of the last century, of hierarchies and of the massification of teaching. For Hawks (2014), this is possible when the conduct of educational processes is based on student engagement, the promotion of constructivist learning and the encouragement of teamwork and collaboration.

As a problem situation, the students needed to deliver the three complete sentences related to the key categories of the reference text. At the end, the team leaders called the inspectors to review the sentences and check if they were consistent with the official response.

The option for a decentralized didactic-pedagogical approach of the exhibition or teaching practice was in favor of the intertwining and the proposal of an investigative environment based on the problem situation. The ludic activity served as an element of the logic inversion of the class, instead from the abstraction to concrete, we proposed from the concrete to abstraction. The entire path, as a proposal for entanglements, was posted on Miro platform. Examples of pedagogical spaces, complementary references and notes on the theme of open access were simultaneously present with possibilities for interactivity and interactions.

It is prudent to highlight that the proposed theme favored the construction of contextual and investigative activities. At first, the students' motivation and involvement with the findings were not aligned with the academic power

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of the reference text, but rather in the permission to express themselves from their experiences.

Subjectivities in different formation spaces

The last step of the previous activity allowed expressions and perceptions detached from the scope of the class. But it was from such aesthetic manifestations that we addressed the understanding of pedagogical spaces as a locus of qualitative research in education according to their inherent subjectivities.

As the last path of the previous questions (table 1), we asked each pair to answer them with photos of the chosen spaces and a description of the representations for the students.

Table 1 – Spaces, subjectivities and pedagogy

Item	Description
1st	Share with us up to three photos of spaces at the university or at the Education Center that bring different sensations: space that I feel embraced; space that I feel focused; and space that makes me want to be a teacher.
2nd	From what you feel, define pedagogical space as a place of habitation.

Source: the authors (2023).

The dynamics indicated in table 1 served to stress the definition of interactive, physical, social, temporal, experiential and online spaces as dimensions of housing, according to Nind, Curtin and Hall (2019). This reading of the world allows us to understand to be a teacher beyond teaching. Thus, according to the authors, it is necessary to be aware of "[...] the ways in which physical spaces hide, perpetuate and generally organize practice and participation" (Nind; Curtin; Hall, 2019, p. 225).

In this sense, we share the aesthetic representations (figure 6) loaded with subjectivities by Pedagogy students about spaces as a field of action and sensitivities for human and educational formation.

Figure 6 – Aesthetic representations of spaces

Source: the authors (2023)

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The advancement of sensitivity in a practice is contingent upon the overcoming of the Cartesian and positivist sense. The understanding of physicality, as ideologies and humanities, is how teaching influences, changes, and resignifies the knowledge of pedagogical practice. (Charlot, 2007; Nind; Curtin; Hall, 2019).

In this context, the activity of describing the spaces (table 2) was part of the reflection on formation as a component to the mobilization of senses and affections.

Table 2 – Description of spaces made by students

Space(s)	Description of the students
Canteen	"[…] a place where we find colleagues, teachers and where it is possible to exercise our condition of being social in a happy, relaxed way" (Student 1, 2023).
Classroom	"[…] where what we came for actually reaches us and, for this, the focus, commitment and sense of responsibility must always be linked. The classroom, a place where we can share knowledge, educational practices and collaborate in the future in the construction of critical, reflective and participatory citizens in society. It increases the desire for new knowledge to be able to transmit to others. Place where we receive several learnings, exchange experiences and the learning becomes mutual. We learned to be critical and reflective beings, becoming exceptional future teachers" (Student 2, 2023).
Reflection wall	"[…] for many, just a painting, but every day that we come across this phrase, the perception of the size of our future responsibility increases, as well as our desire for changes" (Student 3, 2023).
University Restaurant	"[…] a place where we have a good meal and take time to talk to friends, where we feel hugged. Meeting place between students from different courses, providing our guarantee of feeding well. A space for socializing, meeting several people of different courses, races, ethnicity and religion. A welcoming space, where it is possible to sit and exchange experiences with different people, a space where empathy, respect and a sense of collectivity are exercised. A place where we students from all places, courses and cities have the opportunity to socialize and meet new people, realities and different thoughts. It brings the feeling of welcome, I feel embraced, a place of peace. A welcoming, relaxing space, where we have greater freedom to interact with our colleagues and meet new colleagues as well" (Student 4, 2023).
Pallet corner	"[…] where we reflect on life and the profession, we read and rest as well" (Student 5, 2023).
Bus stop	"[…] exactly where we are before and after classes, it can bring us a mix of experiences, from animation to tranquility through learning" (Student 6, 2023).
Peace Square	"[…] a meeting place with friends, both for academic matters and for relaxation. It makes me feel joy and calmness" (Student 7, 2023).

Fonte: Os autores (2023).

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Table 2 – Description of spaces made by students (continuation)

Space(s)	Description of the students
Education Center Garden	"[…] an environment that brings calm, where we can sit, reflect and admire the plants. It brings us warmth. A place where we can disconnect a little from the world around us" (Student 8, 2023).
Institute of Physical Education	"[…] in it, I carry out sports practices and there, I feel welcomed and embraced, as I am always very well received by everyone" (Student 9, 2023).
Education Center entrance	"[…] it brings us welcome and the opportunity to gradually be transformed into people with critical and autonomous thoughts. It gives me determination and energy to start another day of studies" (Student 10, 2023).
University Entrance	"[…] it brings a feeling of 'open doors' to receive and provide us with various experiences and possibilities in various areas, within and outside the professional scope. Upon arriving at the entrance of the university, we see our achievement. It brings a sense of achievement, as it is the result of our efforts to be here and it needs focus and determination to proceed. It brings a sense of focus, goals" (Student 11, 2023).
Central Library	"[…] where we seek and acquire more knowledge; a place of silence, where we feel focused. Moment of studies and tranquility. It is one of the places that allows us to travel through reading, expand our knowledge and instigate focus on what we choose to be. A place of study, where we have greater focus, in addition to several materials made available to study comfortably without being interrupted. A space where there is the feeling of comfort and concentration and where students spend much of their time to prepare before classes. A place to study, where we can focus and study in a quiet way, with a diversity of materials for the realization of our study. There, I can concentrate and feel that my studies have a better quality when I use this space. I spend a lot of time there when I'm not in class. It's a kind of refuge. I also feel welcomed there" (Student 12, 2023).
Education Center	"[…] a place of socialization, learning and reception between teachers and students. A place where I find several professionals with a beautiful love for teaching, a place where every day we feel inspired to teach, to follow the path of teaching. A welcoming space both for the friendships we make and for the teachers and all the organizations that are part of the Education Center. It shows us that education goes hand in hand with art. A place where we learn about teaching, but also a place for socializing with other people, where there are exchanges of experiences and friendships. In it, I feel motivated to be resilient. All the knowledge I acquire in this place makes me want to be a better person and not only a professional. I rethink my values and how my profession has an impact on the lives of students and society" (Student 13, 2023).

Fonte: Os autores (2023).

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Table 2 – Description of spaces made by students (continuation)

Space(s)	Description of the students
Pedagogical space	"[…] an important part of the learning process, since we spend a lot of our time in these environments, which in turn are loaded with information, exchanges of experiences, contact with the new or the different, that is, rich for the formation of the student and the teacher. It is linked to the place of freedom in communicating, making friends, getting to know other cultures in depth and being able to open the mind to situations that were blocked due to lack of knowledge. A place that allows us to see people and the world in a freer way, without prejudice and exclusion. An environment where we can be authors of our own constructions, a place that works collectively so that inclusion occurs without prejudice and inequalities. Basically, we receive several learnings, we become critical and reflective beings through practice, we learn from each other and we can observe, in teaching practice, what 'being a teacher' is like" (Student 14, 2023).

Fonte: Os autores (2023).

The students' reports, shown in table 2, are contributions about spaces as territories of educational practices and subjectivities, made possible by the progressive characteristic of pedagogical practice. They are mediating processes that consider the historic individual in its entirety, according to Mitre; Batista; Mendonça and Others (2008) and Zabala (2014).

In addition, we highlight the categories that express the meaning of being a teacher and being in educational environments, according to the students: welcoming, inclusion and transformation. Being in different territories provided by an experience opposite to "teaching" allowed the voices, authorship and experience of being a researcher of their own practice, even as education program students

Although not the object of discussion in this article, we understand the act of teaching and learning as a relationship between the humanities that is, before mastery, skill and competence with digital and analogical resources, a revolutionary act (Freire, 2016).

Final considerations

In this article, we describe the experience of developing a collaborative practice with TDIC, focusing on the implementation of technologies in a context of curricular innovation, from the teaching internship. With the reports

and descriptions, we point out the potentialities and limitations of the path taken.

It is explicit that curricular innovation through TDIC, in addition to requiring teachers to have digital skills and competencies for organizing, selecting and sharing materials, depends on the methodological approach. In this sense, the first movements of curricular innovation stand out: knowledge about collaborative TDIC and willingness to transliterate pedagogical practice for a progressive stance.

In this regard, TDIC in non-progressive contexts can assume only the instrumental, use-by-use character, aligned with the traditionalist or cognitivist-behaviorist approach to technology-mediated education. Although the research indicates that we are in the 5th generation of TDIC in education, of synchronous and asynchronous interactions also in connective perspectives, the practice, however, persists in its social use.

It was possible to verify that a pedagogical practice mediated by TDIC in a collaborative context demands technological resources. In this experience, for example, we made use of four digital resources: WhatsApp as LCMS for didactic transposition; Padlet platform as a space for authorship and socialization; the blog as a compass, containing guidelines and descriptions of activities; and Miro platform, as a space for collaboration and sharing. There were not only times and previous work as the planning activity requires, but the management of such resources, which requires expertise in visualizing the possible connections that favor the educational process.

However, the potential of connective acts has not been evident since the simultaneously mobilizations of students in the classroom. The resources dedicated to collaboration and simultaneity served as content exhibitors, a kind of improved *slides*. In addition, after the competitive moment, with the construction of the phrasal topics in the construction activity, the students' passivity was another element of attention, especially when the activity was not related to the evaluation.

On the other hand, the richness of the subjectivities of the previous questions about spaces as agencies of multidimensional places, as an optional activity for students, was surprising. Although it was constituted in order to exemplify the theme of the class in learning to learn, it was not felt and manifested by them in the same way, but as an expression of social being and appreciation of experiential knowledge.

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We emphasize that WhatsApp's communication, interaction and interactivity movements created expectations and contributed to the organization of proposals in the classroom. In addition, the existence of a space of production and authorship, such as Padlet platform, helped to consolidate the mental schemes and the demystification of an expository curricular component.

This experience provided scientific, cognitive and affective knowledge as conditioning factors for teaching. Scientific and cognitive through the constant search, exploration, reading and production of the directed activities. Affective because the social construction was related to responsibility, commitment, the maturation of social relations, resilience and empathy, necessary for teacher formation and performance.

In these conditions of coexistence, provided by the teaching internship, we inquired ourselves about the seriousness and dedication to teaching as requirements for career and formation in higher education. This is a context that forms us for the totality as individuals-student, individuals-interns and individuals-teachers, which reveals to us the transformative power of the profession even in a scenario of precariousness and professional devaluation.

20 References

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