Integrated curriculum, youth and spaces for participation

Currículo integrado, juventudes e espaços de participação

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Abstract

This article aims to present the discussions held in a training workshop on integrated curriculum, youth and spaces for participation with young people in a perspective of creating senses and meanings, of youth participation and protagonism in view of the knowledge that permeates Professional and Technological Education. Of an applied nature, the research was carried out from the concepts of participatory research with a qualitative approach, with students from Technical Courses Integrated into High School at the Federal Institute of Santa Catarina. As a result, it is observed that the integrated curriculum must be understood as an ethical-political proposal that demands methodological strategies that enable the integration of its dimensions, knowledge and its subjects, with special attention to the pluralities of youth.

Keywords: Curriculum. curricular integration. Secondary Education. Youth.

Resumo

Esse artigo tem a finalidade de apresentar as discussões realizadas em uma oficina formativa sobre currículo integrado, juventudes e espaços de participação com jovens em uma perspectiva de criação de sentidos e significados, de participação e protagonismo juvenil frente aos saberes que permeiam a Educação Profissional e Tecnológica. De natureza aplicada, a pesquisa foi realizada a partir dos conceitos da pesquisa participante, de abordagem qualitativa, com estudantes de cursos Técnicos Integrados ao Ensino Médio no Instituto Federal de Santa Catarina. Como resultados, observa-se que o currículo integrado deve ser entendido enquanto uma proposta ético-política que demanda estratégias metodológicas que possibilitem a integração das suas dimensões, dos conhecimentos e dos seus sujeitos, com especial atenção às pluralidades das juventudes.

Introduction

This article is the result of a portion of the studies carried out during preparation of the research entitled Times and spaces to (re)think the curriculum with students of Integrated High School, in the Professional Master's Program in Professional and Technological Education (PROFEPT-IFSC), which focused on the relationship of young people with the curriculum of Integrated High School (EMI) courses, in a perspective that creates senses and meanings, of youth involvement and protagonism in view of the knowledge that permeates Professional and Technological Education (EPT). It arises from thoughts on the specific aspects of the curriculum of these courses, as well as the condition of their students, understood from the concept of youth.

This perspective is based on the intrinsic relationships of constitution of curricula and their subjects, according to the assumptions of Arroyo (2013), and is contextualized from the conception of the plural identities of young people who are the subjects of EMI, as discussed by Carrano and Dayrell (2014).

In addition to understanding youth identities, the purpose is to search for ways to integrate them into the curriculum, to foster a change in the subjects’ attitude towards it and the knowledge that is part of it, which represents, in the Machado’s view (2010), a necessary movement to materialize the integrated curriculum.

The research issue highlighted in this text is based on the following question: how to create times and spaces that allow young people to know the curricula of EMI courses so that they can recognize themselves in them and that make sense to them?

Seeking to respond to this problem, the applied research has developed an educational product that, according to Freire, Guerrini and Dutra (2016, p. 102) are "pedagogical tools, developed by the professionals in training that contain organized knowledge, aimed at enabling the pedagogical practice".

The educational product, characterized as a training workshop on integrated curriculum, youth and spaces of participation, was designed as a methodological strategy to promote student involvement in spaces for discussion regarding the integrated curriculum, aiming at comprehensive training from the student protagonism and creation of meanings in relation to the curriculum.

This article subsequently discusses the proposition, the theoretical-methodological grounds and the development of the applied training workshop in the context of EPT.

Theoretical overview of the integrated curriculum

The school curriculum involves the selection, not neutral, of knowledge historically produced by humanity, which needs to be passed on to other generations. However, it cannot be reduced only to the instrumental aspect of relating and ranking content. The curriculum represents and presents the subjects and their identities, values and conceptions of education, world, work, the world of work. Thus, philosophical, political and epistemological conceptions are based on contents, objectives and practices. In
this way, the curriculum is conceived as a space for disputes and the production of identities (Arroyo, 2013; Silva, 2015).

Thus, in discussions about the curriculum, one cannot lose sight of its procedural character, that is, the understanding that it is a human historical-cultural construction, which serves educational purposes, also built in the disputes and contradictions that social subjects experience. Taking on this concept of curriculum implies emphasizing the roles that subjects have in their formation process.

By relating this perspective to the training context of the EMI, it is stated that its objectives concern the integration of knowledge as well as the integration of subjects into the pedagogical process, through the recognition of their identities and knowledge. As pointed out by Ramos (2010), the meanings of High School education, as the last stage of basic education, also in its integrated form with High School Technical Professional Education (EPTNM), turn to knowledge and its subjects.

The idea of integration, according to Ciavatta (2012), refers to the objective of understanding education as a social totality, with a view to the greater objective of human emancipation. Thus, preparation for work should be linked to general education.

Frigotto (2012), in turn, states that the integrated curriculum enables the mastery of knowledge in two spheres, namely human society and its relations and the natural world and, from this domain, the students are prepared for emancipation and criticality, understanding that they can act on reality, including production systems and the technical-scientific knowledge related to them, and transform it.

It is possible to affirm that EPTNM's integrated curriculum is theoretically and philosophically based on socialist bases, even if it is not confused with Marx's omnilateral or polytechnic training perspective, nor with Gramsci's unitary school, as those would not refer to professional training to adolescents and young people, as explained by Moura, Lima Filho and Silva (2015). However, the authors also stress that the context of contemporary society needs to be understood in order to think about training projects for these subjects.

In this respect, the reflection proposed by Pinto (2005) is quite interesting, as it resumes the place of technology in direct relation to human work rather than removed from the subjects, as if it were an abstract entity. For him, the technique also characterizes a process of worker emancipation, only existing from the human being and his conscious intervention in nature and material reality. Therefore, it is defended here the understanding of the technique as a constituent dimension of the integral formation of the subjects, as well as the technical-professional knowledge that is part of the integrated curriculum of the EPTNM.

Therefore, it is worth reasserting that the integrated curriculum project captures work as an educational principle and training context, but without losing the horizon of human emancipation. As explained by Ramos (2008), the EMI, on a unitary basis, represents an ethical-political defense of the formation of youths who, as professionals with a solid general education, will be able to face the adversities of the material reality and of the current productive and economic systems. In addition, they will be qualified for the critical exercise of these professions, but without ever depleting them.
Integration of youth identities into the curriculum

The integration of knowledge represents the understanding that the teaching contents, present in the formal curriculum, have no ends in themselves, but serve the greater purpose of promoting the understanding of real phenomena, from the dialectical effort of analysis beyond their appearance (Ramos, 2008).

In the formation of the EPTNM, the phenomena concern the dimensions of human life, which include work relationships and production systems, in their historically constituted forms. Therefore, Ramos (2014) suggests thinking about the organization of the integrated curriculum taking into account the multiple dimensions that constitute production systems and professional areas, creating relationships between concepts, knowledge and theories to provide questioning analyzes of the phenomena in the world of work. Such relationships could generate meanings that show the integration of knowledge and the inter-relationship of the human dimensions of life. And from this conception, it is stated that the integrated curriculum needs to include discussions about the identities of its subjects and the meanings that are constructed by them in the midst of school and professional training.

Integration, in this context, is presented by Machado (2010) under two aspects. The first refers to the understanding of the student as a subject who experiences other roles in society, thus their life, as conceived in the integrated curriculum, is composed of different dimensions. The second aspect is that, for the curriculum to be meaningful, it must be "integrated into the lives of students, to the dynamics of interaction and the relevant historical, social, economic and cultural processes they experience" (Machado, 2010, p. 82).

The integration of subjects into the training context can be related to the social function that school plays, as well as the meanings that are developed by youths in relation to the school experience. This idea about the senses is presented by Dayrell (2007) and is addressed by other researchers, such as Gusmão (2016); Batista (2007) and Bernardim and Silva (2016).

With regard to EPT and the integrated curriculum, this production of meanings also permeates youths' relationships with the school and the world of work, representing a major challenge for the integration of subjects and knowledge. To Machado (2010), the integrated curriculum materializes with the sociocultural contextualization of the teaching-learning process, bringing students and their interests, needs and demands into educational practices, and developing an understanding of the reality they experience from different dimensions.

In this sense, the complexity of the identity constitution of youths cannot be left out, nor should the youth condition be related only to the role of the student, at the risk of reducing the voice and presence of youths in society and in institutional spaces. In addition to the biopsychological understanding, it is necessary to understand it from the desire to develop a unique identity, in the midst of the relationship with others and the context lived by youth. Therefore, it is always important to reassert the youth condition as a cultural and social construction, a theoretical conception defended by Dayrell (2007); Carrano and Dayrell (2014); Arroyo (2014) and Leccardi (2005).

To manage such complexity, which is directly reflected in the school curriculum, Carrano and Dayrell (2014) suggest adopting the concept of plural youth which, however, does not rule out the uniqueness of the individual identities of youths.
Therefore, taking youth as a category of analysis and proposition of pedagogical actions and educational policies does not aim to homogenize the identities of subjects, on the contrary, it means understanding that it is necessary to go beyond preconceived definitions about what it means to be young.

Arroyo (2014) also uses the proposal to analyze the images that are made about youths and students, noting, inevitably, that they break up and, more than that, they need to be broken. After all, if the subjects are the others, because they are constantly being built socially and culturally, can school and the curriculum remain indifferent to the new identities? For curricular integration, the answer is clearly no.

Returning to the assumptions of integrated training, Ciavatta (2012) highlights the relevance of collective discussions regarding academic-scientific integration strategies, in addition to the articulation with students and their families about the experience of integrated training, the expectations and its possibilities for implementation. The process of giving voice to students and promoting their involvement and protagonism in the understanding and construction of the curriculum is shown as a formative possibility, at the same time that it represents challenges to pedagogical practices.

The challenges are related, as Arroyo (2014) points out, to the school institution itself, which does not encourage true student involvement. Such a process of democratic and participatory school management, which is sometimes still fragile in many contexts, may be linked to hierarchical relationships between school subjects, preconceived views about students, as well as the meanings they develop about school education.

Stereotyped and prejudiced views about youths and their possibilities of organization and involvement are directly related to the hierarchical structure characteristic of the school system, which generates unequal power relations. Martins and Dayrell (2013) associate this inequality with intergenerational conflict, based on which the adults see only immaturity in young people, and thus disregard them as social subjects. Zibas, Ferretti, and Tartuce (2006), in turn, turn the analysis to the insecurity of professors and managers of having their authority questioned by students, if they organize to participate, individually or collectively.

Promoting student involvement, therefore, requires the subjects' awareness of hierarchical relationships, in the sense of not making them natural, but understanding their existence in such a way that student protagonism is not confused with the students being held individually liable for the lacking or superficial involvement. Finally, it cannot be ignored that the subjects have different roles in the school context, and that it is also incumbent upon the school to enable learning experiences and life under the democratic process.

It is understood, therefore, that involvement is a process that needs to be learned and taught. As Carrano and Dayrell (2014) explain, involvement implies theoretical training for citizen life and the creation of times and spaces for the experience of democratic exercise.

Thinking about training intended to integrate subjects and knowledge in their multiple dimensions, mediated by the work process in its ontological sense, represents a pedagogical and political exercise to promote the autonomy and freedom of subjects, so it is related to the exercise of democracy, as also pointed out by Ciavatta (2012).
For Arroyo (2013), participatory dialogue enables the school and the curriculum to turn to other educational dimensions, which directly concern the lives of students. It concerns the right to know about oneself and one's rights, amid the knowledge that makes it possible to analyze phenomena from social, political and economic dimensions.

Youths participating in the integrated curriculum need to understand the meanings of integration in their own lives, in the dimensions of culture, work, science and technology. To this end, perceiving themselves as active subjects of the training process, who produce knowledge and are listened to, represents a political and pedagogical experience for comprehensive training.

Once the theoretical basis is understood, the following article presents the methodological process that supported the development of the research.

**Pedagogical Procedures**

The research, of applied nature, was carried out based on concepts of participatory research with a qualitative approach, involving a universe of 71 subjects, 34 students linked to the Food Technician course Integrated with High School and 37 students linked to the Buildings course integrated with High School. From this universe, 39 accepted the invitation and answered the questionnaire used for data collection and became the research sample. 19 out of the 39 students were attending Food Technician course (AL) and 20 the Buildings course (ED) Integrated with High School at the Canoinhas Campus of the Federal Institute of Education, Science and Technology of Santa Catarina (IFSC), in the northern plateau region of Santa Catarina.

The research subjects included students from the sixth module of these courses, whose classes were the first to be offered by the campus. This audience was chosen because of their representativeness regarding the process of implementing the integrated curriculum on campus. These young people represent the first students of the first integrated courses offered by the IFSC, Canoinhas Campus.

20 out of the 39 participants were 17 years old and 19 were 18 years old. All had finished elementary school in public schools. The majority, that is, 35 participants, lived in the same city where the campus is located, but there were 4 students who lived in two neighboring cities, about 20 km away from the institution. Among those who lived in the same municipality, it was also noticed that there were residents of rural areas. The surveyed audience had 23 subjects without a paid job and 3 stated that they did not contribute to the family income. There were also 2 students doing internships, 4 received research scholarship grants and 10 received extension grants, and 1 student who indicated that he had another type of paid activity, not with a formal employment contract and young apprentice contract.

The methodology was based on the steps attributed to participatory research by Le Boterf (1987). The first phase covered the theoretical-methodological design, while the second, which encompassed the knowledge of the reality proposed to be investigated, presumed the collection of data from the research participants. Data collection was performed through a questionnaire with open questions, using the Google Forms tool. Before its application, the instrument was analyzed by four students of the researched population, who were invited and made themselves available to carry out the analysis,
giving their contributions to the questions. The moment of applying the questionnaire was organized with the coordinators of the researched courses and carried out in the campus computer labs in August 2018.

The instrument was organized into three sections. The first, entitled 'Who are you?', contained six multiple-choice questions and six open questions that aimed to outline a profile of the participants and their perceptions about the experience of youth and training at the IFSC. The second part, 'how is the course you attend?', had six other open questions about the educational experience in the integrated technical course. Finally, in 'What is your involvement?', students were invited to answer six more open questions about the spaces and opportunities for involvement that they experience at the IFSC.

After collection, the content was analyzed according to the studies by Gomes (2007). The analysis categories and meaning cores were built within three thematic axes, namely: (a) youth, students and their youth; (b) perceptions about integrated training and, (c) meanings built by youths about participatory processes.

The third stage of the research was organized based on the analysis of the data collected, which were also made known to the research population. This stage, therefore, represented the development and application of the educational result. Following the idea of Le Boterf (1987), who suggests working with study groups or circles, a training workshop was held, to which the 39 students who answered the questionnaire were invited. The purpose of this stage was to enable students to know and discuss the curriculum of their courses and the spaces for involvement in the institution and rethink them, if they indicated it was necessary. The workshop was taken as a possibility of pedagogical practice that sought to cooperate with the full formation and implementation of the integrated curriculum, from the perspective of the young students who are part of it. This stage involved 10 students from the research audience who were selected because of their individual interest in participating (Chart 1).

<table>
<thead>
<tr>
<th>Table 1 - Research subjects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total research population that answered the questionnaire</td>
<td>39</td>
</tr>
<tr>
<td>Participants in the training workshop who also answered the questionnaire</td>
<td>10</td>
</tr>
<tr>
<td>Research population age</td>
<td>17 to 18 years old</td>
</tr>
<tr>
<td>Residents of the same municipality as the campus</td>
<td>35</td>
</tr>
<tr>
<td>Residents of other municipalities</td>
<td>4</td>
</tr>
<tr>
<td>Not performing paid activity</td>
<td>23</td>
</tr>
<tr>
<td>Paid extension activity</td>
<td>10</td>
</tr>
<tr>
<td>Paid Research Activity</td>
<td>4</td>
</tr>
<tr>
<td>Paid internship activity</td>
<td>2</td>
</tr>
<tr>
<td>Other paid activity</td>
<td>1</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Does not contribute to family income</td>
<td>36</td>
</tr>
<tr>
<td>Contributes to family income</td>
<td>3</td>
</tr>
</tbody>
</table>


The speeches presented after this text come from the dialogues carried out during the conversation roundtable, which was recorded for registration and transcription. The speeches were called 'Conversation Roundtable', given that for the discussions presented in this text, general rather than specific aspects are of interest.

Finally, the stage that Boterf (1987) calls the action plan, corresponding to the fourth phase of the research, resulted in the involvement evaluation process, which was triggered at the end of the training workshop through a systematic discussion and thoughts from the activity.

The sequence of this text addresses the implementation of the third and fourth stages of the research.

The research project was submitted to the Research Ethics Committee and approved according to opinion number 2.674.257, according to the procedures set out by Plataforma Brasil.

### Results and Discussions

The design of the training workshop on youth, integrated curriculum and spaces for participation was based on the strategy developed by Anastasiou (2004) and on the works of Silva (2014). It was designed as a methodological strategy to promote student involvement in spaces for discussion about the integrated curriculum, from a perspective of youth protagonism and creation of meanings and identities in relation to this curriculum and the objective of integrating knowledge and subjects, aiming at full education.

It also sought to qualify youth involvement in decision-making spaces, not in the sense of considering their opinions devoid of qualification or maturity, but under the perspective of student empowerment and protagonism.

The organization of the training workshop included the following elements: (a) context of the activity and its purposes, considering the research objectives and subject; (b) Historical context regarding the integrated curriculum in Brazil; (c) discussion about the nature and objectives of the integrated curriculum and the dimensions that compose it – work, as an educational principle; science, technology and culture, illustrating its educational horizon and the ideal of overcoming the fragmentation of knowledge and the lives of subjects; (d) use of data collected through the application of the questionnaire, highlighting the meanings pointed out by youths regarding the school experience and the ways of identifying them in relation to the integrated curriculum, to support the discussions; (e) considerations regarding the institutional spaces for student involvement, based on the references of the integrated curriculum and youth
identities, analyzed with the students, and (f) referral system suggested by the students about the workshop and institutional spaces for student involvement.

In order to promote the necessary context to support the discussions and thoughts, the researchers chose videos, music excerpts, statistical data about the offers of integrated courses and excerpts from institutional documents.

The data collected during the research also served as elements of (self) thought and guided the discussions, aiming to enable young people to recognize themselves in the midst of them. Thus, it is understood that their identities, demands and opinions supported the reflective work.

The methodological strategy used to organize the workshop activities was based on the proposal of conversation roundtables. For Warschauer (2004), the conversation roundtable technique has its roots in community work and collective involvement initiatives. However, it is not very present in formal education, due to perspectives of "homogenization, standardization and organization of spaces, times and curricula, structured in such a way as to leave few opportunities for the expression of differences and unique aspects" (Warschauer, 2004, page 3). Therefore, Moura and Lima (2014) explain that this is a research instrument that promotes involvement and dialogue, in addition to fostering a space for listening to the other.

The training space was planned to last approximately three hours and took place during the National Week of Science and Technology (SNCT), a traditional event held in the Federal Network of Professional and Technological Education, which had been indicated by the students in the questionnaire as a significant activity in the context of their school education.

Through the materials and strategies used, it was possible to develop discussions about curricular integration, bearing in mind both the different knowledge that must be part of the pedagogical project in the integrated curriculum, as well as their own experiences and the different social roles that youths experience. Thus, the students addressed the possibilities of joining knowledge experienced in the courses:

> Because I think these are structured things, you know? When you have contact with that, from both places... from different places, different subjects, it ends up building in your brain, right? You end up reasoning and pulling a line from here, a line from there. You start to complete things and that becomes very easy and practical (Conversation Roundtable, 2018).

In this sense, it is noteworthy that youths highlighted efforts by some teachers, especially from the curricular units identified by them as High School (mathematics, physics, biology, philosophy, etc.), to show the relationship between the areas, as seen below: "Even high school teachers.... They associate, they give examples linked to the course. So, like, there's this association. In all areas" (Conversation Roundtable, 2018).

For the discussion about curricular integration, the concept presented by Ciavatta (2012) regarding integrating, becoming whole, complete, was also addressed. As a result, youths reinforced the understanding that a "balance" is needed, as a balance in training, as they consider that greater emphasis is given to technical training: "in high school [the teachers] always come back to the course... they always talk about the
course... the technician... They never talk about high school" (Conversation Roundtable, 2018).

It is important to highlight that the speeches brought this division between the areas, referring to the curriculum components of general education as "high school" and the components specific to technical performance as "the course".

Young place emphasized the idea of integration through interpersonal relationships: "integrating, for me, is joining.... Integrating is that. It's with everybody together, thinking together, that all will flow better" (Conversation Roundtable, 2018). This concept could also be associated with those that involve culture, a dimension of the integrated curriculum, and which you people relate to respect for people and their cultures. When asked about the importance of experiences during training, the first comments were aimed at understanding and respecting different cultures:

I think that on such occasions, when we have the cultural relationship at the IFSC, we learn much more than in the classroom through a subject called "human relations", I would much rather be there, exchanging ideas about what culture is, representing, whatever... within a cultural scenario you must have a good relationship with the people who will relate to you. And we end up developing a better relationship with people (Conversation Roundtable, 2018).

The relationship between culture and professional training was also addressed amidst the discussion about the dimensions of the integrated curriculum: work, science, culture and technology. For one youth, it represents another reality for the student and the worker: "we are very... studying, studying, studying, studying. Then you think about talent shows, music, science and technology... it's another world, you know?" (Conversation Roundtable, 2018).

It is possible to infer that this understanding of the cultural dimension as well as the integration related to people is not apart from the notion underpinned by the non-fragmentation of knowledge. For this reason, when youths say that they see their courses apart from other courses at the institution, as "if they were not technical courses" (Conversation Roundtable, 2018), or when they say they do not know the knowledge being built and shared by the other courses of the institution, it is possible to assert that they are pointing out to the fragmentation of knowledge. At the same time, when they draw attention to the experiences that made it possible to meet other people through projects and diversified activities, but often considered extracurricular, or even through the friendly relationship with teachers and administrative staff, they address the interaction with people. However, it is believed that they also point to knowledge getting close and being built through this interaction.

The conversation roundtable also enabled discussions on the reasons to take an integrated technical course. Youths reinforced the idea of getting prepared for life, while at the same time seeing the possibility of entering the world of work, even in cases where they say they do not wish to follow the technical area due to lack of identification with it. According to one of the participants in the conversation roundtable: "the issue is not only of the study itself, but you can think and call a teacher to write a project with you... where would you have this opportunity? If you choose a teacher, does he listen to what you have to say?" (Conversation Roundtable, 2018).
However, the discussion also led to a finding that, at times, the teachers themselves restrict envisaging the possibilities that the integrated course can provide. According to the youths, this is because the teachers present their professional choices as the only ones possible for those who work in a certain technical area. In view of this finding, the students analyzed the importance of curriculum components and the attitude of other teachers who seek to show different possibilities for insertion and professional performance. One of the youths explained, for example, that he sought, on his own, to know the pedagogical project of a technology course in order to see how his technical training would be related to it, indicating new possibilities for the future.

It was also found that the meanings of integration are built in different ways and also depend on the youths' expectations in this regard, as well as on elements that make up their plural identities, as contemplated by Carrano and Dayrell (2014). Thus, there were perceptions about EMI related to the possibility of entering the world of work or continuing studies in related areas, while they expressed their views on the expansion of horizons provided by integrated training. Some experiences lived during the course are highlighted by the youths, and are often related to opportunities for building and exchanging knowledge, interacting with other people, in addition to impacts on the shaping of their own identity.

The training space also enabled the sharing of problems faced by youths regarding the course, specifically the high workload. The youths added their comments with reports on their fatigue and that of their colleagues. They stated that it is common for them to sleep in the classroom due to fatigue, or even to miss classes. The routine of course activities, added with extracurricular activities and work for some, was outlined by a youth: "last week I didn't even see my parents, I left in the morning and arrived at night... they were sleeping, I didn't see them" (Conversation Roundtable, 2018).

In this sense, the students told that the last year, many colleagues sought the support of the campus psychologist, due to pressure. The speeches during the conversation roundtable also showed aspects related to the family relationship of these young people, which seem to indicate that the families do not understand their school experiences: "they [parents] think it's as if we were still in elementary school. It's still fun. [...] Then, you get home and have to pretend that everything is fine, right? 'How was the day?' Great, wonderful" (Conversation Roundtable, 2018).

The lack of understanding related to the difficulties experienced by them comes not only from the family, but it was also related to teachers: "when teachers look at us and say... wow, you just have to study! And for us, this is all that's going on" (Conversation Roundtable, 2018).

By addressing the dimension of technology in the integrated curriculum, it was possible to encourage a discussion about the uses made from technological resources, as well as to expand the view of technology beyond machines and equipment. In this sense, the youths noted that technology encompasses "even the way you develop things in a more productive way, you know? It is not necessarily a machine" (Conversation Roundtable, 2018). This notion of technology directed towards the integrated curriculum made it possible to report situations that demonstrate risks associated with technology and that, therefore, demand attention from those who use it, such as the students themselves.

The youths talked about an incident during a laboratory activity that could have had serious consequences. They also showed that there are discussions about the uses of technologies in the professional context, but more related to the curricular
components identified by students as being in the technical area: "there are ways for you to solve, for you to build... but, you will see that the most efficient one is the one that does not harm the worker so much, so that he makes less effort" (Conversation Roundtable, 2018).

Based on the materials that supported the activity, discussions were encouraged about experimentation and the indispensable relationship between theory and practice for the production of science, which encouraged young people to also think about the process of knowledge construction in their courses, which in turn, depends on studies of a more theoretical nature as well as on practical experiences as supplementary phenomena:

That's when we see the importance of practice, right? Because what you really learned is put into practice, you know? So, you do the PI [Integrating Project], like... let's put the PI as example, but if you don't have knowledge about that... if you don't have it in theory... you don't know how to put it there... even the question of going into practice in the matter of the work itself. [...] If there was a mistake, you go there and study... to fix it and get it right [...]. Because in theoretical subjects, for example... we have the electrical project... we had a huge doubt about a certain type of electric current... we are going to give a workshop today for people about electrics [...]. Then, when we were doing it in practice, something that we were weren't able to understand in theory (Conversation Roundtable, 2018).

Finally, from the lyrics of a song that suggests a distinction between the concepts of work and employment, the youths were led to think about the notion of work involved in integrated courses. Generally speaking, for students "it seems that those who say they have a job already speak more willingly, so... it seems that they enjoy what they are doing. [...] They have a dimension of that, right?" (Conversation Roundtable, 2018).

The ideas on different roles experienced by the subjects were also related to the concept of work, and in this sense, the objectives of integrated and broad training for those who, among many other social functions, are also workers, was also highlighted:

I think the time you come and ask: what are you? The person defines himself by his profession and not by what he really is. Ah, you are an engineer, I am a doctor. Okay, but beyond that? What are you? I'm a father, I'm a son, I'm a woman, I'm a wife... I'm a girlfriend... or I'm the person who loves to enjoy typical food... listening to music at night... Who likes to watch series... Stay with the family. Like, society dictates that from the moment you choose a profession, you are that. But you have your personal side... Far beyond that, right? (Conversation Roundtable, 2018).

Thus, we tried to relate the dimensions from the differentiated notion of work that underlies the integrated curriculum and is its pedagogical principle, proposing that integration be thought of in the midst of these relationships and that, perhaps in this way, the subjects could also feel integrated into the curriculum. Highlight was given to the understanding of the curriculum as a social and historical construction, and integration a horizon to be pursued. In this sense, it can also be related to the involvement of youths in institutional decision-making spaces as part of integrated training.
By thinking about the institutional spaces for collective participation, the youths shared reports about the difficulties they had and which, in their opinion, are common to other students and therefore demand attention. They highlighted the need for spaces for exchanging experiences among themselves: students talking to other students. They even proposed opportunities for them to dialogue with future students of EMI courses, in order to share their experiences and understanding of these courses: "ask students to do it as a conversation, like... I think we should talk with the freshmen... because, ah... I was so disappointed in my freshman year..." (Conversation Roundtable, 2018).

Thus, they highlighted the importance of training spaces that, in their opinion, should be thought of in cycles. They realized that it was the length of the course and experience at the institution that helped to develop the maturity to give an opinion on certain issues, such as the reflective exercises proposed in the workshop.

At the time of putting ideas into a system, the youths explained that the subject addressed in the training space was in line with discussions that they themselves had already been developing. In addition, they indicated that the space made it possible to understand the ideas of integration, science, culture and technology, present in the Pedagogical Course Project (PPC) of the courses, about which they had no previous knowledge: "let's be very clear... no one read the PPC. There should be a workshop about this, right? Already showing the integration like this... I don't know about you, but I only found out today..." (Conversation Roundtable, 2018). They also identified that "presenting the PPC dynamically helps to better understand the objectives of the IF [Federal Institute]" (Conversation Roundtable, 2018). For the group, the space organized as a conversation roundtable proved to be "open and comfortable for students to propose new ways of approaching integration, based on lived experiences" (Conversation Roundtable, 2018).

With regard to participatory spaces, the youths pointed out the class councils as important moments, but reinforced their indispensable participatory nature: "participatory councils with the involvement of teachers [laughs]... with all the teachers present" (Conversation Roundtable, 2018). They explained that sometimes these moments occur during class hours, thus not all teachers accompany them. Furthermore, they emphasized the need to understand the constructive criticism brought by students.

The group also reinforced the need for student involvement in writing the PPC: "One thing we asked for and, so far, no feedback has been brought is about us to give an opinion in the PPC of the course" (Conversation Roundtable, 2018).

Also with regard to collective spaces, they pointed out the need to reorganize moments of dissemination of work and projects developed by colleagues. The youths analyzed examples of events such as Teaching, Research, Extension and Innovation seminars, and advocated greater and better dissemination to the academic community of the different research, extension, culture, science and technology actions in which they can get involved as EMI participants. Thus, the group's proposal was presented in the sense that these opportunities would be disseminated to all young students, and not just a sharing of what has already been developed by students and employees.

Wow, I thought: more project to do... But, today, we see how important it is, right? Like, how much it opens doors for us... not only for the curriculum, but for the experiences we have... not only participating because of a scholarship, but hey... volunteer too... you'll have something more in the curriculum...
you're going to get involved with different things... I think it was important for them to have this reflection... There are people who don't like the course... but, a lot of people think: I don't like it, but what will it do for me? These teachings I'm having now... will they bring knowledge to me? Will I take it to an area of my life maybe? (Conversation Roundtable, 2018).

It is considered that the analyzes developed by the youths, in addition to meeting the data collected during all stages of the research, represent an attentive look by the youths on their integral training, as well as the horizon of curricular integration.

It is also worth highlighting, as stated by the students, the differential of the workshop, as it represents an informal space for dialogue, bringing elements of discussion and analysis that were still unknown to the youths, specifically with regard to the principles of curricular integration as stated in the PPC of the courses. It is considered that the knowledge of these documents developed through dialogue strategies proved to be important to young people, who reaffirmed this need at the time of systematizing reflections, in addition to demanding the collective construction of course projects when dealing with spaces for participation.

The purpose of the training workshop was to encourage the participation of students in spaces for discussion and training about the integrated curriculum, so as to materialize the integration of knowledge and subjects of the curriculum and comprehensive training, which presupposes the development of subjects in their different dimensions and the overcoming of formative reductionisms. It is believed that the activity allowed the youths to experience training about EMI courses, their purposes and dimensions, as well as the opportunity to think about their experiences in institutional spaces of collective participation from the training objectives proposed for the integrated curriculum.

**Final Considerations**

A close look at the most recent changes in educational legislation, with special focus on the changes in the Law of Guidelines and Bases for National Education (LDB), the Common National Curriculum Base and updates to the National Curriculum Guidelines for Secondary Education and the Guidelines for Professional and Technological Education indicates that the curriculum reforms, at their base, show how educational policies are not separate from the political projects of the State, drawing attention to the social purposes attributed to education and, specifically, to High School.

Faced with the scenario of reforms and an increasingly sharp regularization of the curriculum, it is essential to question the directions that have been proposed/imposed on Professional Education in its integrated form.

For this reason, perhaps more than ever, analyzes regarding the nature and history of this curriculum, as well as the experiences and meanings that its subjects develop, are relevant to support the positions of institutions and players who build it daily.

Thus, the focus given to the subjects of the curriculum in this research justified the search to understand how their pluralities are integrated with the plural dimensions of the integrated curriculum itself - work, science, culture and technology - as well as the meanings that they are built in this process, taking knowledge as a political-
pedagogical strategy for integration. Knowledge, in this sense, was conceived broadly, that is, the institution's process of knowing and understanding the identities of students as well as the youths knowing the nature and objectives of integrated education, so that they could experience a real protagonism in the spaces for collective participation.

As for the workshop experience, one cannot disregard the fact that it is formative both in view of the subjects it addresses and the opportunity to participate and build knowledge, in a collective way, with dialogue. Youths who are included in the integrated curriculum need to understand the meanings of integration in their own lives, in the dimensions of culture, work, science and technology. To this end, perceiving themselves as active subjects of the training process, who produce knowledge and are listened to and understood based on their identities and expectations, represents a political and pedagogical experience for comprehensive training.

It is also necessary to stress, with highlight on the collective nature of the integrated curriculum project, that the workshop needs to be addressed as a methodological strategy for the implementation of this curriculum, however, without falling into a process of blaming students for the lack of understanding about EMI. Just as the training workshop is proposed for students, it is stated that the other subjects of the curriculum also need training. And, going further, it is believed that this is not just an isolated formation, but a continuing formation that is established from praxis.

For the integrated curriculum to be experienced as an ethical-political project, it is essential that actions, in addition to didactic and methodological strategies, are designed and developed having the emancipatory principles and objectives of the integrated curriculum as their horizon. And, in this way, it is understood that the subjects are formed from the experience of integration built in the daily life of the EMI.

Given the discussions presented, it is understood that the construction of an integrated curriculum is challenging and requires from its subjects reflections on concepts and meanings historically established as true and unquestionable. Traditionally, the formal school system does not develop integrated actions or projects and, therefore, many of those who, today, are part of the EPT context, in which the integrated curriculum is proposed, were not formed in this way. This corroborates the need for a change of attitude towards knowledge, curriculum organization and the participation of subjects who experience the integrated curriculum, always from a collective effort and project, guided by the ethical-political commitment of the integration.

References


