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ARTICLE

PLANNING INTEGRATIVE EDUCATIONAL PRACTICES FOR PROFESSIONAL AND TECHNOLOGICAL EDUCATION

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ABSTRACT: Thinking about education and its processes is not a simple task, given the large number of resources involved and the complexity of the human being. From the universe of variables that produce the educational process, this text aims to discuss relevant aspects of the planning and organization of educational practices in Professional and Technological Education (EPT), having the integrative perspective and the omnilateral formation of the subjects as references. The methodological route was composed of bibliographical research on the theme, field research with teachers who work in EPT, and analysis and discussion of collected data, according to Bardin's content analysis technique (1977). In theory, during the planning of integrative teaching practices, it is necessary to consider the following elements: collaborative and participatory teaching, involving the other agents of the educational process; linking educational practices, preferably in a contextualized manner, to the reality of the life of the learning subjects; overcoming disciplinarity; taking into account the cyclical and material aspects of the school and students. The data analysis results suggest that the educational practices planned by the interviewed teachers encompass the contextualization and the scenario in which they are executed, the required educational resources, and the relationship between the subject and the course's educational proposal. However, it was found that it is necessary to expand the teachers' perception of the formation process, decentralize the planning of educational practices, advance in overcoming disciplinarity, and also to expand the purpose of the subjects' education beyond professional preparation.

Keywords: integral formation, planning, integrative educational practices, professional and technological education.

PLANEJAMENTO DE PRÁTICAS PEDAGÓGICAS INTEGRADORAS PARA A EDUCAÇÃO PROFISSIONAL E TECNOLÓGICA

RESUMO: Pensar a educação e seus processos não é tarefa simples, frente à grande quantidade de recursos envolvidos e, sobretudo, à complexidade do ser humano. Do universo de variáveis que compõem o processo educativo, o presente texto tem como objetivo discutir aspectos pertinentes ao

planejamento e à organização das práticas pedagógicas na Educação Profissional e Tecnológica (EPT), tomando como referência a perspectiva integradora e a formação omnilateral dos sujeitos. O percurso metodológico foi composto de um levantamento bibliográfico sobre o tema, uma pesquisa de campo, com docentes que atuam na EPT, e pela análise e discussão dos dados coletados, à luz da teoria previamente levantada, seguindo a técnica de análise de conteúdo de Bardin (1977). Em tese, no planejamento de práticas pedagógicas integradoras, é essencial que sejam contemplados os seguintes elementos: atuação docente de forma colaborativa e participativa, envolvendo os demais atores do processo educativo; vinculação das práticas pedagógicas, preferencialmente de modo contextualizado, à realidade de vida dos sujeitos aprendentes; superação da disciplinaridade; consideração dos aspectos conjunturais e materiais da escola e dos estudantes. Os resultados da análise dos dados indicam que as práticas pedagógicas planejadas pelos docentes entrevistados contemplam a contextualização e a conjuntura de onde são executadas, os recursos didáticos necessários, a relação entre a disciplina e a proposta formativa do curso. Porém, constatou-se que é preciso ampliar a percepção docente sobre o processo formativo, descentralizar o planejamento das práticas pedagógicas, avançar na superação da disciplinaridade e ampliar a finalidade da formação dos sujeitos para além da preparação profissional.

Palavras-chave: formação integral, planejamento, práticas pedagógicas integradoras, educação profissional e tecnológica.

PLANIFICACIÓN DE PRÁCTICAS PEDAGÓGICAS INTEGRADORAS PARA LA EDUCACIÓN PROFESIONAL Y TECNOLÓGICA

RESUMEN: Pensar la educación y sus procesos no es tarea sencilla, dada la gran cantidad de recursos involucrados y la complejidad del ser humano. A partir del universo de variables que componen el proceso educativo, este texto objetiva discutir aspectos para la planificación y organización de las prácticas pedagógicas en la Educación Profesional y Tecnológica (EPT), tomando como referencia la perspectiva integradora y la formación omnilateral de los sujetos. La metodología consistió en levantamiento bibliográfico sobre el tema, investigación de campo, con docentes que trabajan en la EPT, y análisis y discusión de los datos, bajo la teoría planteada, siguiendo la técnica de análisis de contenido de Bardin (1977). Técnicamente, en la planificación de prácticas pedagógicas integradoras, es fundamental que se considere: trabajo docente de manera colaborativa y participativa, involucrando a los demás actores del proceso educativo; vinculación de las prácticas pedagógicas, preferiblemente contextualizada, a la realidad de los sujetos aprendices; superación de la disciplinariedad; consideración de los aspectos coyunturales y materiales de la escuela y los estudiantes. Los resultados del análisis de datos indican que las prácticas pedagógicas planificadas por los docentes entrevistados contemplan la contextualización y la conyuntura local, los recursos didácticos necesarios, la relación disciplina y propuesta formativa del curso. Pero, se encontró que es necesario ampliar la percepción docente sobre el proceso de formación, descentralizar la planificación de las prácticas pedagógicas, avanzar en la superación de la disciplinariedad y ampliar la finalidad de la formación de los sujetos para más allá de la preparación profesional.

Palabras clave: formación integral, planificación, prácticas pedagógicas integradoras, educación profesional y tecnológica.

INTRODUCTION

Understanding current Brazilian school education and designing new directions for it are activities that require, in the foreground, awareness of its dual origin. Ramos (2014) and Moura (2007) point out that the Brazilian educational system, even in the 19th century, offered differentiated formation, considering the social class of which the individual was part. In this context, the less favored class received an education of a welfare nature, while the more affluent class had access to a more comprehensive, broader education.

In addition to this dual origin, the complexity of the school space is another relevant factor in the formation of people. Schools, as places dedicated to the appropriation and production of knowledge, have a unique complexity since they involve an enormous amount of resources necessary for the fulfillment of their role, such as physical infrastructure, technological resources, curricular organization, human resources, materials, didactic-pedagogical practices, etc.

In this scenario, the type of people's formation carried out in schools depends directly on the way these elements are perceived and managed. From the set of elements mentioned above, this article's object of study was didactic-pedagogical practices, specifically the stages of planning and organization, which concern what teachers do in the teaching-learning process based on their perceptions of reality. Such practices are quite diversified and vary according to the purpose of the formation process.

In this study, the pedagogical practices are taken from an integrative perspective, that is, they aim at the omnilateral formation of students through which they can develop their constitutive dimensions related to life in society, culture, cognition, and affectivity, in articulation with the preparation for the execution of a certain productive activity.

Considering that a given pedagogical practice is not integrative or fragmenting in itself but depends on structural and conjuncture aspects, the guiding question of this study is: what elements should be considered in the planning of a pedagogical practice that aims at integral formation? Thus, this text aims to discuss aspects relevant to the planning and organization of pedagogical practices in Professional and Technological Education (EPT-*Educação Profissional e Tecnológica*), taking as reference the integrative perspective and the omnilateral formation of the individuals.

The path answers the question above consisted of a bibliographical survey of writings by Ramos (2010), Moura (2013), Ciavatta (2005), Araújo and Frigotto (2015), among others, as well as field research carried out with teachers who work in the EPT of a federal educational institution, located in the city of Teresina (PI). The collected data were analyzed based on theory, using Bardin's (1977) content analysis technique.

The text is organized as follows: in the first section, the EPT is presented as a possibility of integral formation of the individuals, and not just a preparation for the productive market; in the second, the pedagogical practices are evidenced in the integrative perspective; then, the methodology and results and discussions of the analyzed data are presented; finally, the final considerations are presented.

PROFESSIONAL AND TECHNOLOGICAL EDUCATION AS A POSSIBILITY OF OMNILATERAL TRAINING

Faced with the varied and complex obstacles to achieving omnilateral formation in the Brazilian context, in today's society, it is understood that overcoming this situation must be a process, formed by well-defined and executable steps, which are consistent with the conditions of implementation and effectiveness. Following this perspective, it is understood that the EPT has characteristics that qualify it to be the basis for the construction of a counter-hegemonic project.

Regarding the legal and normative framework of Brazilian education, the basic and professional formation has always been provided for but usually in a disjointed way, as can be seen when analyzing Brazilian educational laws and standards, which preceded Decree 5.154/2004. This decree allowed the articulation between propaedeutic formation and professional technical formation, in line

with Art. 2 of Law 9.394/1996, which declares that national education "[...] aims at the full development of the student [...]" and with Art. 205 of the Federal Constitution of 1988, whereby education aims at "[...] the preparation for the exercise of citizenship and their qualification for work".

In the same direction, Law 11,741/2008 amended the texts of articles 37, 39, 41, and 42 of Law 9,394/96. Among the alterations, the replacement of the expression "Professional Education" with "Professional and Technological Education" stands out. This change is not merely formal or naming. Guimarães (2016, p. 210) points out that, in the expression Professional and Technological Education, "professional education" refers to vocational-technical formation aimed at meeting the demands of the productive market, while "technological education" refers to an expanded formation aimed at training and developing a reflective, conscious and critical individual.

Moura (2013) and Frigotto, Ciavatta, and Ramos (2005) present, with great emphasis, Technical Vocational Education Integrated into Secondary Education (EPTNM- *Educação Profissional Técnica Integrada ao Ensino Médio*), better known as Integrated Secondary Education (EMI- *Ensino Médio Integrado*), as a possibility of comprehensive education. In the same sense, this study proposes that this perspective of comprehensive training be present throughout EPT and not just in EMI, but should be developed from initial to higher education (CIAVATTA, 2005; ARAÚJO; FRIGOTTO, 2015).

Law 11.741/2008, Art. 39 declares that "[...] **professional and technological education**, in fulfilling the objectives of national education, **integrates** with the different levels and modalities of education and the **dimensions of work, science and technology**" (emphasis added). In addition to these formal or legal guarantees of integration, Ramos (2010) points out that comprehensive training must go far beyond the overlapping of curricula and workloads to provide the formation that develops the multiple dimensions of learning individuals.

In the same sense, regarding education in formal spaces, Ramos (2010, p. 44) defends an education that is capable of integrating "[...] science and culture, humanism and technology, aiming at the development of all human potential". Complementarily, Frigotto (2001) defends the integration between general training, which allows the individual to learn the scientific bases necessary for understanding reality and its dynamics, and professional formation focused on conscious and responsible productive action.

Given the above, the proposal of the EPT, to integrate education, work, science, and technology, is close to the proposal of omnilateral formation, "[...] whose genesis is in the work of Marx and Engels, as in the school unitary, by Gramsci" (MOURA, 2013, p. 707). In the same sense, Nosella (2007) states that the Marxian formative proposal envisions the subjects as a whole, so that the expression "omnilateral" connotes the set of elements that constitute the human being. In this context, this research understands that EPT has solid elements on which it is possible to develop a broad and comprehensive training of students.

Also, Moura, Lima Filho, and Silva (2015, p. 1060) declare that "By dealing with **intellectual, physical and technological education**, Marx is clearly showing the integral formation of the human being, that is, an omnilateral formation" (emphasis added). The individual must fully develop, both for material production and for the social, cultural, affective, and cognitive dimensions, which also constitute the subjects. That is, it is not a question of substituting training focused on material production for contemplative training, but of providing opportunities for the development of subjects in their entirety.

However, the effectiveness of the EPT, from the perspective of omnilateral training, faces a series of obstacles of material, structural, normative, political, didactic-pedagogical nature, etc. Regarding the didactic-pedagogical practices, the object of discussion in this study, the linear and fragmented logic of disciplinarity stands out as a great challenge to be overcome. This is because if the dynamics of the formative process follow disciplinarity and fragmentation, how will it form integral or omnilateral subjects? Thus, overcoming the disciplinary logic is an indispensable step toward the performance of the EPT.

However, the didactic-pedagogical discipline, which decontextualizes and disconnects knowledge from the reality of the learning subjects, encourages them to search for more specific training, whose results are more tangible and faster, especially for those who are in a situation of material insecurity (MOURA, 2013). Also, the exacerbated individualism and competitiveness, typical of capitalist ideology

are aspects that appear as major challenges for the performance of an omnilateral education in the Brazilian context.

Another reason for overcoming disciplinarity is that it favors unilateral formation. About this, Araújo and Rodrigues (2010, p. 55) state that the didactics that form unilaterally are based "[...] on the decomposition of learning processes into micro intermediate procedures whose sum is supposed to contribute to the whole". This way of systematizing knowledge into areas and subareas, also known as disciplines, increasingly leading to specialization, has expanded strongly with the classic logic of doing science (BICALHO; OLIVEIRA, 2011). Therefore, to overcome disciplinarity, pedagogical practices must be developed that promote the integration between knowledge, subjects, and the environment, in all its aspects.

In this context, it is necessary to emphasize that the individuals are not the problem in themselves, but the didactic-pedagogical disciplinarity, that is, the limitation to the disciplinary context, which prevents the knowledge and methods of the subjects from interacting and integrating. Ciavatta (2005, p. 9) points out that "[...] meaningful learning and the construction of new knowledge require that scientific concepts be apprehended in their epistemological roots". This learning takes place within the disciplines, making them essential elements for the advancement of science and society as a whole. Therefore, overcoming disciplinarity, towards integration, does not mean extinguishing the disciplines, but developing practices that enable the interaction of disciplinary knowledge for the production of 'supradisciplinary' knowledge.

In this sense, integrative pedagogical practices are necessary to resume the perspective of totality or complexity, which includes specialized knowledge and its relations with the whole, enabling the overcoming of disciplinarity. In the same sense, Bicalho and Oliveira (2011) express that multidisciplinarity, interdisciplinarity, and transdisciplinarity seek to provide other options for analytical-reductionist thinking, peculiar to the disciplinary and classic way of doing science, fostering other forms of scientific investigation, capable of meeting facts and phenomena in all their complexity.

Nicolescu (2000, p. 13) also states that "[...] disciplinarity, pluridisciplinarity, interdisciplinarity and transdisciplinarity are the four arrows of the same bow: knowledge" so that they are not antagonistic but complementary to each other. In the same direction, Bicalho and Oliveira (2011) highlight a kind of scale in the production of knowledge, whose sequence of complexity would start from disciplinarity, followed by multi or pluridisciplinarity, interdisciplinarity and transdisciplinarity.

From the above, it is understood that overcoming disciplinarity, at any of the levels presented, is essential to implement the EPT, in the sense of the integral formation of the individuals, and should guide all stages of the process. However, considering all the complexity involved, especially in the current Brazilian context, it is reiterated that the implementation of this proposal can only occur gradually, through the understanding and commitment of the subjects of the process at all levels, towards the consolidation of conjunctural conditions future, which allow the EPT to carry out the integral formation of the subjects, as argued throughout this section.

Therefore, for the didactic-pedagogical practices can contribute to the proposal of the EPT mentioned above, this study argues that they are also developed and executed in an integrative perspective, that is, that they provide opportunities for the individuals to develop their multiple dimensions, as is presented in the next section.

INTEGRATING PEDAGOGICAL PRACTICES

The formative process of an individual is complex since it involves a large number of objective factors, such as the material and normative conditions of the school, and subjective ones, such as the perception and involvement of educators, as well as the learner's will or desire. In this complex context, the pedagogical practices of teachers are highlighted, especially when the desire is to increase the quantitative and qualitative indices of the training process.

In this study, the pedagogical practices are considered from an integrative perspective, that is, as a possible and essential resource for the effectiveness of EPT as integral or omnilateral training of the subjects. Therefore, the main aspects involved in this process were analyzed, as well as the basic elements of a pedagogical practice that aims at integration. Thus, from now on, the expression "integrating pedagogical practices" will be used to refer to the aforementioned perspective.

The first aspect to be analyzed concerns the understanding of what is the object of the alleged integration: after all, what should be integrated? The integration proposed here seeks totality, the development of the subject as a whole. In this sense, it is understood that integration must occur between the elements of the formative process, between the subject's multiple dimensions, as well as between the subject and the environment of which he is a part. Ciavatta (2005) states that this integration aims at training that allows the subject to produce but also to understand, the dynamics of the society of which he is a part.

Thus, individuals are not seen as mere agents of the productive structure but as individuals with multiple dimensions, members of a plural reality. A person is not exclusively professional but plays other roles in society. Whoever graduates from a given profession also acts as a parent, neighbor, consumer, and voter, playing other roles in the interest of the community. Therefore, it is not reasonable that its formation occurs unilaterally, but integrally, aiming at the totality of the subject, and integrating, linking this subject to its reality.

Having presented the intended integration, it is necessary to highlight some assumptions (CIAVATTA, 2005; ARAÚJO; FRIGOTTO, 2015) that permeate the integrating formative process, especially in the Brazilian context: ethical-political conditions of the educational proposal; legal conditions for the development of an integrated and inclusive education; material conditions of both the school and the subjects involved; lack of understanding of the integrated teaching proposal; transforming attitude or will of those who make up the educational team; participatory educational management; integration with the community outside the school; didactic-pedagogical solutions.

Regarding didactic-pedagogical solutions, two equally important aspects stand out: teacher training and pedagogical practices. Regarding the first aspect, Machado (2008, p. 11) declares that "[...] the lack of consistent theoretical concepts and broad and continuous public policies has historically characterized teacher training initiatives specifically for professional education in Brazil." This random and inconstant process suffered economic and political interference, materializing in streamlined, special, and emergency programs, disconnected from the reality of teachers' activities, and subordinated to the immediate interests of the productive market.

In contrast to the perspective of teacher training that took place in Brazil, Costa (2012, p. 65-66) highlights that "Understanding, reflecting, questioning and analyzing social and productive relations [...] should be one of the structuring axes of training of teachers for the EPT, as it would enable greater awareness of social subjects about their place in this production system." In the same sense, Kuenzer (2008, p. 33) argues that "Among other dimensions, this teacher should study work in the ontological dimension [...]", that is, as a constitutive activity of human humanity and not just as a form of material production and survival. There is inconsistency and contradiction between the teacher training process, carried out in Brazil, and the legal objectives foreseen for the EPT.

Regarding the pedagogical practices, in the context of EPT omnilateral training, they must provide opportunities for the broad development of subjects. Araújo and Frigotto (2015) state that more important than the pedagogical practices is the context in which they are developed, composed of the aforementioned aspects, as well as the transforming human attitude of the subjects of the educational process.

Thus, it is essential to emphasize that a given teaching technique or pedagogical practice can become emancipating or alienating, depending on the ethical-political and epistemological context in which it is developed and executed, as well as on the conception of education of the subjects who use it (ARAÚJO, 1991). This understanding is vital for advancing towards the integral formation of subjects, as it allows rejecting the idea of didactic-methodological prescription, given that there is no pedagogical technique or practice that is effective in itself. In the perception of Araújo and Frigotto (2015), it is a mistake to limit oneself to the idea of universal pedagogical practices, valid for all contexts, given the

multiplicity of variables and specificities involved in the training process, as well as existing methodological possibilities.

Thus, it is necessary to understand that integrative pedagogical practices are not ready and finished, capable of effecting the omnilateral development of subjects simply or objectively, in any context. They must be developed by the participants in the educational process, in a collaborative and contextualized dynamic. Araújo (1991) conceives teaching techniques as a "means", that is, a resource through which subjects can achieve established objectives. Also, Araújo and Frigotto (2015) emphasize that the evaluation and validation of a teaching technique are related to its purposes and practice, and not to its previous conception.

Therefore, for a teaching technique or pedagogical practice to become emancipatory or integrative, it must be linked to an educational project aimed at overcoming the formative duality - both in ideological terms and in curricular and didactic terms - and the transformation of social reality concrete. Considering the above, below are some guiding principles for the process of developing integrative pedagogical practices.

> Commitment to the broad and lasting training of men, in their broad capacities; The idea of praxis as a reference to training actions; That theory and educational practice constitute the articulating core of professional training; Theory is always reinvigorated by educational practice; The educational practice being the starting and finishing point; The teaching action revealing itself in concrete practice and social reality (ARAÚJO; FRIGOTTO, 2015, p. 71-72).

Thus, the subjects involved in the educational process must avoid the mere importation of pedagogical practices from other contexts, without making the necessary adaptations to the reality in which they will be applied. Whether for adequacy, combination, or even the development of a new pedagogical practice, aimed at comprehensive training, it is necessary to consider the aforementioned principles as well as the following aspects:

a) **the problematization of reality and curricular contents**. It demands from the subjects the search for solutions, "raising the search for tools, theoretical and practical, capable of helping individuals in facing their daily and historical tasks" (ARAÚJO; FRIGOTTO, 2015, p. 74). It also seeks the use of knowledge and methods, which help in the development of essential capabilities for critical and conscious action in reality;

b) **the contextualization of knowledge and didactic pedagogical practices.** The very conception of omnilateral development entails the integration of the subject into his reality. In this process, the contents and pedagogical practices must maintain a close relationship with the reality of the learning subjects, developing in them the capacity to understand it, as well as to act on it consciously and responsibly. Thus, one should take advantage of the practical experiences of the learning subject, providing meaningful learning (MOREIRA, 1999) and avoid "encyclopedic teaching" as being that "[...] that does not allow students to establish concrete relationships between the science that learns and the reality he lives" (RAMOS, 2010, p. 55). Therefore, the social reality must be the starting point, and the transformed reality, the arrival point in the emancipatory formative process (PISTRAK, 2009);

c) **valuation of active pedagogical practices.** Passivity is not a factor that helps in the full development of subjects, so the integrative training process must value the activity of students. Pistrak (2009, p. 131) points out that "only in activity can the child be formed to be active, only in action does he learn to act, only in reality [...] does he learn to participate consciously [...]". However, it is necessary to emphasize that not every active pedagogical practice is emancipatory in itself. For this, it needs to be committed to the social transformation of the learning subject;

d) **the autonomy of the subjects involved**. In addition to valuing the activity, autonomy is an essential element in the omnilateral training process (ARAÚJO; FRIGOTTO, 2015), since, like passivity, dependence is not beneficial for the training process. Therefore, in the execution of integrative pedagogical practices, it is essential to stimulate the students' capacity for self-organization, which necessarily involves knowledge of each individual's skills and potential. Thus, it is highlighted that an autonomous subject is not necessarily an individualist subject. For Pistrak (2009), autonomy can be identified by collective work, organization of activities, and creative capacity;

e) **creative ability**. Linked to the problematization of reality and the school curriculum, creativity must be present in the actions of teachers and students. Ciavatta (2005) points out that creativity requires that actors in the educational process are open to innovation, using it in favor of integration. Through creativity, subjects should be encouraged to understand the world beyond school routines, as well as establish relationships between theory and practice, other than those formally defined;

f) **collective and collaborative work**. In integrative pedagogical practices, it is essential to prioritize activities that provide subjects with collective work, since this is one of the skills most demanded by today's social dynamics. Araújo and Frigotto (2015) warn that collective work should not be understood as a denial of the subject's individuality, but of individualistic practices. In the same sense, Pistrak (2009) makes a severe criticism of liberal pedagogical theories, in which each subject answers for himself, in an egocentric educational context. Collaborative work also figures as an opportunity to combat exacerbated competitiveness, so damaging to the teaching-learning process and social life;

g) **emancipation of learning subjects**. In the context of the educational process, the emancipation of a subject occurs in different ways and intensities. However, regardless of the particularities of individuals, it is necessary that, through integrative pedagogical practices, the necessary means be provided so that everyone is able to build this emancipation, be it cognitive, social, political, etc. Ciavatta (2005, p. 2) declares that "human emancipation takes place in the totality of social relations where life is produced", and not just in the dimension of productive life, as occurs in the fragmenting context of liberal pedagogies.

Araújo and Frigotto (2015, p. 75) state that the development and implementation of integrative pedagogical practices do not depend on the practice of "[...] lectures, the study of the environment, didactic games, integrated technical visits, seminars, directed study, workshops [...]", but the understanding and involvement of the subjects of the educational process on the subject, the material and legal conditions that ensure the continuity of the process, the linking of these practices to an ethical-political project of transformation social and the commitment to omnilateral training of learning subjects.

From the above, it is highlighted that the omnilateral formative process is complex and necessary. Mészaros (2005, p. 25) declares: "[...] in the educational sphere, solutions cannot be formal; they must be essential. In other words, they must encompass the totality of educational practices in the established society". Thus, alone, integrative pedagogical practices, which aim to overcome disciplinarity, are not capable of guaranteeing the effectiveness of omnilateral formation. However, without them, all efforts will be insufficient, since fragmented teaching is not a path that leads to the subjects' integrated and integrative training.

METHODOLOGY

This is a research carried out within the scope of the Professional Master's Degree in Professional and Technological Education (PROFEPT), Campus Parnaíba of the Federal Institute of Piauí (IFPI). About the methodological procedures, this research is classified as: applied, regarding its nature; descriptive, regarding its objectives; field research, regarding technical procedures; qualitative as to the approach of data analysis.

Concerning Ethics in Research, considering CNS Resolutions 466/2012 and 510/2016, the study: maintained the anonymity of the participants; ensured the secrecy of the information collected in the interviews; made due references to the texts consulted for the theoretical basis of the research; formalized the consent of the participants, through the Informed Consent Term (ICT); received approval from the Ethics Committee for Research with Human Beings (CEP/IFPI), on September 29, 2020, through the consolidated opinion of CEP number 4291029.

The screen research was carried out in a federal educational institution, in one of its campuses, located in the city of Teresina (PI). The focus sector of this research was one of the teaching departments, responsible for managing the provision of three technical courses integrated into the high school, three concurrent-subsequent technical courses, and two technology courses. In this teaching department, there are 41 professors with varied backgrounds.

Of the total number of professors working in the researched teaching department, five professors were interviewed, hereinafter referred to as "Professor 01", "Professor 02", "Professor 03", "Professor 04" and "Professor 05". As this is research with a qualitative approach, which analyzes the phenomenon due to its social nature, it is understood that this number of respondents is compatible with the objectives since it did not seek to quantify the pedagogical practices used by the research participants, but identify and understand them, based on the reports of the teachers interviewed.

To define the participants, the following inclusion criteria were considered in the study: voluntary adherence to the research; effective Professor linked to the researched teaching department; EPT' experience. As an exclusion criterion, it was defined that a substitute or temporary Professor should not participate, as the term of their contracts could end before the conclusion of the study.

After applying the exclusion criteria, five professors were prevented from participating because they were substitutes, leaving 36 effective professors, who participated in the recruitment stage, through an email invitation with information related to the research and the dynamics of data collection. Of these, 15 professors showed interest in voluntarily participating in the research and went on to the selection stage, which was guided by the following criteria: having worked in the three types of courses offered by the department (integrated medium, concomitant-subsequent and higher), considering the semesters academic years 2019.1, 2019.2 and 2020.1; having a higher average number of class hours, considering the aforementioned semesters; as a tiebreaker, the longest teaching time in the researched educational institution was adopted.

The result of the selection indicated that nine professors had worked in the three types of courses. Then, these nine professors were ranked according to two other criteria, so that the five best placed moved on to the stages of signing the ICF and conducting the interview for data collection, which was carried out through semi-structured interviews, composed of guiding and complementary questions, which emerged from the very dynamics of the conversation. The choice of this technique was due to allowing these researchers greater flexibility in data collection, as well as a better quality of the interviewees' formulations.

Due to the context of the Covid-19 Pandemic, the interviews took place remotely, through the Google Meet videoconferencing platform, with prior scheduling. With the consent of the interviewees, the interviews were recorded, with audio and video recording, and filed in the Virtual Drive of the institutional email accounts of these researchers, where they will remain archived for a minimum period of five years. It is noteworthy that access to the videos is restricted, so each participant only has access to the video of their interview, and the researchers have access to all the material.

Following Bardin's (1977) content analysis technique, the five interviews were transcribed, using Microsoft Word software, and revised to avoid, as much as possible, distortions in the information provided by the participants. Then, the "Pre-Analysis" stage of the transcribed material was carried out. All five interviews were selected since there was no failure in the process of recording and transcribing

the information. Then, the first reading was carried out, with a more exploratory or fluctuating character to perceive the text in its entirety.

In the "Material Exploitation" stage, a new, more detailed, and careful reading was carried out, through which it was possible to encode the interview transcripts. In this reading, the record units, represented by text fragments, that dealt with similar subjects were identified and grouped. From the grouping of recording units, the categories and subcategories of analysis emerged, as shown in the Box 1.

Box 1 – Categories and subcategories of research data analysis.

Categories	Subcategories
CHARACTERIZATION OF EPT SUBJECTS	EPT PROFESSORS: training and professional performance.
	EPT STUDENTS: profile, weaknesses, and material situation
PEDAGOGICAL PRACTICES AT EPT	PLANNING AND ORGANIZATION: aspects involved, conception, and structuring of pedagogical practices.
	IMPLEMENTATION: elements and dynamics of the EPT teaching process.
	OBJECTIVES: interests involved in training in EPT.

Source: Elaborated by the authors.

In the next section, there are the results of the analysis and discussion of the data collected based on the theory indicated in the theoretical reference of this research, corresponding to the third stage of the content analysis (BARDIN, 1977). The text was prepared in such a way as to articulate excerpts from the references that underpinned the study, the interviewees' speeches, and the considerations of these researchers. The following information corresponds to the subcategory "PLANNING AND ORGANIZATION: aspects involved in the conception and structuring of integrative pedagogical practices".

RESULTS AND DISCUSSIONS

The pedagogical practices, aligned with EPT as a broad and comprehensive training, should be planned and organized to provide opportunities for subjects to improve their multiple dimensions, aiming to develop in them critical awareness for acting responsibly for the reality they integrate. Lukács (1978, p. 5) highlights that the development of human consciousness is "[...] the essentially separatory moment [...]" between the natural man and the social man, that is, man's humanity is directly linked to his consciousness, the reality of which he is part and of the interventions he practices in it. Thus, in the context of EPT, the development of human consciousness must permeate the stages of planning, organization, and execution of activities that make up the formative process.

Regarding the stages of planning and organizing pedagogical practices, understanding the role of conscience is essential. Based on the theoretical contribution of this study, it is highlighted that awareness is directly related to the understanding of reality, understood as a totality of interrelated parts (MOURA, 2007), and that it should avoid fragmentation or hyperspecialization of its constituent parts (MORIN, 2011). Araújo and Frigotto (2015) emphasize that the implementation of comprehensive formative is directly related to pedagogical practices that allow the subject to perceive and understand reality as a whole.

It is in this context that EPT pedagogical practices must be planned and organized, requiring professors to be aware of aspects of the educational process in which they work. It is fundamental that the pedagogical practices connect to the concrete reality of the subjects, seeking to overcome the limits of the disciplines to which they are linked and the essentially theoretical character. Thus, in the planning

and organization stage of pedagogical practices, the need for them to be conceived considering the context in which they will be performed, and not as isolated actions, disconnected from reality, is highlighted. Therefore, it is important that, in the process of planning and organizing didactic activities, professors seek information about the level of the course, the modality of education and teaching, and the social context of the students, as can be seen in the reports below.

> Thus, I end up giving a link to the students, I try to find out about the course, what the course is, and what they are going to work with, and I adapt it. For example, in general, accounting, which I teach in the accounting course when I go to the administration course, the focus is already different, because it is focused on the administrator (Professor 03).

> So, every time I prepare disciplines, I have a very big concern – because my area is extremely theoretical – to bring to that specific course – that I am teaching that theoretical class – an understanding that is related to the practical part of the profession, of that particular course (Professor 05).

The participants' speeches allow us to perceive two points: the first reveals the professor's care in contextualizing the discipline to the reality of the subjects, and in bringing the proposed activities closer to the students' experiences. Considering the specificities involved in the process is very important for the educational success of the subjects involved, given that the pedagogical practices are not infallible in themselves (ARAÚJO, 1991). The second point refers to the centralization of planning on the teacher, a fact that contradicts the participatory dynamics indicated for the educational process that aims at integral formation. Thus, teachers must decentralize the planning and organization of these practices to involve students and other school professionals.

In the planning and organization stage, it is also necessary for professors to understand the syllabus content that is the object of pedagogical practices, considering the objectives proposed for the discipline, as well as its relevance to the educational proposal as a whole, foreseen in the Pedagogical Political Project of each course. On this point, the statements of the interviewees follow:

> Remembering then, I took the discipline, what am I going to do? I'll look at the discipline's syllabus. So, there is a basic menu proposed in the PPC, and so far so easy! (Professor 01).

> Well, in the beginning – when I receive a discipline at the beginning of the module, of each semester – the first planning I do is the discipline plan, which then I will look at the syllabus, I will develop the syllabus (Professor 04).

> Contain the content of that menu, of that discipline within what we have as school days. Well, this is the first job that I have to structure (Professor 05).

In general, the curricular organization of the courses still follows the disciplinary logic, in which the syllabus is organized by areas of knowledge and disciplines, a fact that does not represent a problem. However, for this disciplinary organization does not imply barriers to the integral formation of the subjects, the professors must seek to broaden their perception of the student's formative process, in its entirety, through activities that transpose the limits of the disciplines and allow the students the integration between knowledge.

In the interviewees' speeches, the care they have for the structural aspect of the disciplines they teach refers to the syllabus. This point is very important, but it is not the only one to be observed by professors. In addition to the syllabus, other aspects must be observed, such as the objectives of the course, the profile of the graduate, the nature of the course, the workload allocated to it, the target audience, the methodology, as well as the purpose of which is linked. In the reports below, it is possible to observe some of these aspects being contemplated:

> I take the syllabus, see the general objective and try to adapt the practice of the discipline to the job market, I try to bring the reality of the market to the classroom. Be practical, very practical! (Professor 03).

> I usually teach notions! So, I'm going to look first for what's main, what's important within that subject to be said, what can't be said about each subject (Professor 02).
>
> Afterward, I plan what I am going to do in each class: content, activity, dynamics, and text, and, based on what I am going to do in that class, I make my schedule. Then, I see more or less the issue of the amount of time I will have (Professor 04).
>
> The second work, which I have to structure, is to check the level of that student. So, I'll check if it's a high school student, a college student, or a technologist student, so I can guide the classes (Professor 05).

In the reports above, it is possible to notice that some of the indicated aspects were contemplated. However, there is a need and possibility to advance in the design processes of disciplines, especially in the involvement of students in the planning stages, and in expanding the purpose of the training process, which is restricted to training for the job market. Thus, by understanding the aforementioned aspects and the specificities of the process, professors can plan and organize with more propriety the conduction of the pedagogical practices carried out in the disciplines they teach.

It is necessary to emphasize that, in the planning and organization of disciplines, professors have several methodological possibilities. Araújo and Frigotto (2015, p. 67) say that "There are different ways of thinking about the contents necessary for the formation of children, young people, and adults capable of developing their capacity to autonomously interpret and act on reality". In this sense, it is understood that, from the planning and organization of disciplines, professors must consider the different existing possibilities. The following quotes illustrate this needs:

> [...] some professors understand that the classes are all the same. And they are not, they are all different! Each period has its peculiarities, and each class has its peculiarities (Professor 01).
>
> thus, the discipline of 'labor routines', in the accounting course is one thing and there in the administration course, it is something else. Despite my workload being the same, the focus is different because the administrator will not do the bookkeeping, the accounting technician will! (Professor 03).

The interviewees' reports demonstrate the importance of thinking about pedagogical practices according to the context and its elements, avoiding the idea that the same methodology is valid for any situation. In addition to these specificities of each discipline or course, there are also conjunctural aspects, which should be considered by professors in the planning and organization of disciplines: time available for each class, the shift and the time of execution of the class, the class size, maturity and level of interactivity of the students, which can be seen in the following statements:

> Then, I see more or less the issue of the time I will have: if it is a fifty-minute class (Professor 04).
>
> There is a variation, even the time. If the face-to-face time is the first two, it is different from the last two times. So, we have to think about all the subject dynamics, not thinking that it will be the same (Professor 01).
>
> There are very large classes that make this unfeasible, especially when I only have one fifty-minute class a week. But, in smaller classes, with four classes a week, I manage to maintain closer contact (Professor 05).
>
> However, depending on the maturity of the class, this may even cause some complications! [...] depending on the class, I can play this game as if it were a competition (Professor 04).
>
> You know that there are apathetic groups, that groups that no one participates in. And some classes already participate too much (Professor 05).

It is possible to see how these aspects mentioned above interfere with the way professors define their practices, aiming to find the most effective way to carry them out. The speech of "Professor

01" emphasizes the need to consider that different conjunctural situations require different teaching actions, to build a successful teaching and learning process. It is also noted that the perceptions of the professors about the classes, in general, and of the students, specifically, can guide how the disciplines are organized and structured, which denotes the influence and importance of the teaching experience in their performance professional.

In addition to the aforementioned conjunctural aspects, which are usually present in the school context, some arise sporadically, as is the case of the new Coronavirus pandemic. This exceptional situation greatly impacted the way professors planned and organized their subjects. This is because the format of remote classes, imposed by the pandemic, significantly aggravated deficiencies in the teaching-learning process: limited access to necessary material resources, such as digital equipment and the internet, for a significant part of students, with direct implications for permanence and in success; teachers' lack of ability to use the resources necessary for the production and execution of classes in a remote format; lack of adequate space for the teaching and learning process.

In this sense, the context of the pandemic has shown even more how challenging and dynamic it is to plan and organize the training process, requiring all subjects, especially professors, to adapt and be flexible, necessary to overcome the barriers imposed, unexpectedly. However, it also enabled, through the challenge, new learning and experiences for all those involved in the process, according to the following reports:

> This pandemic, today, is teaching us many things, even our way of teaching (Professor 03).
>
> I found our experience in Remote Education to be very interesting because it forces each professor to do a didactic sequence. So, what is the didactic sequence? It would be lesson planning, a lesson plan, which was not mandatory before (Professor 01).

In the planning stage and organization of pedagogical practices, considering the specificities of the discipline or course and the conjunctural aspects of the context, the professors must define which resources or materials will be used. Araújo and Frigotto (2015) state that these definitions involve variables such as the professor's training and professional maturity, the class's profile, the time and material conditions available, and the posture required of the students.

> First, the content, which is previously established. Then, the number of classes or class hours and then, in this case, also, making the necessary material, which can be either the slides, which is a very interesting resource, or the dynamics that we will work on: readings, interpretations, discussions (Professor 01).
>
> In short, I do my stuff in Word, Excel, etc. Books, too, I try to make and it becomes standard in all classes and I put them on for the students (Professor 03).
>
> I see what I need to prepare: if I'm going to need a slide; if I'm going to need some text – if I use text, I already leave it printed to make copies on the day or the day before my class; if I'm going to do some dynamics, some practical activity, I already prepare it, I separate what I'm going to use from the material; if I need to print something (Professor 04).
>
> When I teach high school, integrated high school people, I always prepare the class through a booklet, where I develop that class. [...] I create the booklet because since I entered the institute, I have noticed that, because my disciplines do not have a course at the Institute, there is a deficiency in the library (Professor 05).

The statements above, once again, how the professor still plays a central role, if not exclusive, in the planning and organization stage of disciplines and pedagogical practices. Bringing students and other education professionals into this process needs to be overcome. Another point worth mentioning is related to the institutional fragility in offering the necessary didactic resources for the development of subjects, as well highlighted by professor 05. The lack of necessary resources has a direct impact on the way and possibilities that professors have to plan and organize their pedagogical practices.

Faced with the complexity involved in the planning and organization of pedagogical practices, it is necessary to highlight that the search for techniques or practices that promise success, valid for any situation, is not compatible with the proposal of integral formation of the EPT. Thus, it is understood as pertinent that the development of these practices occurs in an integrated, collaborative, and participatory way, under the coordination of the professors. Based on Araújo (1991), who presents pedagogical practices as a means by which the teaching and learning process can take place, Araújo and Frigotto (2015, p. 72) assert that "'as a means, technique always is an end and it is from this perspective that teaching strategies are treated here, together with an integrative and emancipating educational project." In this way, the same pedagogical practice can lead to different, even opposite results, depending on the purpose to which it is linked.

In the context of the EPT, the pedagogical practices have the purpose of "[...] enabling the student to understand the context in which he is inserted, so that he can intervene in it, depending on the collective interests" (MOURA, 2007, p. 23). From this point of view, professors must carry out their work, giving the conditions to develop their multiple capacities and not just those focused on material production.

The analysis of the participants' speeches, based on the theoretical reference on the subject, indicated that, when planning and organizing their pedagogical practices, the interviewed professors contemplate the following aspects: contextualization of practices with the reality of students, through the context of social, the level of the course and the students, the teaching and education modality and the specificities of the educational process; understanding of the syllabus and its relationship with the training proposal of the course; the necessary resources for each type of proposed practice; the conjuncture for carrying out the practices, such as available time, size and maturity of the class, level of interactivity of the students.

The analysis also revealed that: it is necessary to broaden the professor's perception of the training process to understand it in its entirety; in the planning of pedagogical practices, the interviewees centralize the work, so that practically all the definitions come from them, configuring a process with little participation; it is necessary to move forward in overcoming disciplinarity, an essential condition for comprehensive training; the purpose of the planned pedagogical practices is restricted, prioritizing training for insertion in the labor market, to the detriment of broad and integral development, as the training carried out by the EPT is defended.

Therefore, in the planning and organization of the pedagogical practices, developed by the professors who work in the EPT, it is necessary to consider the aforementioned aspects, as a way of creating the right conditions - respecting the due specificities of each context - for a training wide and integral of the individuals, which aims not only at their insertion in the labor market but also at their human and citizen development.

FINAL CONSIDERATIONS

In this text, we sought to discuss aspects relevant to the planning and organization of pedagogical practices in the EPT, taking as reference the integrative perspective and the omnilateral formation of the subjects. Therefore, the EPT was presented from the perspective of broad training, through a training process that contemplates the subject as a whole, providing him with the didactic-pedagogical conditions for integral and integrating training. Integrating pedagogical practices were characterized, which are in line with EPT as a comprehensive training. Data from field research related to the planning stage and organization of integrative pedagogical practices were analyzed, based on the theory on this theme, to identify the elements that should be considered in this process.

It is necessary to emphasize that, in the planning and organization of pedagogical practices, which aim at the integral formation of the individuals, the development of human critical awareness must permeate the entire process, as it is the awareness, of themselves and of the reality they are part of, that allows human beings move away from their natural condition and approach their social condition.

Therefore, any integrative pedagogical practice needs to have as a reference or objective to provide learners with opportunities to develop their critical awareness.

For this awareness, integrative pedagogical practices must be directly connected to the concrete situations of reality, creating conditions for the subjects involved in the teaching and learning process to be able to carry out the transposition of theoretical knowledge for its application in real life. This connection with concrete reality can occur, for example, through the contextualization of pedagogical practices, that is, through the use of the life experiences of the learning subjects. This contributes to bringing the theory closer to the subjects' concrete life, in addition to involving them in the process, creating favorable conditions for meaningful learning.

Another aspect that needs to be considered is overcoming disciplinary barriers, which fragment content into parts or disciplines. Overcoming disciplinarity does not mean eliminating disciplines, but creating conditions, through integrative pedagogical practices, so that subjects can perceive and understand the interactions between the parts that form the whole. To this end, it is recommended that professors involve students and other school actors in the planning of their pedagogical practices, taking full advantage of each one's experiences.

We need to consider the conjunctural and material aspects peculiar to the place and to the people for whom the pedagogical practices are being planned and organized. This is because the idea of a valid and infallible pedagogical practice for any situation should be avoided. Rather, it should be noted that the professor has at his disposal a wide variety of methodological possibilities, on which he can make modifications or adaptations, to make them more effective in the context in which they will be implemented.

The results of data analysis revealed that, in the planning of their pedagogical practices, in the context of EPT, the interviewed professors partially contemplate the aspects indicated by the theoretical reference: contextualization of pedagogical practices with the students' reality; understanding of the course's syllabus and its relationship with the course's training proposal; the necessary resources for each type of proposed pedagogical practice; the conjuncture for the execution of the pedagogical practices.

However, it was also possible to verify that: it is necessary to broaden the teacher's perception of the training process to understand it in its entirety; the professors interviewed centralized the planning work, configuring a process with little participation; it is necessary to advance in overcoming disciplinarity; the purpose of the planned pedagogical practices prioritizes training for insertion in the labor market, to the detriment of broad and integral development, as it the training carried out by the EPT is defended.

Given the above and in response to the research problem, in theory, in the planning and organization of integrative pedagogical practices, it is essential that the following elements be considered: teaching performance in a collaborative and participatory way, involving the other actors of the educational process; linking pedagogical practices, preferably in a contextualized way, to the reality of the life of the learning subjects; overcoming disciplinarity; consideration of the conjunctural and material aspects of the school and the students. Finally, given the complexity of the human being's formative process, the planning and organization of pedagogical practices is not a ready-made process, rather it is dynamic and changeable, formed by multiple possibilities that can be explored.

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Author 1 – Guiding and responsible for data collection, data analysis, and text writing.
Author 2 – Research advisor, with active participation in data analysis and review of the final writing.

CONFLICT OF INTEREST DECLARATION

The authors declare that there is no conflict of interest with this article.

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