

EXPERIENCE REPORT - EDUCATIONAL PRODUCT - INTEGRATED HIGH SCHOOL TEACHER TRAINING: IN SEARCH OF AN EMANCIPATORY EDUCATION



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ABSTRACT

Experience report on the elaboration and application of an Educational Product, a requirement of the master's course of the Graduate Program in Professional and Technological Education (ProfEPT) of the Federal Institute of Mato Grosso do Sul (IFMS), called Integrated High School Teacher Training: in search of an emancipatory training that had as subjects teachers who work in state schools of Campo Grande in Mato Grosso do Sul in Integrated High School to technical courses. The meetings were online and the study of texts by authors who discuss the categories of polytechnic education, omnilateral education and work as an educational principle was used as a reference. The theoretical foundation used is based on historical materialism, as it allows us to understand the historical movement and the contradictions of the capitalist system. In addition, Professional Technological Education is inserted in this context with its particularities. A previous and a post-training investigation was carried out in the teachers who participated in the pedagogical training to investigate their conceptions about the categories chosen for study and it was possible to verify advances regarding the need to establish a more effective link between basic education and technical-professional training, as a way to pursue an education that articulates culture, knowledge, technology and work, with a view to an integral formation of the subjects who are the recipients of public policies.

Keywords: Teacher Training. Educational Product. Omnilaterality.

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INTRODUCTION

We present a brief report of the formulation and implementation of the educational product called Training for Teachers of Professional Education: in search of an emancipatory education resulting from research conducted throughout the master's degree of the Graduate Program in Professional and Technological Education of the Federal Institute of Mato Grosso do Sul (ProfEPT-IFMS), which constituted a pedagogical training aimed at teachers who work in state schools that offer Integrated High School to technical courses in Campo Grande – Mato Grosso do Sul.

The option for the theoretical framework of historical-dialectical materialism to support pedagogical training was due to the fact that this theory explains the foundations that govern the dynamics of social and economic relations of the capitalist mode of production. Understanding the social reality in which we are subjected is one of the premises for teachers to develop a pedagogical work committed to the perspective of the integral development of their students, with the objective of providing training beyond the dictates established by the labor market.

The horizon to be thought about is that of an education in a perspective of emancipation of the human being, to the extent that what is desired is the appropriation, by the children of the working class, of the knowledge historically produced by humanity and that allows them to apprehend the foundations of the society in which they are inserted and can, thus, promote its transformation so that it is increasingly inclusive, fair and egalitarian, providing them with a full existence.

From the apprehension of this framework, we seek to develop a reflection on the possibilities of a critical and contextualized teaching performance, providing opportunities for the adoption of didactic-methodological procedures consistent with a transformative practice, aiming at the formation of the student in order to develop the capacity for appropriation of philosophical, artistic, technical-scientific, social and cultural knowledge, in order to allow their citizen action in society.

One of the premises that sustains pedagogical training is to contribute to the reflection and perception that ideas are marked by political-ideological references and, in this way, to understand that didactic work depends on the political choice that is made and by the theoretical-methodological framework that marks its conception of the world, of society and consequently of education.

The curricular structure was structured in order to allow reflection on the relationships that can be established between the categories omnilaterality, polytechnics, work as an educational principle and professional education in order to capture their senses and meanings, with a view to building understandings about the context of the capitalist production system, in which we are inserted.

The proposition and realization of a pedagogical training aimed at teachers who work in schools of the state education network that offer Integrated High School to technical courses, initially required knowing them to identify those who have a specific degree in the professional area in which they work and those who have a degree in the disciplines of the common core of basic education.

This procedure was important because, in the first case, administrators, web programmers and other bachelors were identified as teaching without specific training to act as such and who needed pedagogical training to master the didactic-pedagogical aspects. In the second, teachers who had training for teaching in basic education and were working in the teaching of the Portuguese language, biology, mathematics, etc., and needed to articulate with the curriculum of the specific part of professional training in order to promote their integration.

In order to reduce the fragmentation of the curriculum, the two groups have, in their daily lives, the challenge of mastering not only the specific knowledge of their areas of training, but also the didactic-pedagogical aspects that sustain the educational practice and establishing a relationship between the contents they teach with those of the other disciplines. in order to make the connections between the disciplines of both the general and the specific part. According to Saviani (2005), and here in particular the teachers of EFA, they have as they should broaden the understanding of the relations between education and politics, their historical existence and the recognition that they are part of a set and the same totality, in the specificity of the socialization of knowledge, and with the understanding that "[...] political practice is based on the truth of power; the educational practice, in the power of truth [...]" (SAVIANI 2012, p.87), so that they can see as a result of their actions an emancipatory human formation of their educated.

Regarding the methodology used in conducting pedagogical training, we use historical-critical pedagogy as a way to provide experience in a theoretical framework that uses the same assumptions of the Marxist theory chosen for the study of the master's student and her advisor.

METHODOLOGY

The Educational Product called Teacher Training for Professional Education: in search of an emancipatory education was designed with the purpose of contributing to teachers who work in the context of Professional and Technological Education (EPT), specifically those from High School Integrated to technical courses. The appropriation by these professionals of the categories of polytechnics, omnilaterality and work as an educational principle provided the opportunity to understand the necessary overcoming of the current educational model that presents itself with a bias aimed at utilitarian training for productive work to the detriment of an education that privileges social, political, scientific and technical knowledge.

Due to the emergence of new patterns of organization and management of flexible work processes, based on microelectronics, and on the integration between science, work and culture, the demands placed on the working class require an education that provides the mastery of scientific knowledge that underlies social and productive processes in today's society (KUENZER, 2009). Only the pragmatic and utilitarian domain provided by training focused on the specific domain of forms of work are not capable of providing the training of workers with a new profile, capable of political and productive action.

It is essential for the working class that its insertion in the world of work is not only intellectual, but also that it acts critically, ethically and with autonomy in the decisions it has to make in the face of the resolution of complex situations. Another important aspect is that it is able to keep up with changes in the technical basis of production and can maintain a continuous learning process.

For this, it is essential to consider work as an educational principle, with the perspective of understanding the historical process of scientific and technological production, as well as developing the understanding of how the social appropriation of this knowledge occurs with a view to the transformation of life in society and the development of the potentialities and capacities of the human being. The central objective of a transformative education with these premises presupposes the formation of subjects not for the labor market, but a citizen who will enter the world of work.

Likewise, it is necessary to understand that "[...] men and women are historical-social beings who act in the concrete world to satisfy their subjective and social needs and, in this action, produce knowledge [...]" (RAMOS, 2014, p.84). It is through the mediation of work that human history is made, with the social appropriation of the natural resources with

which the human being uses, with a view to the development of science and the systematization of productive work.

Science is built through the appropriation by men of the resources made available by nature, its systematization and recognition of its applicability in the social context in which it was produced. It is, therefore, based on these analyses that work is considered as an educational principle, capable of providing a comprehensive education, which allows human beings to be inserted in the world of work, with full mastery of the technical, social, political and cultural bases that structure today's society, in order to be able to act with criticality, ethics and creativity with the purpose of promoting the transformation necessary for a solidary society. inclusive and egalitarian.

The understanding of the history of education and its duality between manual and intellectual work is the turning point when seeking to understand the historical-social, ontological and ethical-political nature of society. The human social relationship implies recognizing the issue of work as an educational principle in which human beings depend on nature to reproduce their life and, through work, transform nature into a means of life and creation of vital inputs to meet the needs of survival. The formation of the subject must be anchored in polytechnic and omnilateral education for the transformation and emancipation of the human being.

In order to provide the opportunity to apprehend these categories, we start from the analysis of the capitalist mode of production as the guide for the analyses related to the division of labor in the production process and the impact on the formation of the worker of this mode of production by not allowing the integral formation of the students. An emancipatory education presupposes the overcoming of the human being who has historically been divided through the social division of labor, which established a rigid distinction between the act of executing and the intellectual action of thinking and formulating directive and planning actions. In this sense, it is important to understand human beings as historical and social (RAMOS, 2014), which constitute a dialectical relationship with the environment in which they are inserted and, in this mediation with the social and work reality, build their ways of life and human existence.

Therefore, despite the obstacles posed by the capitalist system, which advocates a reductionist formation of the working class, it is clear that, because work is the vital activity of the human being, it is precisely in the worker that the possibility of the realization of the universal man is found, to the extent that, through omnilateral education, he will be able to

unite science and production. With the knowledge of these two fields of knowledge, certainly, the achievements of the working class will be at a level that will allow the construction of a new human reality. In this sense, it is essential to understand how man produces himself, based on the adaptation of nature to his vital needs, consequently generating the creation of the world of culture (SAVIANI, 2013).

Regarding the conception of work, Kuenzer (2009) elucidates it regarding the relationship with the integral formation of the human being and with work, and the fact that it is considered the reference for the organization of education in general and professional education and, for this reason, is understood as an educational principle. Thus, work is understood as a central axis for understanding the social relations built by man in the exchange with others. Education is organized based on the reality imposed by work, just as human formation is centered on it. It is through the process of production of work that man will define his historical existence, since, through work, man transforms nature and creates the world of culture, the human world. A world that he himself expands, progressively, as he modifies the forms and the way he carries out this development.

As the processes of production change, the production of the material existence of the human being changes. In this dynamic transformation of reality, a consequence of the production process of capitalism, social relations are established and new forms of domination and subordination between social classes emerge, with repercussions on the social whole. Understanding the constitution of the capitalist system and the central role of the worker in the productive process and in the expansion of capital is fundamental for teachers to develop their pedagogical practices based on the concreteness of the real world.

It is a condition for the emancipation of the working class to know in depth what forces are active in the capitalist system and the role reserved for it. In this regard, Marx and Engels (2012) show that:

Owing to the expansion of machinery and the division of labour, the labour of the proletarians has lost all self-employment, and with it all attractiveness to the workers themselves. The worker becomes a mere accessory of the machine, from which only the simplest and most monotonous movement of the hand, which is very easy to learn, is required. The costs which the labourer entails are thus confined almost exclusively to the food which he needs for his sustenance and for the propagation of his species. The price of a commodity, however, and therefore of labour, is equal to that of its costs of production. As the repugnance for work grows, so does the wage. Moreover, as the machinery and division of labor increase, the amount of work also increases, either by multiplying the working day, the amount of work required in a given period of time, the increase in the pace of machines, etc. (MARX and ENGELS, 2007, p. 52).

Thus, the understanding of the expanded concrete reality, the totality, implies understanding the processes of production as part of a broader economic, social, environmental, historical, political and cultural reality, that is, it is necessary to understand them as particularities in relation to the totality. It is up to the school to advance in the perspective of overcoming the dichotomy of dualistic education, which emphasizes an existentialist conception (SAVIANI, 2012, p. 61) based on the distinction between intellectual education and manual training, which presupposes incorporating the overcoming of existing conditions through educational strategies that privilege an integral education of the working class and that meets their interests.

In the Marxian perspective, the theme of education, teaching or professional training will appear in several works by Marx and Engels and not only in a specific way. The perspective defended by the authors, in relation to training for the working class, has a broad and comprehensive approach, articulating the different dimensions that constitute the human being.

First: Mental [intellectual] education.

Second: Physical education, as it is imparted in gymnastics schools and by military exercise.

Third: Technological instruction, which transmits the general principles of all production processes and, simultaneously, initiates children and young people in the practical use and handling of the elementary instruments of all trades (MARX, 1982a, emphasis in the original).

An education expressed in such a way that considers the mental, physical and technological instances and leads to an integral formation of the human being constitutes an omnilateral formation, which has been incorporated into the Marxist tradition under the name of polytechnic or polytechnic education. This denomination was used by Marx in his own references, as well as by other scholars of his work. The importance of polytechnic education is evidenced by the fact that it will allow the articulation between productive work, intellectual education, physical exercise and polytechnic instruction and the fact that polytechnics are configured as part of the integral formation of the human being, as can be seen from the excerpt below:

In the continuity of the transcribed fragment, Marx already signals something of his understanding of the subject when he states that "the combination of paid productive work, mental [intellectual] education, physical exercise and polytechnic instruction, will raise the working class well above the level of the upper and middle classes" (idem, ibidem). From this we can infer that, for him, polytechnic or polytechnic instruction is part of integral education, therefore, it is not synonymous with it. On the other hand, the same author, in chapter XIII of Capital, states that

large-scale industry, as it develops, needs to "replace the fragment-individual, the mere bearer of a detailed social function, by the fully developed individual, for whom different social functions are alternating modes of activity" (Marx, 1996, p. 114). He also states that "a moment spontaneously developed based on the large industry of this process of revolution is the polytechnic and agronomic schools". This indicates that Marx links polytechnic education to the idea of the fully developed individual (MOURA; LIMA FILHO; SILVA, 2015, p. 1061).

Therefore, the formation of the subject must be anchored in polytechnic and omnilateral education for the transformation and emancipation of the human being. In order to deepen the theme, the need to consider the capitalist mode of production as the guide for the analysis of the division of labor in the production process and the impact on the education of the worker by not allowing him a comprehensive education was investigated.

Integral human formation presupposes the overcoming of the human being, who has historically been divided through the social division of labor, which established a rigid distinction between the act of executing and the intellectual action of thinking and formulating directive and planning actions. In this sense, it is important to understand human beings as historical and social (RAMOS, 2014), which constitute a dialectical relationship with the environment in which they are inserted and in this mediation with the social and work reality they build their ways of life and human existence.

Despite the obstacles placed by the capitalist system creating a reductionist formation of the working class, we realize that, because work is the vital activity of the human being, it is precisely in the worker that the possibility of the realization of the universal man is found, to the extent that, through omnilateral training, he will be able to unite science and production. With the mastery of these two fields of knowledge, certainly, the achievements of the working class will be at a level that will allow the construction of a new human reality.

Teachers have, therefore, to take on the challenge of deepening their knowledge not only about

Training and qualification must therefore go beyond the acquisition of didactic techniques for transmitting content for teachers and management techniques for managers. Obviously, these aspects will continue to be important, but the macro objective is more ambitious and should privilege training in the context of the country's public policies, especially educational ones, in a perspective of overcoming the current socioeconomic development model, so that the human being should be prioritized more than simply market relations and the strengthening of the economy (MOURA, 2008, p. 30)

This was, therefore, the invitation made to the teachers who adhered to the invitation to participate in the pedagogical training based on the theoretical assumptions presented in this experience report and which resulted in the Educational Product that we present here, whose results were encouraging, which will be presented in the last part of this brief experience report.

THE PROCEDURES OF PEDAGOGICAL TRAINING

The Educational Product (PE) applied consisted of a course called Pedagogical Training for Teachers of Professional Education: in search of an emancipatory education, with 40 hours, and aimed to contribute to teachers who work in the context of Professional Education to take the category of polytechnic as the basis of the study, using the Marxist framework, which is expressed by the construction of a dialogue with the social world and in a historical movement in order to highlight the work as an educational principle aimed at integral and omnilateral education, with a view to overcoming the educational model that advocates a bias of utilitarian training for productive work to the detriment of a training that privileges social, political, scientific and technical knowledge.

It was sought to contemplate the theoretical references that explain the foundations that govern the dynamics of social and economic relations of the capitalist mode of production and, from the apprehension of this reference, to allow reflection on the possibilities of a critical and contextualized teaching performance, providing the opportunity for the adoption of didactic-methodological procedures consistent with a transformative practice, aiming at the formation of the student in order to develop the capacity for appropriation of the philosophical, artistic, technical-scientific, social, and cultural knowledge, in order to allow their citizen action in society.

In conjunction with the NP, a survey was carried out with the target audience in order to identify the level of knowledge in relation to the categories polytechnics, omnilaterality and work as an educational principle in order to evidence whether the participants, first, had knowledge about these categories and, then, whether they signaled the appropriation of the contents studied and the degree of satisfaction or dissatisfaction with the methodology used.

The pedagogical training was carried out in an online format, with 9 p.m., with 3 hours a day, for weekly meetings, from 6:30 p.m. to 9:30 p.m., and 7 p.m. for reading the texts and watching the indicated video. The target audience was teachers from previously

selected state schools that offer Integrated High School to technical courses in Campo Grande, in the State of Mato Grosso do Sul. 20 vacancies were offered to state schools that gave formal acceptance to the offer of the course and disclosed it to their teachers. The following is the schedule with the dates, contents, didactic procedures, indication of the texts for reading and the link to the video that were studied in the pedagogical training:

Goal:

- To approach the historical process of the constitution of capitalist society and the training of workers from a polytechnic and omnilateral perspective.
- To analyze the category of work as an educational and educational principle from a polytechnic perspective.
- To reflect on the social function of Professional Education and didactic and pedagogical issues.
- To enable the questioning of the role of the teacher in Professional and Technological Education.
- To promote the development of pedagogical reflection on teaching practice.

Syllabus:

- Work and Education: ontological-historical foundations;
- The illusions of the knowledge society;
- Duality and fragmentation in teaching and professional education;
- The relationship between professional and technological education and the universalization of basic education;
- The category of omnilaterality and the clash between unilateral versus broad education;
- Conception of work as an educational and educational principle from a polytechnic perspective;
- The epistemological trajectory of the definition of the polytechnic category as a pedagogical principle.

The contents were organized to be taught in weekly meetings with indication of the didactic procedures and reading texts. In order to provide greater interaction between participants, we created a WhatsApp group and a class email. In the e-mail, we sent the texts that should be read in advance before each meeting, which were discussed and

analyzed with the master's student as mediator. The meetings began with an explanation of the contents by the master's student and with the participation of the teachers answering questions, contributing with their reflections and understandings. We use Google Forms for attendance control and subsequent issuance of a declaration of participation. Below is Chart 1 – Schedule, Procedures and Contents of the online classes with the details of how the pedagogical training took place and the articles studied/analyzed in each meeting.

Chart 1 - Schedule, Procedures and Contents - Online classes

ONLINE CLASSES		
Dates/ Timetables	Procedures	Texts/Video
15/7 Thursday	Lecture 1: Work and Education: ontological-historical foundations. Opening of the course: welcome and thanks for participation. Brief presentation of the master's student and the participants. Clarifications about the dynamics of the course: prior reading of the texts in each class; encouragement of the active participation of students so that the discussion is enriching. Explanation of the concepts covered in text 1 by Dermeval Saviani. Sending the Attendance List via Google Forms after 2h40 of class.	Text 1: SAVIANI, Dermeval. Work and Education: ontological and historical foundations. Revista Brasileira de Educação v. 12 n. 34 jan./apr. 2007.
19/7 Monday	Lecture 2: The illusions of the knowledge society. Explanation of the concepts covered in text 1 by Newton Duarte sent by e-mail to the participants shortly after confirmation of enrollment Explanation of the concepts addressed in text 2 by Newton Duarte sent by e-mail. Encouragement of the active participation of students with interactions with each other and with the master's student. Submission of the Google Forms Attendance List after 2h40 of class.	Text 2: DUARTE, Newton. The pedagogies of learning to learn and some illusions of the so-called knowledge society. Brazilian Journal of Education. Sep/Oct/Nov/Dec 2001 nº 18. Paper presented at the special session "Skills and competencies: education and the illusions of the knowledge society", during the 24th Annual Meeting of ANPED, held in Caxambu (MG), from October 8 to 11, 2001.
20/7 Tuesday	Lesson 3: Duality and Fragmentation in Teaching and in Professional and Technological Education. Explanation of the concepts covered in text 3 by Maria Ciavatta and Marise Ramos sent by e-mail. Explanation of the concepts covered in text 4 by Dermeval Saviani "On the Conception of Polytechnic" sent by e-mail, as well as the link to the video. Encouragement of the active participation of students with interactions with each other and with the master's student. Submission of the Google Forms Attendance List after 2h40 of class.	Text 3: CIAVATTA, Maria; RAMOS, Marise. High School and Professional Education in Brazil: duality and fragmentation. Revista <i>Retratos da Escola</i>, Brasília, v. 5, n. 8, p. 27-41, jan./jun. 2011. Available at: http://www.esforce.org.br.
21/7 Wednesday	Lesson 4: The relationship between EFA and the universalization of Basic Education. Explanation of text 4 by Gaudêncio Frigotto. Encouragement of the active participation of students with interactions with each other and with the master's student. Submission of the Google Forms Attendance List after 2h40 of class.	Text 4: FRIGOTTO, Gaudêncio. The Relationship of Professional and Technological Education with the Universalization of Basic Education. <i>Educ. Soc.</i>, Campinas, vol. 28, n. 100 - Especial, p. 1129-1152, out. 2007. Available at http://www.cedes.unicamp.br.

26/7 Monday	Lecture 5: The category of omnilaterality and the clash between unilateral versus broad education. Explanation of the concepts covered in text 5 by Marise Ramos. Encouragement of the active participation of students with interactions with each other and with the master's student. Submission of the Google Forms Attendance List after 2h40 of class.	Text 5: Chapter IV - Concepts for the construction of a conception of professional education committed to human formation from the book RAMOS, Marise Nogueira. History and politics of professional education. Curitiba: Federal Institute of Paraná, 2014. - (Pedagogical training collection; v. 5).
27/7 Tuesday	Lesson 6: Conception of work as an educational and educational principle from a polytechnic perspective Explanation of the concepts covered in text 6 by Dermeval Saviani. Encouragement of the active participation of students with interactions with each other and with the master's student. Submission of the Google Forms Attendance List after 2h40 of class.	Text 6: SAVIANI, Dermeval. The Theoretical Shock of Polytechnic. Trabalho, Educação e Saúde, 1(1):131-152, 2003. Video: Polytechnic conception of education and the organization of school work. Gaudêncio Frigotto and Marise Ramos: Available at: https://youtu.be/S2DJg_S7IOs
28/7 Wednesday	Lesson 7: The epistemological trajectory of the definition of the concept of polytechnic as a pedagogical principle. Explanation of the concepts addressed in text 7 by Dante Henrique Moura. Encouragement of the active participation of students with interactions with each other and with the master's student. Submission of the Google Forms Attendance List after 2h40 of class.	Text 7: MOURA, Dante Henrique; LIMA FILHO, Domingos Leite; SILVA, Mônica Ribeiro. Polytechnic and integrated education: conceptual confrontations, political projects and historical contradictions of Brazilian education. Paper presented as a paper commissioned by the Working Group "Work and Education" (GT-09), at the 35th Annual Meeting of the National Association of Graduate Studies and Research in Education (ANPEd), in Porto de Galinhas/PE, 2012. Revista Brasileira da Educação, v. 20, n. 63, Oct.-Dec., 2015
31/7 Saturday	Sending the post-course survey through Google Forms.	
Total 21 hours		

The choice to carry out the course in state schools that offer High School Integrated to technical courses was due to the interest in providing teachers from the state network of Campo Grande – MS with the opportunity to participate in a pedagogical training that addressed themes that could contribute to the expansion of their theoretical knowledge, but with a different perspective from that expressed in the Pedagogical Projects of High School with Professional Qualification that these schools Develop.

The challenge of pedagogical training for those who are inserted in EFA as teachers imposes itself as a condition to advance decisively in the valorization of this professional, on whom falls the responsibility for conducting courses with social quality. Machado (2011, p. 694) lists the new needs and political-pedagogical demands for the training of EFA teachers:

More dialogues with the world of work and general education; interdisciplinary and intercultural pedagogical practices; strong and fruitful links between technology, science and culture; comprehensive contextualization processes; radical understanding of what it means to take work as an educational principle; perspective of emancipation of the student, as a subject of rights and speech.

It is observed that the EFA teacher needs to have an expanded training based on knowledge not only of his/her specific area of training, but also to know the guiding principles of the dynamics of the world of work, to master pedagogical practices based on educational theories, in addition to having work as an educational principle as a guideline. This is one of the central components that was worked on with the teachers who participated in the pedagogical training. Understanding work as an educational principle is a prerequisite for appropriating an essential theoretical framework when dealing with an emancipatory education.

RESULTS

In view of the significant adherence of teachers who work in Integrated High School to technical courses – there were fourteen participants –, and by the apprehension of the contents studied expressed in the second questionnaire applied after the pedagogical training, as well as by the participation in the virtual meetings, we can affirm that it was possible to promote an in-depth reading and discussion of the assumptions that underlie the theory of historical materialism from selected texts by authors of this theoretical current.

The texts analyze capitalist society, its foundations and, specifically in relation to EFA, explain the conditions of the economic, political and social system that hinder the full development of the student who attends high school integrated with the technical one. The school has its limitations, but certainly having reflective teachers on its teaching staff, according to Nóvoa (2017), can contribute to teachers seeing themselves as protagonists in the implementation of more egalitarian and equitable educational policies in Brazil, in the scenario of great social inequality.

Integrated high school highlighted the concept of polytechnics as central to the study. It is important to remember that polytechnic education is opposed to polyvalent education, since the latter has a merely utilitarian character and conceives work as a mere adaptation of the worker, as exposed by Machado, Neves and Frigotto (1994). Therefore, polytechnic training is consistent with omnilateral education by placing work in connection with the development of man in all objective and subjective dimensions and with access to scientific, cultural, political, practical, ethical and aesthetic knowledge. Thus, it is configured as a unitary education from the Marxist perspective, which is the meaning of the integral development of the human being.

DISCUSSION

From the analysis of the questionnaires applied before and after the pedagogical training and also based on the observation of the questions and contributions during the weekly meetings, we could verify that the categories studied, the authors indicated for reading and the theoretical framework of historical materialism chosen by the master's student and her advisor were not the object of study in their graduations, master's course – a person had this title among the participants -, specializations or in pedagogical training that they have already participated.

In the list of questions in the first questionnaire, for example, it was stated whether they had already studied the categories of integral education, work as an educational principle, polytechnic education and unitary education in their undergraduate studies, and more than half answered that they had never had access to this knowledge, corresponding to 65% of the total number of participants in the survey. There were fourteen people participating. Generally, the answers were impregnated by common sense, lacking a theoretical basis. This is what can be observed in the answers in Chart 2 below, elaborated with categories and their descriptions to analyze the answers of the participants of the pedagogical training.

Chart 2 – Categories of teachers' initial conceptions about Integrated High School

Category	Quantity	Description
Develop professional skills.	03	Develop technical and professional skills. Protagonism of young people in their own development.
Articulate high school with professional education.	02	Attend high school and technical training at the same time. Articulate the contents of the propaedeutic part with the professionalizing part.
Prepare for the job market.	03	Prepare for a professional performance. To be able to exercise a profession. Entering the job market.
Understand the conception of Integrated High School.	03	Technical training at the same time as attending high school Integrated high school, where the student has the opportunity to acquire technical training High school integrated with technical training to learn a profession I teach regular and technical subjects.

Source: From the authors, extracted and adapted from the first questionnaire (interview given to the master's student in 2021).

We present, as an example, the answers of some teachers to one of these categories: Explain what your understanding is about High School Integrated with technical courses. Answers:

1. I always believe that this technical education training aims to provide the development of professional and cognitive skills and communication skills, as well as scientific, technological and sociocultural knowledge (Participant 4);
2. It complements high school by integrating professional education simultaneously, working on competencies in general (Participant 6);
3. Very good. Because young people become protagonists of their own knowledge (Participant 10).

Kuenzer (2009, p. 16) clarifies that, although the concept of competence is not recent, "it has taken on a new meaning from the enlargement it has undergone, particularly the concept of professional training in the face of the new demands of the world of work". According to the author, as a result of the replacement of electronic-based processes by microelectronics-based ones, there was a shift from the "concept of professional training from ways of doing things to the articulation between knowledge, attitudes and behaviors, with emphasis on cognitive, communicative and creative skills". In the continuity of his analyses, Kuenzer (2009) elucidates that the adoption of the concept "competencies" by the MEC/SEMTEC was incorporated into the official documents and discourses present in the school practice and with a mere formal citation in the school plans. We agree with the author that these are guidelines that are given vertically, such as requirements for funding, but little understood by teachers.

Therefore, the use of the concept by teachers raises questions about whether the term was appropriated through studies and reflections, or if it was only incorporated into the discourse within the school because of its adoption in official documents based on legal determinations, as observed, for example, in the Pedagogical Project of the Technical Course in Informatics Integrated into High School (2018) which defined as one of the skills to be developed in students the installation of operating systems, desktop applications and peripherals, among others.

Thus, it was observed that the category called *Articulating high school with professional education* was the one that stood out the least with four answers. However, a certain coherence was found with the concept of Integrated High School (EMI) as

expressed by the teachers from the examples of their statements (Interview given to the author in 2021). Answers:

1. It is a teaching modality in which the student carries out technical training at the same time as attending high school. (P5);
2. Study of regular disciplines articulated with the teaching of technical disciplines. (P11).

Regarding the question whether they had read or studied about the category of labor in Marx and what is labor in capitalist society, it was verified by the answers of the nine professors below that there is a certain understanding of the meaning of the concept of labor in Marx and what labor is in capitalist society when they associate it with the sale of labor power by the worker to the capitalist, moment in which the liberal contractual relationship is established. There were no signs from the teachers about reading or studies on the production of surplus value. The following are statements from the interviewees on the subject: (Interview given to the author in 2021).

1. I believe that for Marx, work was positioned as an action/occupation directed towards production and liberalism. (P4);
2. The basis of the capitalist economy is the exploitation of labor power. (P7);
3. The worker who does not have the means of production to produce what he needs to survive starts to sell his labor power. (P12);
4. In Marx's understanding, work is an activity on which the human being employs his power to produce the means for his sustenance, being indispensable to his existence. (P13).

On the whole, the answers obtained denote an insufficient level of understanding regarding the nature of the social relations established in the capital-labor relationship and the fact that it is the working class that is the party that is most committed to this relationship.

In order to better understand the development of the working class by the bourgeoisie and how the relationship of sale of this labor power occurs, Marx and Engels (2007) sought to explain that this will occur in the process of destruction of the feudal system and in the development of capitalism. In the view of these theorists, human survival is related to work and the multiplication of capital occurs when labor as a commodity is sold

by the worker in retail, a fact that only contributes to multiply the capital of the owner of the means of production.

It can be seen, therefore, that labor power constitutes the determining factor for the transformation of money into capital. But the production of capital will only take place when the capitalist buys the means of production and the power of labor at the exact price that he bought the means of production. To this end, it levels the payment of a minimum wage to the labor force, regardless of the amount of goods produced by the worker. This movement generates surplus value, making the owner of capital richer and richer through the exploitation of labor power. Thus, the production of surplus value is the main foundation of the market, as Tonet (2008) explains.

Therefore, not investing in the integral training and qualification of the worker is a strategy of capital. In this bias, the Secondary Education Integrated to the technical course cannot incorporate the strategy of capital in promoting a utilitarian, scientific and banking education as Freire (1996) says, in which the student, future worker, does not have mastery of intellectual and practical knowledge and much less an active and critical participation in society. Therefore, training based on competencies must come to be understood in a perspective of integral training in fact and not the one that trains some to assume the position in staff positions (intellectual) and others to be just taskers (practical).

CONCLUSION

The formulation and realization of pedagogical training The Integrated High School Teacher Training: the appropriation of the concept of unitary education in view of an emancipatory education made it possible to offer training to teachers who work in Integrated High School in state schools in Campo Grande, Mato Grosso do Sul, which would allow them to approach categories of Marxist theory that explain the capitalist mode of production and broaden the understanding of the relationship between education and politics, their historical existence and the recognition that they are part of a set and the same totality.

The adherence of thirty teachers to pedagogical training, of which fourteen concluded, highlights the need to address issues such as omnilaterality, polytechnics and work as an educational principle. In other words, the teachers who participated in the pedagogical training showed interest in appropriating knowledge that would give them the opportunity to understand the contradictions of the society in which we live and that could

answer their questions about how to overcome the education of students focused on the exclusive demands of the labor market for an education that allows them to appropriate technical-scientific knowledge, so that they can be inserted in society in a more egalitarian way.

It is worth remembering that, in the Marxist conception, it is capitalist society that produces social inequalities and class differentiation. That said, it should be noted that the production of material and immaterial goods produced by human society needs to be based on the omnilateral principle of productive work so that human beings can live in society in a dignified way. And this will only be possible if the worker participates in the results of the production process and not only in unilateral production that empties his ability to understand the production processes and removes from him the ability to reelaborate his work based on the mastery of technique and the foundations of science that allow the creation of new products and services.

Understanding the category of polytechnics and its relationship with industrialization and the role of technical and technological courses is essential for those who work in basic education, especially in high school integrated with technical courses, since it is desirable for education professionals to act based on the development of the human, social and productive dimension of students, in order to integrate theory and practice or intellectual and practical training, for the development of human potentialities and not only to train taskers.

The understanding of this category is essential for teachers, since the mastery of the intellectual and practical contents of the student's own work can guarantee the conditions for facing the contradictions of capital, at the same time that it seeks to overcome the capitalist mode of production that assigns to the working class a technical education devoid of scientificity, of the theoretical mastery of technique and technology, contrary to the integral formation of the human being. We agree with Frigotto (2001) that the educational principle of work is a necessary activity for all, a creative element of life, duty and right.

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