

Young women in technical professional education: Motivations, challenges and future projects



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ABSTRACT

This article addresses the perspectives of three students from the Technical Courses in Buildings, Mechanics and Informatics of an institution of the Federal Network of Professional and Technological Education. Due to their specificities and because they are mostly male careers, theories of gender in EFA and the sexual division of labor supported the critical analysis of the discourses of these young women. The New High School and the National Common Curriculum Base (BNCC) advocate the development of the Life Project at School, aiming, among other functions, to guide the choice of "training itineraries" and favor the personalization of student learning. In the case of Secondary Technical Education (EPTNM) in the integrated modality, students must attend the training itinerary of the general disciplines of the BNCC (Portuguese and Mathematics), together with some other chosen itinerary, compulsorily associated with Technical and Professional Training. However, in addition to fulfilling a legal obligation, knowing the real life projects of young people from EPTNM becomes essential for understanding their motivations, experiences and expectations, in relation to their professional training, the world of work and the continuity of studies. Thus, the results obtained are expected to raise reflections on the relevance of EFA in the lives of young people, taking into account the gender difference, and to promote the debate on public policies for the access and permanence of young people in technical courses.

Keywords: Vocational and Technological Education, Middle Level Vocational Education, Life Projects, Youth, Gender and Vocational Education.

1 INTRODUCTION

This article presents, in the perspectives of three young women students of the Technical Professional Education of Middle Level of a public school of the Federal Network of Professional and



Technological Education, their motivations for the choice of the technical course, their challenges and obstacles to attend them - in view of their female condition, and their future projects in relation to the world of work and the continuity of studies. Their real names were replaced by the fictitious names of Bell, Frida and Marie, in a tribute to the writer and feminist of the American black movement, Bell Hooks; Frida Kahlo, a Mexican artist and feminist; and Rose Marie Muraro, Brazilian writer and feminist, respectively.

Starting from a brief exposition on Professional Education in Brazil, the female participation in this teaching modality – with data and studies already developed – and in the light of the theme "future projects", the category "youths" is approached in the female in order to problematize how the technical professional education of medium level is experienced by the students.

From the analysis of their reports in a critical perspective, having as theoretical assumptions the sexual division of labor of the French Sociology of Labor, it is possible to affirm that this educational follow-up has been increasingly the stage of the presence of women. Although aware of the structural machismo that prevails in the technical and technological areas and in the institutions of professional training, the choices of these young women have been conscious, their objectives clear and their projects for professional and academic life, coherent and focused.

It is expected with the results obtained to raise reflections about the relevance of Technical Professional Education in the lives of young people, taking into account gender differences, and to promote the debate on public policies for the access and permanence of women in technical courses.

2 YOUTH AND VOCATIONAL EDUCATION

Professional education in Brazil, historically, according to Ciavatta and Ramos (2011), Küenzer (2000), Cunha (2005), Frigotto (2004), among others, was marked by duality, in which its structure was based on the differences in educational paths offered to the children of the elites and to the working class. For those a propaedeutic education was offered that prepared and stimulated access to higher education and work opportunities at command and management levels; for the working class, professional education of technical and instrumental training for a rapid insertion in the labor market in more precarious professions. Thus, this teaching modality was for many years associated with representations that associated it with low educational quality and cultural poverty (CUNHA, 2005).

For Moura (2007, p.06),

professional education in Brazil has, therefore, its origin within a welfare perspective with the objective of "supporting orphans and other lucky disadvantages", that is, to attend to those who did not have satisfactory social conditions, so that they did not continue to practice actions that were against the order of good customs. (MOURA, 2007, p. 06).



However, recent studies show that from the point of view of young people in today's society is increasingly widespread the understanding that vocational training is a fast, necessary and intermediate path that gives them professional qualification, both for entry into the labor market and for adult life (ATLAS DA JUVENTUDE, 2021)

For the Ministry of Education,

professional and technological education (EPT) is an educational modality provided for in the Law of Guidelines and Bases of National Education No. 9,394/1996 (LDBEN) with the primary purpose of preparing "for the exercise of professions", contributing so that the citizen can insert himself and act in the world of work and in life in society. To this end, it covers qualification courses, technical and technological qualification, and postgraduate courses, organized in order to provide the continuous and articulated use of studies. (BRAZIL, 1996)

However, technical vocational training is no longer a guarantee of work as in the past. Studies by Pochmann (2007 p. 11) that deal with issues related to the work expectations of young Brazilians, when comparing the percentages of young people who attend school and those who are already inserted in the labor market, show that the optimism of young Brazilians in relation to their expectations of success in entering the formal labor market has disappeared.

Also for Leão and Nonato (2014, p. 23), the insertion of young people in professional life has been characterized by the context of social inequality and unemployment, precarious work and lack of protection. One must, then, think of work for young people from the perspective of their needs and desires; "One cannot think of youth work without a social protection network that guarantees the fulfillment of their demands and the preservation of their physical and moral integrity."

For Silva and Lehfeld (2019), the current moment is paradoxical in guaranteeing access, stability (in the sense of non-unemployment), qualification and dignity of young people in the world of work. Changes in the legal basis have provided young people with more time to study, but post-training placements are still not enough to guarantee quality jobs and income to this population, which seeks first the opportunity of insertion and, later, of ascension in the socio-occupational spaces.

According to the National Institute of Educational Studies and Research Anísio Teixeira (INEP, 2023), 23% of the total population of Brazil are between 10 and 24 years old, - approximately 48.5 million people - which make up the largest generation of young people in the history of the country. This demographic bonus, in which a high proportion of people are of potentially productive age, however has failed to improve economic development, given the high number of unemployed young people in the country. The current ideological discourse is that there is a lack of adequate professional training for young people as a possibility of their qualified insertion in the world of work. If the lack of a solid school education for work is an old problem in Brazil, the situation has worsened during the recent years of the Corona virus SARS-Covid 19 pandemic, in which the average unemployment rate in 2020 among people aged 18 to 24 reached 29.8%, the highest ever recorded in the country's history.



Thus, analyzing the micro-data of the National Household Sample Survey (PNAD, 2023), the indicators of occupational quality (which combine factors such as salary, duration and types of work) show that, for young people with training in Technical Professional Education (EPT), the chances of insertion in the formal labor market are substantially higher than for those graduated in propedeutic high school (although lower than those graduated in higher education). "They indicate that EPT graduates have good application in the labor market and the profit is mainly in formality, wages and routine activities," explains Camargo (2023). This time, vocational training courses play an important role and become a necessary option for young people to get their first job, as warned by the National Service of Industrial Apprenticeship (SENAI, 2016). Technical vocational training is perceived by young people as a good way to start their career, to be well accepted by companies and to better prepare for the job market.

3 WOMEN IN VOCATIONAL EDUCATION

For Louro (2003), the categories established by Western societies created a pattern of family example that predominated for centuries, being natural the world of the woman in the home, performing the chores of the house, and the man the external work, salaried, providing the home with what is necessary to support the family. In this way, society has instituted rules, standards and measures of the model of man, who lives in the public universe, and designates the profile of the woman to welcome all the precisions of her private world in the home. These distinctions between the sexes for centuries have dictated how male and female subjects should be constituted, who have to be domesticated, educated, taught, and adapted to follow standards stipulated by society.

In this pattern, the Brazilian family formation shows a history of women assuming exclusively domestic tasks - which are not considered work. Added to this are the gender stereotypes that associate women with fine motor skills, thoroughness and attention, always associated with care and innate and natural aptitudes, related to frailty and weakness. Thus, an image of the woman caregiver is consolidated and this figure does not cease to appear when the woman assumes a paid job or seeks a professional qualification. The functions in which characteristics such as sensitivity, patience and delicacy are valued, considered inherent to women, end up being delegated more to them, which leads to their exclusion from functions that demand decision, individuality and rationality (QUIRINO, 2011).

Thus, in order to dedicate themselves exclusively to domestic work, no professional training was necessary for women, who were already born with the "gift" of caring.

Thus, at the beginning of modern history, schools were attended only by the male children of the wealthiest families, the aristocracy or the nascent bourgeoisie. Women married very young and took on domestic responsibilities. Thus, school education reinforces a process of separation between



adults in training, thus creating a hierarchical order based on the relations between genders and the stages of life (GRACIOLI, 2006).

However, in a historical leap in this movement of segregation of women from the productive and educational spaces, in Brazil, today, even in the face of a scenario of economic, social and educational inequalities, women have been conquering spaces in the most varied spheres of social life. "Whether in politics, economics, the world of work, education or in the most diverse areas of activity, there are no spaces where they have not been able to reach and prove their capacity" (PEREIRA and ANJOS, 2020, p.4). However, "even in the face of so many advances in the journey of inclusion of women in the economic-social context and more specifically in the world of work, the remnants of a past of submission still leave marks and influence the conception of the social role of women" (Id. *Ibd.*).

When it comes specifically to Professional Education as a public policy, it is intended to promote the realization of two fundamental rights, enshrined in the Federal Constitution of Brazil: the right to education and the right to work. This teaching modality aims at the insertion of the individual in the world of work through technical training and, although directed to the preparation for the exercise of a technical profession, it must be understood as providing the integral formation of these individuals.

Corroborating the assertion of this female advancement in society and in the world of work, according to data from the School Census, in 2022, women were the majority throughout Brazil. One million and two hundred thousand women entered technical courses that year, which corresponds to 58% of the total enrolled.

However, when the school reproduces and naturalizes, without due reflection, the behaviors constructed from a conception that there are professional qualifications for women and others for men, it is contributing decisively to the perpetuation of the model of sexual division of labor.

Thus, the distribution of women enrolled in the technological axes of environment and health and educational and social development, in proportion, is three times higher in relation to men. In the axes of food production and tourism, hospitality and leisure, the number of women is twice the number of men enrolled. On the other hand, the presence of women in courses of the control axes and industrial processes is more timid, in which 84% of those enrolled are men; military area, with 28% women; information and communication, with 36% female. From the numbers presented it is possible to observe that the culturally accepted perception that certain professions are intended for men, and others for women, has an influence on the profile of entry into technical courses.

Thus, "[...] despite the existence of legislation guaranteeing equality in treatment for both sexes, the segmentation of jobs expresses inequalities in gender relations and constructs female "ghettos" of work" (SEGNINI, 1998, p. 15).



4 WITH THE WORD, THE YOUNG WOMEN, SUBJECTS OF THE RESEARCH

Bell, Frida and Marie are three young students of the third year of the Technical Courses in Informatics, Mechanics and Buildings, respectively, in a school of the Federal Network of Professional and Technological Education, located in the Metropolitan Region of Belo Horizonte, State of Minas Gerais.

Transgressing *the status quo* that relegates them to certain professions and areas of activity specific to the female gender, such as those of the technological axes of environment and health and educational and social development, they entered technical courses mostly male in the axes of control and industrial processes and information and communication. What motivated them to pursue such areas? What do they intend in their future? What are your life projects in relation to work and the continuity of studies? What obstacles and challenges have you overcome to remain and be successful in completing your chosen courses? These questions permeated the semi-structured interviews conducted with them in the first half of 2023.

At the opportune moment in which the New High School and the National Common Curricular Base (BNCC) underwent changes and advocate the development of the School Life Project, aiming, among other functions, to guide the choice of "formative itineraries" and to favor the personalization of student learning, such issues become even more relevant. After all, when it comes to the Technical Education of Secondary Level (EPTNM) in the integrated modality, the students must meet the formative itinerary of the general disciplines of BNCC (Portuguese and Mathematics), along with some other itinerary chosen, compulsorily associated, to the Technical and Professional Training.

However, in addition to complying with a legal obligation, knowing the real life projects of young people from EPTNM becomes essential for understanding their motivations, experiences and expectations, in relation to their professional training, the world of work and the continuity of studies. Especially women, subjects of this research, who are in the phase of completion of the courses. Taking stock of their choices and future projects was a rich and fruitful moment for these young women.

Because of their specificities and because they are mostly male careers, the theories of gender in the EPT and the sexual division of labor supported the critical analyses of the discourses of these young women.

4.1 BELL

Bell is 17 years old, self-declaring herself black, comes from the most precarious social layer of the three interviewees. Daughter of working parents, who studied until high school, had access to the technical course in this institution highly competitive by Law No. 12,711/2012, also called the Law of Racial Quotas. Throughout the technical course was contemplated with the aid of the social scholarships offered by the institution. What made it possible for her to move, feed and stay the course:



If it were not for the help of the scholarship I would not be able to take the course. Although the value of transportation, food and material used was free, my parents would not be able to afford it. My father is a bricklayer, he works on his own and my mother is a canteen in a municipal school. They earn very little and I still have two more younger brothers (Bell, 2023).

Asked why she chose the Computer Technician Course, Bell was emphatic in her answer: "It is the area that generates the most jobs today. And we even have the chance to work for a foreign company in the *home office system*."

The choice of the institution is due to the gratuity and quality of the education offered. "It's a very good school, besides being free. Leaving here I get an easy job just because I studied you here," he says. About his future project, Bell has grandiose dreams and awareness of the difficulties he has faced and will still face:

Since I started the course it has been very difficult. Everyone thinks that computer science is just for men, that girls won't be able to handle it. In my class there are only four girls and more than twenty boys. And on top of that, I'm poor and black, right? All against me... Even the teachers didn't put much faith in me, they thought I was going to quit in the first year. I saw it in the way they looked at me, in the difficulty I had to do the group work. She was always the last one chosen... After I graduate, I will work by day and continue to study at night. I'm going to do Computer Science or Computer Engineering. Maybe it's the distance... If I can't go to college, I'll do other improvement courses in the area to keep up-to-date. But I can't go another so many years without working and helping around the house. I need to work... But I will not stop studying or abandon the area of computer science. Loved... I found myself in the area (Bell, 2023)

Bell's discourse highlights several elements already present in some research on young people from poorer popular strata who seek in mid-level professional education a qualification for faster insertion in the world of work, in order to be able to help with household expenses. For Dayrell (2007) most young people from low-income families attend public schools in search of a project or some goal beyond high school, in which they need to make choices between several paths - professional qualification, work, higher education or any other. However, due to the quality training received at the institution, which goes beyond technical knowledge, they are able to project their future in the continuity of studies at higher level and plan a professional ascension that takes them out of the social class in which they find themselves, because,

The democratization of access to higher education, particularly for low-income youth, began to gain space on the agenda of Brazilian governments and society, triggering public policies for the expansion and internalization of vacancies, as well as affirmative action aimed at the most excluded social groups. (TREVISOL and NIEROTKA, 2016, p.23)

As emphasized by Burnier (2003), the world of work is then constituted as a fundamental and transformative element for the construction of the projects of the working class, just as the vocational school plays a very important role in the achievement of these projects.



And when it comes to a life project or a future project, Leão, Dayrell and Reis (2011, p. 1071) conceptualize them as every action of the individual in an attempt to "choose one among the possible futures, transforming the desires and fantasies that give it substance into goals that can be pursued, thus representing an orientation, a course of life." The project category acts as a mediation between the individual and the context, involving both individual dreams, desires, needs and anxieties as well as the values, *ethos* and worldview of the groups in which the individual(s) circulate; it stands out as an important research tool in order to capture and analyze the world views of the subjects in their changes and permanences (BURNIER, 2003. p. 32).

When talking about the obstacles and challenges, interviewee Bell addresses all sorts of prejudices that surround her (and are supposed to surround her throughout her life), whether it's class, race, or gender. Lima (2013) associates them with the metaphor of the crystal labyrinth, described as barriers or traps that assail women in their professional careers, slowness or stagnation in the career/area of activity, pace of gain, recognition or even withdrawal from a certain profession.

Olinto (2011) also addresses that throughout their professional trajectory women face challenges and barriers imposed by societies through stereotypes - formed from beliefs, values and attitudes - that consider the skills between men and women, factors influencing choices and decisions, even while still young. Thus, women often emerge in the so-called horizontal segregation and trace their projects or make their choices different from those outlined by men (OLINTO, 2011).

Bell, however, manages to be faithful to her choice for the professional area and does not intend to change areas in Higher Education, thus breaking a gender paradigm very present in women's professional choices.

4.2 FRIDA

Frida calls herself *parda*, is also 17 years old and is completing the Technical Course in Mechanics. His mother is a civil servant and has a degree in the humanities. His father studied until elementary school and works on his own.

Frida claims that the choice of school is due to the quality of education offered by the institution, and the choice of the course at the insistence of her father, who is a mechanic and has a small auto repair shop on the ground floor of his residence.

My father insisted that I do mechanics. It has nothing to do with me, but he wants me to graduate and go work with him in the workshop. I'm not really going to... I want to go to college and study fashion. I love clothes, shoes, those things... I never thought mechanics were a woman's thing, but he insisted and I didn't want to disappoint. But working in the workshop, I'm not going to go at all. Since I'm already going to be 18, if he continues with this, I'll leave the house. If I need to, I get a job in a store and go to school at night. But I want to study fashion and open a sewing atelier, design my models, my clothes, work with it (Frida, 2023).



Although it is a legitimate desire to change professional area and dedicate oneself to a so-called feminine profession, Frida reinforces the gender stereotype that segregates women into more appropriate professions and them, as an extension of domestic work. Sewing, taking care of clothes and the feminine look is something inherent to the feminization of professions, which Yannoulas (2013) refers to the transformations of certain types of occupations or professions, linked to social and symbolic practices, in a given time or culture. Possibly influenced by family, society, the media or school, many young women elaborate their life projects, judging themselves more apt to certain activities to the detriment of others, or choose their careers segmented by gender, based on what they believe may be more suitable for them.

Hirata and Kérigoat (2007) call this phenomenon as one of the organizing principles of the sexual division of labor: the principle of separation, in which there are men's jobs and women's jobs and one cannot, or should perform the work of the other, thus bringing a cleavage in the professions and the separation of male and female workers in watertight compartments, naturalized by the natural differentiation of genders.

About the obstacles and challenges experienced during the course, Frida clarifies that "the course has many more men and the teachers don't care, if we can't carry the pieces, if we're going to get dirty... They treat us like men and if we complain they still make fun of: 'oh, I didn't want to come do mechanics, so hold on'. They're executioners."

In this sense, Lopes (2016) states that the academic environment reproduces the discourses of segregation of women rooted in society. To the extent that some courses are mostly occupied by male students and others with a higher female concentration, these young women had to overcome challenges to assert themselves in the technological courses considered suitable only for men and live daily what Bourdieu (1989) calls "symbolic violence". Evidenced in the simple way of speaking or acting of the dominator, sometimes it is imperceptible and it may be that the victim does not even realize that it is violence.

4.3 MARIE

Marie declares herself white, is upper middle class, her parents both have graduate level training and are graduates of the same school she attends. According to the interviewee, the choice of the Technical Course in Buildings is due to an old desire of Marie, who feels very attracted to architectural design and identifies with the profession.

Since I was little I always loved drawing and mathematics. One day in ninth grade there was an event at my school about professions and the speaker told me that I should study architecture. Then I asked my mother about this profession and she explained it to me. He told me about Niemayer and gave me several books about him. I was in love right off the bat. Then she took me to see Brasilia and explained everything about the architecture there. I said at the time: I'm going to be an architect! As she and my father studied here I asked if I had architecture



at the technical level. Since I didn't have it, I chose buildings because it's the closest to the profession I chose. Now I'm already taking a course for ENEM and I'm going to do Architecture at UFMG. I don't want to work as a technician, but what I learned in the course will help me a lot when I open my architecture office. I will have it easier than architects who have not taken a technical course (Marie, 2023).

Regarding difficulties and obstacles in the course of the course, Marie states that "many colleagues asked why I did not choose accommodation or nursing that are more appropriate courses for women", reinforcing once again, gender stereotypes and the feminization of the professions.

It is evident in Marie's words an active participation and investment of parents in their formation, both in the choice of school and course. It can be inferred, as Bourdieu and Passeron (1992, p. 63) recall, that family socialization does not fail to contribute to the acquisition of cultural dispositions that are not the product of a "miracle of predestination." Thus, Marie's future project of not working in the technical area, graduating in Architecture and opening her own office meets what theorists enlighten about the education of the ruling classes, who see in higher education the shortest path to positions of command and management or to entrepreneurship, and technical courses only a springboard to higher education.

At this point, as Golbspan (2020, p.54) warns,

It is important to understand the representations about youth as social constructions, that is, not as intrinsic and essential characteristics of all young people, but as discourses with which young people are confronted and to which they produce changing and original responses in their daily lives. This is true for how they deal with future plans, but it is also true for diversified characteristics, [...] which can be intersected with other belongings that these subjects have. This idea of intersection of dynamics, therefore, helps to explain why these protagonists of the school need to be interpreted not as only students and students, nor as only young people, but at the intersection of these forms of belonging.

5 CONCLUDING

It is important to emphasize the relevance of giving voice to young people when the theme is life projects or future projects of young people in relation to work and continuing education after high school. The discourses of the three young women interviewed in this research, although they cannot be generalized to all young students of Professional Education, allow the understanding of several elements that permeate the relationship of young students and EPT.

It is evident in the choices of these young women the influence of the family regarding the chosen course, the "fame" of the institution in the quality of the education offered to get a formal job quickly after the completion of the course or as a stepping stone to higher education.

It is also evident how much the categories class, race and gender influence the professional choices of these young women, especially with regard to their insertion in the labor market and the continuity of their studies. Young people from economically disadvantaged popular strata see in the technical course the shortest way to qualification and insertion in the formal labor market; the need to



work to help the family as something urgent; the realization of higher education courses at a distance or at night as a consequence of this need, and even the realization of free courses of improvement as an option of continuing education, in the impossibility of attending an undergraduate course. For the more affluent young women, in addition to financial capital, the social and cultural capital of their parents are factors of influence and investment in their choices and future projects.

However, gender oppression pervades all social classes since women's choice of hegemonically masculine courses still appears as a subversion to the *status quo* that determines specific professional areas and careers for women, as an extension of domestic tasks. From this gender prejudice, symbolic violence manifests itself through looks, questions and affirmations about the courses that these girls should choose and the place they should occupy in professional education and in the world of work.

In this sense, studies with young people in academic and professional spaces are salutary and necessary in order to provide new discussions and ways to mitigate discrimination and devaluation of women's work in relation to men's work before the societies and within the walls of the schools themselves. Giving time and voice to young people can bring significant changes in the provision of professional education and in the conduct of public policies for access to technical professional education for young people, as well as enable reflections necessary for the reduction of inequalities between men and women in Professional Education and in the world of work.



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