
Ifes e Senai: análise comparativa sobre a docência na educação profissional

Ifes and Senai: comparative analysis on teaching in professional education

Ifes y Senai: análisis comparativo acerca de la enseñanza en la educación profesional

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Resumo

Esta pesquisa tem como objetivo identificar e comparar a docência na Educação Profissional Tecnológica (EPT) no contexto do curso técnico em mecânica no Instituto Federal de Educação, Ciência e Tecnologia do Espírito Santo (Ifes) e no Serviço Nacional de Aprendizagem Industrial (Senai-ES). Por meio de uma abordagem qualitativa, a pesquisa descreve essas duas realidades através da análise documental e das entrevistas semiestruturadas. Dialoga com autores do campo Trabalho e Educação que defendem a prática educativa emancipatória, cuja centralidade da formação profissional deva estar na dimensão do ser humano, contribuindo para o desenvolvimento de cidadãos-trabalhadores críticos e autônomos. Os dados permitem identificar que ambas instituições de ensino possuem *modus operandi* bastante arraigado, em que a docência encontra-se sob forte influência dos ditames institucionais e culturais, isto é, os valores, as finalidades, os objetivos institucionais e o currículo escolar são alguns dos elementos que influenciam a prática de ensino, adequando-a segundo as proposições de cada uma dessas instituições.

Palavras-chave: Docência. Senai-ES. Ifes. Educação profissional

Abstract

This study aims to identify and compare the teaching practice in Professional Technological Education (EPT) in the context of technical course in Mechanics at the Federal Institution of Education, Science and Technology of Espírito Santo (Ifes) and National Service of Industrial Learning (Senai-ES). Through a qualitative approach, the study describes these two contexts through documentary analysis and semi-structured interviews. It dialogues with authors from the field of Work and Education who defend the emancipatory educational practice, whose centrality of professional education must be in the dimension of the human being, contributing to the development of critical and autonomous workers-citizens. The data allows us to identify that both educational institutions have a very deep-seated *modus operandi*, in which teaching is under strong influence of institutional and cultural rules, that is, the values, purposes, institutional objectives and formal curriculum are some of the elements that influence the teaching practice, adapting it according to the propositions of each of these institutions.

Keywords: Teaching practice. Senai-ES. Ifes. Professional education.

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Resumen

Esta investigación tiene como objetivo identificar y comparar la enseñanza en Educación Tecnológica Profesional (EPT) en el contexto del curso técnico en mecánica en el Instituto Federal de Educación, Ciencia y Tecnología de Espírito Santo (Ifes) y en Servicio Nacional de Aprendizaje Industrial (Senai-ES). A través de un enfoque cualitativo, la investigación describe estas dos realidades a través del análisis de documentos y entrevistas semiestructuradas. Diálogos con autores del campo del Trabajo y Educación que defienden la práctica educativa emancipadora, cuya centralidad de la formación profesional debe estar en la dimensión del ser humano, contribuyendo al desarrollo de trabajadores-ciudadanos críticos y autónomos. Los datos nos permiten identificar que ambas instituciones educativas tiene un *modus operandi* muy arraigado, en el que la enseñanza está bajo la fuerte influencia de los dictamos institucionales y culturales, es decir, los valores, propósitos, objetivos institucionales y el currículo escolar son algunos de los elementos que influyen en la práctica docente, adaptándola según las proposiciones de cada una de estas instituciones.

Palavras-Clave: Enseñanza. Senai-ES. Ifes. Educación profesional.

Introduction

This study presents the specificities of *Instituto Federal do Espírito Santo - IFES* (Federal Institute of Education, Science and Technology of Espírito Santo) and of *Serviço Nacional de Aprendizagem Industrial - Senai-ES* (National Service of Industrial Learning), from a comparative study on the working condition and the teachers' practices from the technical course in Mechanics. Through a qualitative approach, the study describes and compares the teaching practice in these two institutions of *Educação Profissional e Tecnológica - EPT* (Professional and Technological Education), having the documentary analysis and semi-structured interviews as research tools.

The comparative method contributes for a broad analysis that regards the relations between the individuals (or objects). From the principle of otherness it is possible to know an institution through the other, this is evident in Ciavatta Franco (2000, p. 200), by stating that "the comparison is a process of noticing differences and similarities and of assuming values in this relation of acknowledging its own and the other". Thus, Ciavatta Franco (2000, p. 200) concludes that this method "deals with understanding the other from its own and, by exclusion, acknowledge its own in the difference". This means that the beings or elements have relations since they are part of a whole; in this sense, from the knowledge on the other it is possible to know its own. In this perspective, to investigate the relation between the teaching practice at IFES and Senai-ES enables a wide understanding on those educational institutions.

Both institutions have relations, mainly because they are part of a whole, thus, it is possible to show not only the differences and similarities between them but also the

regularities, the transformations, the contradictions, the limits and the possible contributions of each one. This enables the generalization, i.e., the identification of the most general determinations of the teaching practice within the context of EPT. Therefore, in this study, the comparative method was used with the aim of understanding how teaching is structured in various educational experiences. Therefore, it was needed to preserve the singularities of each educational institution and the particularities of the teaching practice performed and demanded in each one of those school contexts.

Thus, the EDT constitutes the context of which emerges the study object in this study: the teaching practice. In accordance with *Lei de Diretrizes e Bases da Educação Nacional* – LDB (National Education Guidelines and Framework Law) n°. 9394/96 (BRASIL, 2016), the formal education consists on higher education and basic education; this last one consists on elementary school, middle school and high school. Besides that, the formal education comprises several teaching modalities that prevail in their school levels. One of these modalities is the EPT.

The EPT has the specificity to educate people for the world of work, what includes the preparation for work and citizenship. The § 2° of the Article 39, in LDB n°. 9394/96 (BRASIL, 2016), states that the EDT comprises the following courses: "I- initial and continuing education or professional certification; II- of a technical professional education of middle level; III- technological professional education of graduation and post-graduation". Among those courses, we chose to study the teaching practice in the context of *Educação Profissional Técnica de Nível Médio* – EPTNM (Technical Professional Education of Middle Level). The LDB n°. 9394/96 (BRASIL, 2016) has the section IV-A which standardizes the EPTNM as a general education course for the learner, which can be conducted in the subsequent way for students who have already completed the basic education; and in the articulated way (integrated or concomitant) to the high school for students who are studying this stage.

The legislation indicates a set of characteristics that gives specificity to the professional education in the context of formal education. In this perspective, this teaching modality is essential as a public policy, as it aims to ensure the right to education and, concomitant, to the work. According to Costa (2016), the specificity of the EPT implies the

articulation of the Education to the dimensions of Work and Society, therefore, the teacher of this field would need to be able to work based on this triad.

In this perspective, according to Machado (2008), the EPT teacher should be a professional with enthusiasm to reflect, to research, to work collectively, to carry out critical and cooperative actions, to understand the world of work, to understand the role of the teacher, to get updated with knowledges in his specific field and in the educational area, as well as to be able to work aiming at the human and full education of his students, i.e., an education in which students understand themselves as subjects of their history and acquire critical comprehension on the world of work, social organizations, technological progress, among other factors that describe the situation in which the individuals are inserted.

In the educational plan, it suggests a teaching activity that is more focused in the human dimension and less economical, to be able to educate individuals not only for the working practice but mainly to educate critical and active workers, aware of the context in which they are inserted. This assumes a teaching practice committed in a learning that enables the wide-ranging education of the individuals. Therefore, in the face of the social role of the formal education, the role of the teacher is not lowered to the education of workers in accordance to the capitalist mode of production, because it is the teacher's responsibility to conduct, organize and plan his teaching activity having in mind the wide, critical and political education of the citizens. To sum up, this debate benefits the understanding that the teaching practice in EPT is much more than providing technological knowledges. Since education is a political and fight tool, in the same way, the teaching practice is a political and fight mediation. In this sense, it is of paramount importance that the teacher is aware that his job is not neutral in the society.

In face of this debate, it becomes important to study the teaching practice in EPT. In this investigation, the main individuals are teachers working in technical courses in Mechanics at Ifes - Campus Vitória and at Senai – Institute Vitória. As shown, from the qualitative approach, this study took a comparative bias endeavoring to establish relations between the teaching practices in both educational institutions. Documentary analysis (legislations, notices/reports of selection process of teachers) and semi-structured interviews were carried out. From each of these teaching institutions, five teachers from

the field of Mechanics; a course coordinator; a union director; and managers from the educational sector contributed to this study. From all data produced and analyzed, it was possible to list some similarities and differences between these two institutions.

It is important to highlight that Senai-ES and Ifes were chosen to accomplish this study for being referral institutions in the offer of EPTNM courses in the state of Espírito Santo. In this regard, among several campi in operation currently, we chose to carry out this study at Ifes - Campus Vitória since it is the oldest one, therefore, has a tradition in the offer of EPTNM courses; and in the same way, among all institutes of Senai-ES, we also chose the one located in Vitória, because, likewise, being the oldest one, it presents tradition in the offer of EPTNM courses in the region of Espírito Santo.

Another reason that motivated me to choose the schools located in the city of Vitória/ES is the fact that both offer the course Technical in Mechanics, which is the reference in this study for the purposes of teaching analysis, since it is a traditional course in the field of EPTNM. Furthermore, the curriculum of the course Technical in Mechanics expects a great amount of practical activities and an extremely technical education process; thus, teachers may face challenges to develop teaching activities that surpass the pragmatic thinking, in which traditionally defines this teaching modality.

Work and Education: Human Education

Work and education are essentially human activities, what it is clear in Marx (1983). For this author, while working, men build their world and themselves and, in education, humans learn how to be men and how to produce their own existence. In this perspective, the work is a mediation between men and nature in which, through the activity of transforming nature in means that are necessary for life, the individuals ensure their existence and, more than that, they are developed in human beings. This means that, by modifying the nature due to their vital needs, humans change themselves, being self-produced by the work. In this perspective, work and education have a direct implication with life.

In this sense, Saviani (2003) highlights that the Marxism implies a contribution to the education field because it substantiates the fight for a revolutionary education, committed with the political education of the individuals, which enables a wide understanding on the

working processes and an aware and active presence in the civilian life. The Marxist conception as the main education principle assumes, basically, the relation between work and education in the sense of human education. According to Saviani (2013), this conception arises from the fact that all human beings need to ensure life (to get fed, to be protected, to get dressed). This perspective includes acknowledging work beyond the individual's professional education: considers itself the ontological centrality of work in the process of knowledge production; indeed, the education is understood as a condition to humanize the human being.

Thus, in the light of the Marxist referential, it is possible to question the education strategies of workers adjusted to the logic of capital and fight for an educational project committed to the full education of workers. Authors like Saviani (2003) clarify that the conception of full education is linked to the polytechnic education, which enables the *omnilateral* education of human beings. It expects a wide and complete education, in addition to the merely technical knowledge, enabling a wide understanding of knowledges built historically and socially by the humanity. In this sense, Saviani (2003) explains that the Marxist's polytechnic concept refers to the integration between the intellectual knowledge and the productive work; in other words: it is about the technological instruction from theory and practice what defines the human being. According to this educator, the man is built by theory and practice, since all human activities involve thinking and exercises of the body parts: "this lays in the proper origin of understanding the human reality as constituted by the work" (SAVIANI, 2003, p. 138).

Accordingly, the full-time education, assuming the concept of polytechnics, can be understood as an education that cherishes the human education, that intends, according to Ciavatta (2015, p. 69) "[...] to ensure the teenager, the youngster and the working adult the right to the full education to read the world and the capability to serve as a citizen integrated worthily in the society". That is, an education that enables the understanding of social relations, of working essence, of human being as a social being, among other phenomena that imply in the experiences lived by the individuals.

In this direction, Moura (2016) defends that the teaching essence is related to the teaching activity, which result is the transformation of the individuals; if it doesn't happen, the teaching practice has no sense. Therefore, Moura (2016) explains that the student

(human being) transformed is the product of the teaching practice: in the education process, the student tends to leave different of when he came in, i.e., by learning he transforms himself, and this transformation is not kept only in during the class, but extended throughout his entire life. It is important to resume the dialectical work conception, exposed by Marx (1983), where the work does not enable only the transformation of objects (or products), but promotes the transformation of the worker itself. Therefore, it is not only the student who is different when leaving the class, because the teacher himself is modified. The teacher identity is consists on the role that he performs: he is an educator because he educates.

Based on these considerations, we can infer that there is a meaningful difference between being a teaching professional (who performs the teaching activity) and being a market professional (who works away from the teaching spaces). In the context of mechanics, for example, the work of a technician, technologist and engineer is pretty different than the work of a teacher. Although both professionals have the same object (the mechanics), they act on them in a different way, since their purpose is different: one needs to project, build, operate the mechanical systems; but the other needs to teach such processes of the mechanical system. This enables us to understand that to be a mechanical teacher it is needed to know how to transform the technological knowledges in educational knowledges. In other words, for the teacher it would be needed to know not only the rules that imply the occupation in the field of mechanics, but also how to teach them, aiming at the students learning.

In this direction, authors like Saviani (2003) and Frigotto (2001) - that refer to education as a social practice and political act, which main role is the human education - enable us to infer that the teacher is an important individual in the education process, because it is the teacher who interferes directly in the learners education, enabling their transformation in emancipated citizens. In EPT field, being aware of this social and political nature of the teaching practice is essential for the construction of activities that are critical and committed to the workers' needs.

Historically, EPT is a teaching modality designed to the demands of the labor market and to the capital needs; consequently, the teaching practice in this field tends to follow a pragmatic and technical education. However, Saviani (2003) and Frigotto (2001) are some

of the authors that help us understand that EPT is not an alienation tool of the worker and invite us to understand it as an education that enables the human emancipation. This way, these authors motivate the counter-hegemonic teaching practice, in the sense of fighting for educational policies that value the human being above any market law, aiming to meet the needs of the working class and overcome the logic of the capital.

Therefore, the role of the EPT teacher is not lowered to the education of workers according to the capitalist mode of production. In opposition to it, in the perspective of the polytechnic education, it is up to the teacher to conduct, to organize and to plan his teaching activity, having in mind the wide, critical and political education of the citizens, which expects autonomy, freedom and critical awareness of people. Authors like Frigotto (2001) and Moura (2008) explain that EPT does not tend to be restricted to the market needs; more than that, it aims to educate people for a conscious presence in the world. In this perspective, EPT can be a mediating element to empower the fights of the working class and to overcome the conditions imposed by the current capitalist market, because it enables to promote the technical education for the work and, along with it, to provide the education of critical citizens; committed to the social equity, not conformed with the injustices and unsustainability of the capitalism; and with availability to change the society. In this sense, the polytechnic education refers to the human and complete education, i.e., in an education that enables to develop a wide comprehension of the knowledges built historic and socially by the humankind and a complete education of workers and citizens, willing to enable students a presence that is active, critical and aware of the world.

Working in this perspective is not an easy task, since teachers face several challenges that limit - at times in bigger and at others in a smaller level - their teaching activity. In this context, the teaching practice becomes even more challenging and complex, in several aspects, especially because the internal culture of the teaching institutions (values, aims, norms, as well as the administrative, political and educational organizations) in which teachers work not always allow a practice coherent in relation to the principles of the human education. From this theoretical perspective, we started to study the teaching practice in EPT, in the context of Senai-ES and IFES.

Comparative Study of Teaching in Senai-ES and Ifes

Both Senai-ES and Ifes were designed to offer professional education, mainly, of a middle level. Currently, they are institutions of tradition, reference and social prestige in this teaching modality in the state of Espírito Santo. The institutions chosen as research loci are based in the capital Vitória-ES, in middle-class neighborhoods, in a good location and with a big flow of people and vehicles. Furthermore, both institutions have satisfactory physical structure. In the context of the course Technical in Mechanics (subsequent and concomitant), these institutions offer training spaces (labs and workshops) with high-tech and conserved equipments, pretty similar to the industrial environments. They also present a curriculum (course plan) with similar characteristics, which prescribes a teaching practice from the vocational and technician bias aiming at the development of a professional profile based in competences.

Even with these similarities, Senai – institute in Vitória and Ifes - Campus Vitória present various education conditions. In this context, the teaching practice in these spaces has specific characteristics. The difference between these institutions is shown through the legal nature and administrative organization. Senai-ES is a parastatal institution: non-profit; has private management; subordinate to the Industries Federations and Confederation; its organization comprises the national department and regional departments; and its services are of a semi-mercantile nature (SENAI-DN, 2010). In counterpart, IFES is a federal autarchy: its management is public; subordinate to the Union; its organization is consists on the superior board, rectorry and campuses; and its services are public and free of charge (BRASIL, 2008).

The contrasts between these institutions are also manifested in their educational organizations; in their purposes and in their conceptions of professional education. Senai-ES offers professional courses of initiation, certification, continuing education and technical qualification and its aims have a clear affinity with the interests of the industrial companies, thereby, the concept of EPT proclaimed by this institution is extremely related to the needs of the market. This is clear in Resolution n°. 410, of May 30th of 2010 (SENAI-DN, 2010), that defined Senai's education guidelines, that imposes their methodological basis to all Regional Departments and educational branches. According to these guidelines, Senai's mission is "[...] to promote the professional and technological education, the innovation and

the transferring of industrial technologies, contributing to raise the competitiveness of Brazilian industry" (SENAI-DN, 2010, p. 11).

Ifes offers courses of a middle and higher level, and its objectives have relation with the market, but also presents commitment with the development of the society and its conception of EPT seems to be centered in the education of workers and citizens for the exemption in the social practice, what is clear in the article 7° of Law 11.892/2008, which institutes the Federal Network and determines the objectives of their institutes to: "III - perform applied studies, stimulating the development of technical and technological solutions, extending their benefits to the community (BRASIL, 2008). Another objective of the institutes presented in this same article is: "V - stimulate and support education processes that lead to the creation of job and profit and to the emancipation of the citizen in the perspective of the local and regional socioeconomic development" (BRASIL, 2008).

There is a disparity between these institutions when it refers to the conditions of the teaching practice: contract, salary and career plan. The report n°. 002/2016 (SENAI-DR, 2016a) on teaching staff selection for Senai-ES clarifies that the teachers earn the same salary, independent of the academic level (graduate, specialist, master, PhD). Furthermore, teachers have their labor rights driven by *Consolidação das Leis de Trabalho* – CLT (Consolidation of the Working Laws); some of these rights are *Fundo de Garantia por Tempo de Serviço* – FGTS (Severance Pay Indemnity Fund); to be formally hired; the paid vacation; the unemployment insurance; the retirement by *Instituto Nacional do Seguro Social* – INSS (Social Security National Institute), among others. However, it is interesting to highlight that, despite of all these benefits, the teachers at Senai-ES are not acknowledged legally as belonging to the teaching class, therefore, do not benefit from the rights that are specific to this class, as a career plan; moreover, they are hired under Brazilian Working Law (no stability in the work contract) and the salary is fixed concerning the additions by degrees (SENAI-DR, 2016a).

At Ifes, the conditions are different than that; in their announcement to select teachers, like the announcement n°. 03/2016 (IFES, 2016), it is possible to understand that the teachers are acknowledged belonging to the teaching class; have rights expected to this category; are statutory with professional stability; and the salary varies additions by degrees and by years of service. These rights are very attractive, and may be some of the

reasons that booster many professionals to apply for civil service entrance examinations (or selection processes) in the teaching area to work in the Federal Network.

Furthermore, the relation between teacher-institution and teacher-student has different configurations in these schools. At Senai-ES, due to its private nature and its direct connection with the industries, it is established a market-based relation between the individuals (worker-employee and consumer-supplier) and its services have a clear commitment to meet the interests of the productive sector (SENAI-DN, 2010). On the other hand, at Ifes, from its public nature, the relations between the individuals are developed in the perspective of the right to the education and to the work, not having a clear nor direct connection of its services with the productive sector (BRASIL, 2008).

These characteristics define the identity of each of the institutions studied and bring several implications for the teaching practice, defining their limits of working and educating. Centered in the education of the workers, each of these institutions dwell on this purpose in a different way, therefore, they have particularities in concern to the management, to the administrative organization and to the educational practice. In other words, Senai-ES and Ifes have a very deep-seated *modus operandi*, thereby, the teaching practice in these spaces are under strong influence of the institutional and cultural rules. It means that the values, the purposes and the institutional objectives, as well as the school curriculum (the content organization, the teaching methodology and the learning activity), among other norms and prescriptions are some of the elements that influence the teaching practice, adapting it according to the proposition of each of these institutions.

The rules proclaimed by Senai-ES and Ifes may not always aim the emancipation of students, and may reduce the teaching activity to the technical operationalization to meet the needs of the capital, mainly if we analyze the curriculum (course plan) of each one of these institutions. Studying about the objectives and the purposes of the courses Technical in Mechanics promoted in the curricula, it is possible to notice that, even nowadays, the relation between the professional education and the productive sector is strong. In this way, the conception to develop a professional profile through competences necessary to the labor activity has centrality in the curricular purpose of the two institutions.

For Ifes, the general purpose of the technical course in Mechanics is to educate professionals that are able to perform "[...] activities of a technical and professional nature

in the industrial field, with license in mechanics, in a perspective of social economic and political development, aiming at the betterment of the quality in the industrial production" (IFES, 2006, p. 8). For Senai-ES, the general purpose of the course is "to educate professionals to act in the several sectors of the labor market, such as public, private and third sector institutions, providing the development of the technical, social, methodological and organizational capabilities" (SENAI-DR, 2016, p. 15).

However, though the curriculum of both institutions prescribes a centered teaching practice, particularly in the demands of the market, the study highlights that, in the context of teaching activity, teachers can offer an education beyond the vocational and technical method. In the context Senai – Institute in Vitória and Ifes - Campus Vitória, it is possible to notice that teachers perform an activity that at times has coherence to the institution rules, and at other times go beyond what is prescribed. This can be noticed in the lines of teachers, when asked about what would be the social role of the professional education:

Senai's social role is to provide the professional education with the focus on the education of people to the industry market. Senai was designed to serve the industries, this is its social role. However, the purpose is to prepare qualified workforce for the work in the industry (Prof. A at Senai-ES).

Senai's social role is to insert the young adult in the labor market and educate him for the life. The professional education is important mainly when we talk about employment, because it contributes to the basic education that allows people to be inserted in the labor market (Prof. B at Senai-ES).

Ifes' main role is to educate critical citizens, focused on the education not only for work, but for life. We, at Ifes, have a very interesting motto: to educate for life [...]. The mission that we have for long time is this: to educate the complete citizen for life. And I see that most of my colleagues, teachers, follow or try to work in this direction (Prof. C at Ifes).

The role of the professional education is to develop the technical training and the civilian education in the students. The concern of citizenship allows the student to understand that only knowing only how to tighten the bolt is not enough for a meaningful practice in the workstation and in the society (Prof. D at Ifes).

Through the speeches of teachers from Senai-ES, it is possible to notice that EPT role is connected to the interests of the industry, as well as related to the market and to the employment; on the other hand, there are some teachers in this institution that point the EPT connected to the "education for the life". Now in the speeches of the teachers from Ifes, there is a bigger consistency in the answers: teachers defend that the role of EPT does not aim only the education of people to meet the demands of the market, but also the

citizen and human education, aiming a meaningful acting in the society throughout the entire learner's life. To sum up, in the reports of teachers of Senai-ES and Ifes, we notice that the education for the labor market is emphasized; however, some teachers also connect the EDT to the human education for life.

This way, the teaching practice is complex, dynamic and its founding characteristic is the autonomy, that allows the teacher to work both in the perspective to accomplish accurately the prerogative of the educational institutions, as to perform a differentiate work, or without any commitment with the educational norms. Such autonomy forges the professional identity of the teacher. This means that the characteristics of the institutions tend to establish lower or higher levels of freedom for the teacher to work, but keeps his autonomy; thus, there are many contradictions that cross both institutions.

However, Law n°. 11.892/2008 (BRASIL, 2008), that instituted the Federal Network, supports a teaching activity closer to the perspective of the human education in their institutes. On the other hand, the Resolution n°. 410/2010 (SENAI-DN, 2010), that institutes the branches of Senai, points to a teaching more connected to the productive sector. Thereby, the educational practice of teachers in these institutions presents different results and can be closely implied in the teaching profile required by the teaching institutions in their selection processes.

According to the institutional documents analyzed and the lines of teachers interviewed, in Senai-ES, traditionally, it is emphasized the teaching of the practice (know-how). It reflects on their teachers' profile and, consequently, in the teaching action. As seen in the Announcement n°. 002/2016 (SENAI-DR, 2016a), Senai-ES selects preferably professionals with practical experience in the industry to work in the teaching practice.

Table 1. Requisites for the teaching staff

2.1.1 TEACHER FOR PROFESSIONAL EDUCATION II – (MECHANICS)

Position: Teacher for Professional Education II.

Remuneration: R\$ 4.451,37 (for complete 40h-weekly workload, other reduced schedules will be proportional).

Fringe benefits: Health insurance, meal allowance and bonus per hour/class.

Education: Degree in Mechanics, specialization is desirable.

Previous Experience: Professional experience in the working area, teaching practice in vocational courses is desirable.

Competences: Competences in Machining, Boiler, Weld and Mechanical Maintenance.

Workplace/Workload: Linhares/40h weekly.

Work Schedule: 1pm to 10pm.

Job openings: 01.

Source: Senai-DR/ES (2016a)

This way, Senai-ES demands teaching activities centered in the practical content of the technological area. The analysis of the data produced in the interviews with teachers of this institution allows inferring that there is an aligned work, in which teachers tend to follow the same approach: to teach the labor practice. Therefore, Senai-ES has a bigger possibility to provide a teaching practice connected to the productive world, not only due to its relation with the industries and its private nature, but also because of their teachers' profile, that shows to have practical experience in the industrial sector. In this case, throughout the course, students can develop affinity with the field and value the insertion in the labor market.

In counterpart, according to the institutional documents analyzed and the lines of the teachers interviewed, Ifes presents a line that at times advises a teaching practice in the perspective of human education, and at other times retake a teaching very shaped to the logic of the market. Being a public institution, the autonomy to choose the professionals is minimal, the selection process tends to give prestige to a more academic teaching profile, this is, the teachers with a concrete theoretical education in the technological area; in this case, the connections of teachers with the practice in the industry is not ensured, as can be seen in the Notice n. 02/2016 (IFES, 2016).

Table 2. Academic degrees required to EPTNM teaching staff at Ifes

REGISTRATION INDEX	LICENSE	JOB OPENINGS	CIVIL SERVICE ENTRANCE EXAMINATION'S AREA	DEGREE REQUIRED
204	Mechanical Engineering	01	Mechanical Engineering (Capes code 30500001)	Degree in Mechanical Engineering with Specialization or Master's or Doctor's Degree, in all the cases, in Mechanical Engineering

Source: Instituto Federal do Espírito Santo – Ifes (2016)

This teaching profile at Ifes can bring implications in the teaching activity, what allows inferring that learners in the Federal Network can get a wide professional education, with further development in the theoretical part. The teachers' profile itself can influence the former students to the interest in keeping their studies in the higher level, instead of being inserted in the market in an immediate way.

The data from this study allow to infer that such teaching profiles present limits for work in EPTNM in the perspective of the human and complete education, since the educational practice of the teacher can be harmed both by an activity restricted to the practice as for an activity restricted to the theory; what seems to be a reality of each of the institutes in discussion. The issue of the pre-requisites to work in EPTNM is discussed by several authors of the field of Work and Education, such as Moura (2008) and Machado (2008). For these authors, besides the technological education (in the theoretical and practical dimension), the teacher would need to have a specific education in the teaching area, as well as a political commitment with the education and a understanding on the organizational culture of the teaching institution in which he works, so that, this way, he could have conditions to develop wider education actions, besides the technician teaching that is centered in the market, committed with the emancipation of workers. Therefore, only with education, at times required by the institutions, there is no possibility of achieving a counter-hegemonic teaching practice that surpasses the logic of the capital.

However, the way in which Brazilian legislations, throughout the years and currently, standardize the education and professionalization of teachers in the professional education is problematic, allowing many distortions and being configured in several challenges to the teaching practice. The legislations allow professionals without a license for the teaching practice to work as teachers in the field of EPT. This situation is, nowadays, reinforced by Law n°. 13.415/2017 (BRASIL, 2017) that instituted the Reform of the High School, authorizing the action of professionals without the teaching training, being enough only the notorious knowledge to give classes in the context of the Professional and Technological Education. It is known that the teacher is educated from the experiences lived in his day-to-day (through the school practice, leisure, rest, social activity, being father, or mother, or son, or student); even so, the teaching education courses are sources of relevant knowledges, as they offer scientific elements that enable teachers to surpass the common

sense, question what he knows (or what he thinks he knows) and create education actions contrary to the capitalist logic.

Final Considerations

The discussion carried out in this study endeavored to build several questionings on the teaching in Professional and Technological Education that, surely, were not fully discussed in this study and, therefore, deserve more intensified studies. From the qualitative approach, this study assumed a comparative bias to try to establish relations between the teaching in Senai-ES and Ifes. Nonetheless, in this study, there was no pretension to establish value judgement on the characteristics identified of each educational institution, to point which one is the best or the worst; but, to understand how the teaching is structured in each one of these educational contexts. From the identification of contrasts and similarities between these two educational institutions, it was possible to know an educational reality from the other, as well as understand critically the teaching practice in EPT.

Therefore, this comparative study between Senai-ES and Ifes highlights the specificity of the professional and working education in this modality. In regards to these considerations, it is possible to understand that EPT is crossed by many conceptions that are met in dispute in the society: its results is the workers education, that, on the one hand, can be associated to the interests of the market, on the other hand, can aim at the needs of the workers. This way, at the same time that the educational institutions are demanded by the capital, they are also considered by the workers a privileged space for the professional education, which enables the insertion and rise of the learners in the society.

Thereby, the teaching practice is inserted amidst the demands of education restrict to the market, but also in function of the emancipation of the workers. These contradictions cross the teaching work in the professional education, requiring a political and pedagogical effort of the professionals involved, that need to choose how to act in the process. This way, the teaching activity makes all the difference in the education of the individuals; the teacher, in the role of mediator and advisor in the process of teaching and learning, can relativize the education for the world of work, i.e., not restrict their teaching practices to market demands in line to the logic of the capital, but provide the human education, having

in mind the freedom, autonomy and emancipation of the individuals. To summarize, from a dialectical work, the teacher can carry out a flexible activity, which surpasses the logic of capital.

Finally, we can affirm that both institutions studied have several similarities, but also important differences. This study enables to understand the several contradictions that determine the teaching in EPT. To build a professional education in the perspective of the human and full education, the role of the teaching would need to surpass the logic of a technical education for the job/market. For that, it would be necessary to invest in teaching education policies committed with the development of a complete teaching profile, i.e., being possible to meet demands and diversities inherent to the professional education; it would be also of paramount importance the valuation of teachers: fair salaries, career plan, inducement for the continuing education, among other elements that are necessary for better conditions of the educational practice. To invest in the education and in the work conditions of teachers is a basic assumption of a professional education of quality that aims at the emancipation of the workers.

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