## VOCATIONAL EDUCATION AND LABOR IN BRAZIL: A HISTORICAL ANALYSIS OF THE EDUCATIONAL SECTOR EVOLUTION

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#### Scientific Investigation

**Higher Education** 

**Educational Technology** 

#### **Concluded Study Report**

### ABSTRACT

The discussion on educational processes organization and labor evolution always brought large debate not only in Brazilian soil, but also worldwide. The cultural, behavioral and mainly the technological changes of our society occur vertiginously, according to our own concerns or public policy's actions, as we contemplate the history of vocational education evolution. Our intention with this article is to demonstrate the progress applied on a determined period of Modern History, highlighting its respective studies and taking into account especially the Brazilian government concerns for the current and future workforce technical formation. Therefore, we intend to reflect upon historical actions and directions of vocational education, as well as worries and associations of practices performed at school. The school is the place that truly shapes future workers, and, somehow, designs society conscience plus the sense of collaboration and collectivity of children, youngsters and adults, since they spend most of their time in a school chair. Later, they will be the future workforce inside several corporate segments.

We will only address explicitly ability-oriented educational practices regarding a historic period of education and qualification for the job market. This delimitation of the research object is necessary due to a scientific article's limitations and characteristics.

Keywords: labor; vocational education; society; government.

#### Introduction

This present article's goal is to draw a brief outline of the Brazilian vocational education sector and its association with labor, performing a historical analysis of its evolution. Such study may allow the approach of high school vocational education and the perception of real changes related to job positions, as well as the education quality in a determined period.

For Gil (2002, p. 44) 'the development of bibliographic research is based on already elaborated material, mainly books and scientific articles'. Documentary research 'resorts to materials that have not received analytical attention yet or that can be re-elaborated according to other research objects' (GIL, 2002, p. 45). We elaborated the bibliographic review using books from essential authors who dealt with the same research object, besides scientific articles, journals and websites in order to base the theme proposed. The methodology sequence for this article had bibliographic research as an initial technical procedure, and documentary research served as review material.

The text will present vocational education clearly to the reader, providing historical secondary sources to guide information that prove or at least guide to the conclusion that such education in Brazil has always been focused on the unwealthy social classes of society. This fact is not good or bad, but should induce to a more thoughtful discussion on its content. In this path, the research demonstrates an origin related to the North-American culture due to its influence on the standardization of educational systems. Such influence even includes the adoption of course material from the United States, according to the text sequence.

The study also thinks of education and schools as concepts presented to people freshly released from slavery, of the resistance on their part after such situation. Real attention to this issue comes forward only after the implementation of the law enforcing education as mandatory, in 1874. A comparative superficial analysis of context dating from the implementation of American models had very little time to create the necessity for education on this population, if we take into account that from the 800 thousand of these people who considered themselves free, only 140 thousand affirmed to know how to read and write. It was just the beginning for the need of knowledge.

# A brief history of technical education development from the 1930's to the 1980's

For the real comprehension of this scenario, the universal meaning of the expression 'high school' as the formation of adolescents and young adults must be in mind. Historically, high school separated Brazilian society since the beginning between secondary school or propaedeutic, destined for the elite, and vocational high school, destined for the working class, major focus of this article's content.

After all, nowadays, vocational education cannot be or should not still be faced as one more charity program provided by the government exclusively for young citizens in a situation of social disadvantage. Some educators still think of it in these terms, and History confirms it at the present. A better notion of space and time was possible in 1909 at capitals cities, known as apprentice and artisanship schools, in order to train students with more effort and stablish social control. Their main goal was to enable citizens of society's margin to a profession <sup>1</sup>. Industrialization came next, changing the point of view of vocational education as focused on the marginalized and unfavored. According to Amorin<sup>1</sup>, the creation of *Comissão Brasileiro-americana de Educação Industrial* (Brazilian-American Committee of Industrial Education – CBAI) – a cooperation program between Brazilian and American governments, firmed and signed by both nations –, in January 3rd, 1946, had as its main goal the formation of teachers who, later, would work at the educational system named as 'industrial education'. The beginning of vocational education thinking at the time is justified by the country's moment of broad industrial expansion process and, logically, by the American's interest in having a larger and better relationship with Latin America, due to the Cold War and to the economic strength sought by the cooperation of all American countries. This was Brazil's strategy to meet the demand and employ its working class at the same time.

The change of Brazilian's technical education brought consequences to the job market because, in 1951, Vargas government was installed, and its large economic growth absorbed CBAI's workforce; the fact is confirmed by Evaldo Lodi, president of *Confederação Nacional da Indústria*, CNI, (National Industry Confederation). He affirmed that the increase of the technical level of Brazilian's industry would only be more competitive and, consequently, more successful with the extension of vocational education. (AMORIN *apud* RODRIGUES, 1998, p. 76).

It is worth mentioning that high school student's right to guarantee or even to apply to higher education only occurred in the 1950's. Up to this period, the division of social classes was clear, and students from vocational high schools would go straight to the job market, in order to supply the immediate workforce needs. After the agro-export society system phase, with large properties and slave workforce, Brazil changed to an industrial society system focused on production, justifying the aforementioned statement, which affirmed the need to produce.

<sup>&</sup>lt;sup>1</sup> AMORIM, Mário Lopes. Da escola Técnica de Curitiba a Escola Federal Técnica Federal do Paraná: projeto de formação de uma aristocracia do trabalho (1942-1963).
2004. Tese (Doutorado em Educação) – Programa de Pós-Graduação em educação, Faculdade de Educação da Universidade de São Paulo, São Paulo. pp.

The historical search of the vocational education outline in Brazilian soil became relevant by the 1930's, when Brazil's transition to an urban-industrial society is clearer, with the government's strong support and massive urbanization process; vocational education already held the feature of larger social control of popular classes. In 1930 and 1945, the demand for welltrained workers and technical areas increased even more, motivated by the implementation of national industrial capitalism.

In 1937, with the Federal Constitution, the obligation of a law regulating vocational schools by companies and syndicates ensued. In 1942, the *Serviço Nacional de Aprendizagem Industrial* (National Industrial Learning Service), "Senai", was born, along with the *Lei Orgânica do Ensino Industrial* (Organic Law of Industrial Education). The latter organizes vocational education as not exclusive to companies and syndicates anymore and equivalent to propaedeutic high school.

The educational model hereby mentioned ended being compatible with the implementation of the existent high school and vocational school technical standards. We can state, therefore, the model matched and even improved the average future worker qualification demanded by the country's development and, in the process, the participation of the State and municipalities was essential. By the historical timeline, in 1945, Brazilian population was of 41 million total; in 1970, it more than doubled, 93 million. In 1945, the initial enrollment in primary school (*ensino fundamental*) was of 3.3 million, and, in 1970, this number increased to 16 million! In 2000, high school jumped to 8.2 million enrollments.

Trained workers professional needs are more visible in areas such as engineering related to infrastructure, at the industry sectors of construction and shipbuilding. Technology, oil prospecting, and corporate agriculture are the areas that stand out.

Brazil, therefore, is already in a phase of maturity, bringing out the need of access to higher education for its citizens, so they can have a profession to be self-sufficient, avoiding crime and rising from marginality. As consequence, such scenario can increase self-esteem and contribute to social and environment development in a more effective way. The importance of high school and vocational education in the last decades reveals the need of adequacy of new courses, because of the transition process to an economy founded on constant marketing change, due to technology issues affecting new needs created by the supplier market and its customers. A new set of apt professionals and technicians is necessary to answer this existent demand.

If during the period prior the 1930's the policies focused on vocational education had as guideline the control of social classes identified as unfavored or even as marginalized, at the following decade public policies claimed due to society's natural industrialization a minimum level of education. There was a vertiginous growth of the initial enrollments in primary education, predominantly public. The Brazilian government outlined a more adequate form of vocational education and accelerated its programs of professional formation, due to a phenomenon called 'economic miracle' (1968-73) by the media: a period of large national growth on the industrial segment.

Since then, we have more vocational education placements offered at all regions of the federation in relation to the federal government. We also have a growth at the corporate sector, which is more concerned about the employees' professional qualification, as the market itself placed the debate on industrial development and rethought the government role on workers' formation.

#### Professional development on distance education reformulated

Information and communication technologies (ICTs) promote interrelationships between education (traditional and distance educations) and labor. As we consider the changes involving human existence cultural, political material production and reproduction as important for social and reflexive actions, we can infer that science, technology and labor are interspersed with practices and processes of knowledge appropriation. Lima Filho and Queluz (2014) explain that these relationships connect historically, philosophically and ideologically, and on a daily-basis dimension of social constructions that mix to scientific, educational and social principles. If we think on factors that implicated changes on teaching practices due to technology, we notice methodology transformations in the teacher/professor roles. Let us reflect upon the paths that drew a dissent from the traditional role of the teacher/professor to a myriad of teaching functions consolidated by distance education. We go from the premise that there are functional differences proved by conflicted perceptions on the teaching profession for distance education. Such situation came to view firstly because teacher/professor and student are apart from each other, but this is justified by other agents' virtual presence and by the interactive technology apparatus on both parts' relationship.

The hierarchy created between distance education teachers/professors displeased the group functionally and financially. There was an addition operational work with function deployment and disqualification of tasks on production programs and educational control and evaluation. The paramount was outlined this way because of the progressive number of students per teacher/professor and the use of course material direction. Legislation determined a maximum parameter of students per teacher/professor.

The same traditional teacher/professor/tutor has a relevant role for the success of distance education. There are conflicting functional and financial differences between traditional teacher/professor/tutor and the distance education professionals inside the educational process, mainly because of the hierarchy designed on attitudes and values attributed to functions and roles dictated by education institutions. But such process is much more profound. It is born on the teaching work constitution, on the importance given to its management and, essentially, on the social point of view on the teaching function. The understanding of this construction may indicate a possible path for changes.

This is also an important reflex on professional qualification and the need of rebuilding traditional models of Brazilian's labor profile for more flexible and welcoming conditions.

Programs like federal government's PRONATEC are destined to the youth interested in professional formation through distance education methodology, an area filled of traditional tutors.

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### **Finish considerations**

Based on the research to the elaboration of this article, even though it may be considered superficial to any decision making, the 1990's were clearly the moment of total reorganization of the production process under new technology basis was performed — information system advances in particular, with a great role performed by computing; as consequence, we have a decrease on the government's intervention in this context.

Nowadays in Brazil, vocational education is organized, traditionally, in three levels: (1) initial and continuing formation (2) technical formation and (3) technology formation. During the latest years, initial and technology education suffered few alterations in their structures and purposes. According to ILO (International Labor Organization, 2013) nearly 40% of the world population has less than 20-years-old. And 85% of them are working under poverty conditions and live in countries under aggravated poverty conditions by lack of opportunities. The youth unemployment rate has increased from 11.7% to 13.8% in the last decade. On an average, youth have three times more possibilities of being unemployed than adults. The fact highlights the relevance of this article, since it was assessed that the unemployment problem is a world phenomenon related to the lack of qualification and its connection with the job market. PRONATEC, the government's national program of employment and vocational education access created in 2011, surfaces in such scenario, with the goal of broadening the offers of professional and technology formation, which will certainly be the basis for a next article.

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