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The historical contexts of the implementation of technical education in Brazil: a case study concerning the Federal University of Santa Maria

Os contextos históricos da implantação da formação técnica no Brasil: um estudo de caso relacionado à Universidade Federal de Santa Maria (UFSM)

Contextos históricos de la implementación de la formación técnica em Brasil: un estudio de caso relacionado con la Universidad Federal de Santa Maria

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ABSTRACT

This study aims, based on a bibliographic review and relevant documentary analyses, to reflect on the national and international historical processes that stimulated the implementation of technical education at the Federal University of Santa Maria (UFSM). It assumes the principle of the correlation of historical facts, grounded in authors from the historical-dialectical materialist tradition, in order to establish reflections on the historical framework that influenced the implementation of technical education within UFSM, the first Federal University established in the interior of Rio Grande do Sul, as well as comparing this perspective with other thinkers representing different approaches. In this sense, it becomes evident that the decades of the 1950s and 1960s were marked by the reorganization of the capitalist productive model, a period when new parameters for global agricultural production were established,

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through the high mechanization of crops, the use of agricultural pesticides, seeds, and the adoption of new cultivation techniques. Furthermore, it is observed that it was within this context of Cold War polarization that Brazil effectively defined its role in relation to the new demands of capitalism, resulting, for example, in the “MEC-USAID” agreement and the establishment of new educational guidelines, in a scenario of the implementation of the civil-military dictatorship, whose governments articulated the mechanisms for reconfiguring the relations between capital and labor.

Keywords: Technical education; Civil-military dictatorship; Capitalism; Historical materialism.

RESUMO

Este estudo tem por objetivo, com base em revisão bibliográfica e análises documentais pertinentes, refletir sobre o processo histórico nacional e internacional que estimulou a implantação do ensino técnico na Universidade Federal de Santa Maria. Parte-se do princípio da correlação dos fatos históricos, com base em autores do materialismo histórico-dialético, para estabelecer reflexões sobre os elementos históricos que influiram na implementação do ensino técnico no âmbito da UFSM, a primeira Universidade Federal instalada do interior do Rio Grande do Sul, cotejando-se tal perspectiva com outros pensadores representantes de outras linhas. Nesse sentido, vê-se que as décadas de 1950 e 1960 foram marcadas pela reordenação do modelo produtivo capitalista, sendo a época em que se estabeleceram novos parâmetros para a produção agrícola mundial, a partir da alta mecanização das lavouras, aplicação de defensivos agrícolas, sementes e o emprego de novas técnicas de cultivo. Ainda, observa-se que foi nesse contexto de polarização da Guerra Fria que o Brasil efetivamente definiu seu papel frente às novas demandas do capitalismo, daí decorrendo, por exemplo, o convênio “MEC-USAID” e o estabelecimento de novas diretrizes educacionais, em um cenário de implantação da ditadura civil-militar, cujos governos articularam os mecanismos para as novas relações entre capital e trabalho.

Palavras-chave: Ensino técnico; Educação; Ditadura civil-militar; Capitalismo; Materialismo histórico.

RESUMEN

Este estudio tiene como objetivo, a partir de una revisión bibliográfica y el análisis documental pertinente, reflexionar sobre el proceso histórico nacional e internacional que impulsó la implementación de la educación técnica en la Universidad Federal de Santa María. Se parte del principio de correlación de hechos históricos, basado en autores del materialismo histórico-dialéctico, para establecer reflexiones sobre los

ISSN: 1984-6444 | http://dx.doi.org/10.5902/1984644475431

elementos históricos que influyeron en la implementación de la educación técnica en el ámbito de la UFSM, la primera Universidad Federal instalada en el interior de Río. Grande del Sur, comparando esta perspectiva con otros pensadores de otras líneas. En este sentido, se puede observar que las décadas de 1950 y 1960 estuvieron marcadas por la reorganización del modelo productivo capitalista, siendo la época en la que se establecieron nuevos parámetros para la producción agrícola global, basados en la alta mecanización de los cultivos, la aplicación de tecnologías agrícolas pesticidas, semillas y el uso de nuevas técnicas de cultivo. Además, se observa que fue en este contexto de polarización de la Guerra Fría que Brasil definió efectivamente su papel frente a las nuevas demandas del capitalismo, resultando, por ejemplo, en el acuerdo “MEC-USAID” y el establecimiento de nuevos lineamientos educativos, en un escenario de implementación de la dictadura cívico-militar, cuyos gobiernos articularon los mecanismos para nuevas relaciones entre capital y trabajo.

Palabras clave: Educación técnica; Educación; Dictadura civil-militar; Capitalismo; Materialismo histórico.

Introduction

Education, as part of a broader social whole, is the product of the interrelations between society, culture, politics, and philosophy. That is, education and, consequently, teaching, are rooted in a historical and ideological context that affects both the implementation and the directions taken by institutions. In this sense, considering the influence of positivist doctrine on education in Rio Grande do Sul, of significantly progressive orientation—when viewed through the positivist lens—one may ask: in what ways did the thought proposed by the positivist philosophical current, during the 1950s and 1960s, impact the implementation of the secondary-level technical training unit, namely the Agricultural School, at the Federal University of Santa Maria (UFSM), and subsequently the Industrial Technical School (CTISM)?

Based on this problematic, the ultimate goal of this study is to outline a historical-analytical panorama of the implementation of technical schools in the 1960s, connecting it to the positivist philosophical current that emerged in France in the early nineteenth century, with Auguste Comte’s positivism as its guiding line of thought. This strand was dominant in Rio Grande do Sul beginning with the establishment of the Republic and the Government of Júlio de Castilhos, retaining influence up to the limit

ISSN: 1984-6444 | http://dx.doi.org/10.5902/1984644475431

of the period under analysis, that is, the 1960s, considering the establishment of the Agricultural Technical School in 1963, and CTISM in 1967, although it can be argued that the positivist current of thought reverberates to this day in its variants. Such a historical context—although cut temporally for the purposes of the research conducted—derives from a long period of predominance of part of the political class originating from the rural aristocracy of Rio Grande do Sul, whose exercise of power was authoritarian and scarcely questioned; of regional political leaders influenced by the French Revolution (1789–1799), the effects of the First and Second Industrial Revolutions, and the strength of Comtean positivist doctrine.

At the time, Rio Grande do Sul was dependent on agriculture and extensive livestock farming, and dominated by the rural aristocracy, as well as governed by leaders shaped under the framework of such doctrine. This extended from the late nineteenth century (the government of Júlio de Castilhos), into the twentieth century, under the governments of Borges de Medeiros and Getúlio Vargas, influencing national politics from the 1930 Revolution onward, and continuing into the post–World War II period. Its fundamental feature in the educational field was that the wealthiest, that is, the economic and intellectual elite, governed and, therefore, dictated what the poorer, the governed, should do.

Thus, the historical process of implementing the Agricultural School, which inaugurated the provision of secondary-level technical education at UFSM and is the object of analysis in this study, is intrinsically linked to the modernization of agricultural and livestock activities in the post–World War II period, connected to the productivist principles that consolidated the so-called “Green Revolution,” which aimed at raising the status of countries considered “underdeveloped” or “late-developing,” such as Brazil. One can thus identify the historical-temporal context of the implementation of a type of education—secondary-level technical education—that was not common practice in the country, despite scattered initiatives throughout the Imperial period and the Old Republic, as well as the influence of the philosophical current that intellectually guided political leaders in the 1950s and 1960s, when these teaching units were established at UFSM.

ISSN: 1984-6444 | http://dx.doi.org/10.5902/1984644475431

It should be noted that there were numerous challenges for those involved in this symbiotic process of teaching and learning, especially regarding vocational education in Brazil. The changes experienced by the Brazilian educational system during the governments of Juscelino Kubitschek ("JK"), Jânio Quadros/João Goulart ("Jânio/Jango"), and during the military dictatorship governments after 1964, as well as their relations with the National Development Plans and the so-called "Brazilian Economic Miracle" (1968–1973), sustained by the so-called "Golden Age" of global capitalism, deeply impacted secondary-level vocational education in Brazil. This is because the demands generated by technological transformations since the mid-twentieth century required the training of workers both technically and socially prepared. Having outlined these parameters of the historical context surrounding the theme, the research proceeds.

Why History?

The foundations for the structuring of the country's educational system go back to the arrival of the first religious missionaries, members of the *Society of Jesus*, who presented themselves, ostensibly, as guardians of the ecclesiastical structure in the colonial areas and as those responsible for the ideological ordering of society. Precisely for this reason, the order monopolized so-called scientific knowledge since the Middle Ages in the Western world. This model persisted and profoundly influenced the organization of the national educational system. In the case of the Portuguese colonial domain, Jesuit activity was based on the organization of schools aimed at the conversion of Indigenous peoples and, above all, the maintenance of the settlers under the aegis of Christian religious doctrine. The rise of the Marquis of Pombal to power in Portugal and the reforms he implemented, especially those that led to the expulsion of the Jesuit priests from the Portuguese colonies, had profound repercussions across the Lusophone colonies, particularly in Brazil.

Educational initiatives were not exclusive to the Catholic Church, but throughout the nineteenth century and the beginning of the twentieth, confessional education was notably present throughout the national territory, establishing a dichotomous teaching

ISSN: 1984-6444 | http://dx.doi.org/10.5902/1984644475431

model, as mentioned earlier, that already pointed to a separation between “thinking” and “doing.” This is because, during the Colonial period, the Empire, and up to the end of the First Republic (1889–1930), access to formal education remained restricted to a small group of socially and economically privileged individuals who could afford to send their children either to Europe, or later, to the major urban centers of the country (Ghiraldelli Jr., 2001).

Meanwhile, for the children of the poor, the so-called “destitute of fortune”, the future was different. At the beginning of the twentieth century, access to formal education in Brazil remained markedly elitist, oriented toward the cultural and political formation of the elites, members of the rural aristocracy. However, some shifts were already taking shape due to pressures from a new social group: the urban working class. The influences brought by European immigrants expelled from their countries by the lack of natural and economic resources, combined with deep political and social transformations, accelerated this process of change.

The agrarian country, dependent on exports of sugar, cotton, coffee, and tobacco, that emerged from the nineteenth century scarred by profound inequalities and backed by an incipient Republic, gradually surrendered to the necessity of adapting to the new global context: liberalism, which was experiencing its last throes in Europe and the United States during the interwar period (1918–1939), with its model of market economy and new forms of production and political representation, as seen in the biographical work of John Maynard Keynes. This new configuration required education to prepare the masses of workers to meet new demands (Schwartz, 1984).

As previously stated, education is not detached from the social whole. In Brazil, the implementation of this model, particularly from the rise of Getúlio Vargas to power and the policy of “import substitution” demanded by the context of World War II, determined a shift in the general conception of the educational process. In this light, it is necessary to emphasize that:

> In Brazil, the extension of citizenship to subordinated classes expanded after the Revolution of 1930, which directed the State toward meeting workers’ social rights. (…) From this perspective, citizens are understood as those whose occupations are legally recognized and defined. Citizenship becomes

ISSN: 1984-6444 | http://dx.doi.org/10.5902/1984644475431

> embedded in one's occupation, and rights are thus referenced by the individual's place in the productive process. Therefore, the constitution of citizenship mirrors the inequalities of the productive process and, in this way, reinforces them (Sposati, 1998, p. 36).[1]

With the new socioeconomic model oriented toward the diversification of the economy, urbanization, and industrialization, a transformation of the educational system became necessary. This, in turn, gave momentum to the idea of the possible transformation of the country through education. From this new economic and social order, along with its political repercussions, which required changes in the Brazilian educational system, emerged the perspective of social transformation of the nation through education. From this process arose the "Manifesto of the Pioneers of New Education" (1932) and the creation of the Ministry of Education (*Ministério da Educação* – MEC), which began its history under the government of Getúlio Vargas in 1930, under the name Ministry of Education and Public Health Affairs. According to Ghiraldelli Jr. (2001, p. 32) "The 1932 document was based on the premise that education always varies according to a 'conception of life,' reflecting, in each period, the prevailing philosophy, which is itself determined by the structure of society." The author adds that "If the new education would serve only the individual, it would do so on the basis of the 'principle of the connection of the school with the social environment,' which in the modern context was presenting as the ideals of education 'solidarity,' 'social service,' and 'cooperation.'"[2]

In the subsequent historical period, the public policies implemented during the *Estado Novo* (the "New State", 1937–1945) were grounded in the political need of the

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[1] Original: "*No Brasil, a extensão da cidadania às classes subalternizadas expande-se a partir da Revolução de 1930, que direciona o Estado para o atendimento de direitos sociais dos trabalhadores. (...) Nesta ótica são entendidos como cidadãos aqueles cujas ocupações são reconhecidas e definidas legalmente. Embute-se a cidadania na ocupação e os direitos passam a ter como referência o lugar que o indivíduo ocupa no processo produtivo. Assim, a constituição da cidadania espelha as desigualdades do processo produtivo e deste modo o reforça*" (SPOSATI, 1998, p. 36).

[2] Original: "*O documento de 1932 partiu da premissa que a educação varia sempre em função de uma 'concepção de vida', refletindo, em cada época, a filosofia predominante que é determinada, a seu turno, pela estrutura da sociedade*".
"*Se a nova educação serviria somente ao indivíduo, ela o faria fundado no 'princípio da vinculação da escola com o meio social', meio este que, na atualidade moderna, estaria colocando como ideais da educação a 'solidariedade', o 'serviço social' e a 'cooperação'*" (Ghiraldelli Jr., 2001, p. 32).

ISSN: 1984-6444 | http://dx.doi.org/10.5902/1984644475431

dominant classes to establish mechanisms of control and manipulation over the growing urban working masses, through state apparatuses, resulting in a structure that responded to certain social demands while simultaneously legitimizing and keeping Getúlio Vargas (1882–1954) at the forefront of the political process.

Therefore, in order to understand vocational education in Brazil and contextualize the process of implementing secondary-level technical education at UFSM in the 1960s, it is necessary to analyze the structuring of technical education in Brazil since the so-called “Vargas Era”, as well as its interaction with the country’s transformation from an essentially rural society into an urban and industrial one, a transformation that was only solidified during the developmental government of Juscelino Kubitschek (1956–1960). From this perspective, public education, as Brazil’s economic process was altered by the transformations of global capitalism, assumed the role of preparing the workforce to meet new demands. Thus, the structuring of what is now known as technical-vocational education stems from the transformations experienced by Brazil, particularly in the first half of the twentieth century, even though earlier initiatives had appeared isolated and ephemeral. However, this mode of education gained emphasis beginning with the aforementioned JK government, and intensified under a new logic, that of “training”, during the civil-military governments (1964–1985). To fully comprehend the historical context of changes in the educational sector, a theoretical analysis of historical science is required, as presented in the following section.

The historical process as an epistemological resource

The understanding of the historical process of vocational education in Brazil allows for a more accurate examination of the contradiction between slave-based, manual, and operational labor, and so-called intellectual and reflective labor, accessible to the landowning elite. Thus, when attempting to grasp the trajectory of vocational and technological education in Brazil from the Vargas Era and its redefinition in the following decades, with a view to contextualizing the process of establishing the Agricultural Technical High School within UFSM in the early 1960s,

ISSN: 1984-6444 | http://dx.doi.org/10.5902/1984644475431

and of CTISM in 1967, it is imperative to cast an analytical gaze upon the historical process and its complexity, reflected in the political, social, and economic dynamics of a nation undergoing transformations.

For Burke (2003), education—or "knowledge," as he calls it—in modernity is comprehensible through the historical context of the discoveries that characterized the period. The author discusses the dissemination of the press, the development of science and technology, the Protestant religious reform, urbanization, and the appropriation of knowledge by the Academy as determining factors in the social valorization of education. However, this is not precisely what can be observed with regard to the implementation of technical education in Brazil. Rather, it seems more closely related to welfare-oriented policies aimed at preparing labor for industry, agriculture, and services, without concern for overcoming the dichotomy between manual and intellectual work, a legacy of slavery, thereby maintaining the privileges of certain social classes. Even today, this issue has not been adequately addressed and remains a "social fracture": individuals from less privileged classes are trained for factory-floor work, while those better endowed have access to a comprehensive education that enables them to access "noble" forms of work, socially valued and, consequently, better remunerated. Overcoming this discrepancy remains the major challenge for radical reform in vocational and technological education in Brazil.

In the educational field, such thinking was reinforced by the paternalist and populist ideology of the Vargas government. However, there was a turning point, as can be inferred from the following excerpt:

> In the early 1940s, "a qualitative change will take place in the welfare-oriented behavior of the State and business sectors toward the proletariat. Attitudes that appeared paternalistic—though by no means devoid of economic interest—which had generally sought to respond to, and even preemptively neutralize, demands for rights, must give way to a more comprehensive policy, representative of a new rationality" (SPOSATI et al., 1998, p. 46).[3]

[3] Original: "*No início dos anos 40 irá ocorrer 'uma mudança qualitativa no comportamento assistencial do Estado e do empresariado em relação ao proletariado. As atitudes aparentemente paternalistas - absolutamente não desprovidas de interesse econômico - que geralmente procuravam responder, até mesmo preventivamente, e desvirtuar em seu conteúdo a pressão reivindicatória, devem ceder o lugar a uma política mais global, representativa de uma nova racionalidade*'" (SPOSATI *et al*, 1998, p. 46).

ISSN: 1984-6444 | http://dx.doi.org/10.5902/1984644475431

This shift intensified from the 1960s onwards with the MEC-USAID Agreement, which inspired and supported the new configuration of vocational education in the country, providing both economic and technical support for the entire educational process that pertained to the new model. The backdrop of this project and its development was the conflict between capitalism and communism, which characterized the historical period known as the Cold War.

Arapiraca (1979), in his dissertation on USAID and Brazilian education, critically addresses human capital theory and distinguishes between Brazilian school practices under two ideological-social models of influence: those emanating from societies that concentrate the mode of production in socialism demand a single, polytechnic type of school; whereas those inserted in the capitalist system, by virtue of coherence and logical principle, reflect an education based on differentiation, which the author calls the “class school”.

Analyzing a given historical period implies not only the use of information recorded across diverse sources but, above all, assigning new meaning to recorded facts through the lens of the present, a task that is always difficult, complex, and highly challenging, as previously noted. From this theoretical and methodological standpoint, the historian faces questions such as: What concepts should be inferred to render the text engaging, informative, and scientifically appropriate? Which branches of history best align with the stated objectives? Which philosophical, technical, and ideological elements from the broad arsenal offered by philosophy, historical science, archaeology, anthropology, sociology, or even economics will the researcher employ? Thus, it is indispensable to define with which elements one will work and, by focusing on them, determine the vantage point from which observations will be made and articulated in an attempt to construct the discourse.

Therefore, in order to interpret the local and regional historical process within which technical education was established at UFSM, it is fundamental to draw from social history and economic history the structural concepts that aid reflection upon the

ISSN: 1984-6444 | http://dx.doi.org/10.5902/1984644475431

various aspects present in this process, namely, the political, social, economic, or entrepreneurial dimensions.

The aforementioned conceptual categories, in the Brazilian case, were articulated in public policies generated by a State in transformation, preceding the rise of the civil-military dictatorship. The dialectic surrounding the genesis of the implementation of the technical high school at UFSM demands methods and processes of reflection that refer us to the theoretical premises of post-1945 economic history, particularly historical materialism, for the analytical tools it provides. This involves employing elements that enable the identification of the political and social consequences of the process in question, following the line of analysis that Hill (1987) undertakes when examining the "revolution" within the "English Revolution." In his work, the author states that:

> [...] I am concerned with what from one point of view are mere ideas and side issues in the English Revolution: the attempts of various groups, composed of ordinary people, to put forward their own solutions to the problems of their time, in opposition to the purposes of their betters who had called them into political action. (HILL, 1987, p. 442)[4]

Concerning the compartmentalized analysis of class society, Fragoso and Florentino (1997, p. 30), based on Thompson (2004), affirm that class experience is assessed, to a considerable extent, by the context of relations of production in which human beings are raised or into which they involuntarily enter. Thus, in examining the structuring process of vocational education at UFSM, one cannot lose sight of which audience such schools sought to serve in that context; in other words, which socioeconomic class was intended as the target, insofar as the schools emerged locally under the aegis of the established economic relations and thus effectively experienced by their subjects.

[4] Translator's note: In the original Portuguese text, the authors cited Hill (1987) from the Portuguese translation. In this English version, the passage has been quoted directly from the original English edition of Hill's work to ensure textual accuracy.

ISSN: 1984-6444 | http://dx.doi.org/10.5902/1984644475431

The history of educational institutions and the insertion of technical education at the Federal University of Santa Maria: a separate history?

To better evaluate the process of modernization of the Brazilian economy in the period under study, it is essential to return to the context of the "Revolution" that brought Getúlio Vargas to power in 1930, marking the end of the First Republic, that is, the end of the old "coffee with milk" politics, in which the São Paulo and Minas Gerais oligarchies dominated the national political scene.

According to Pesavento,

> During the First Brazilian Republic, industrialists, who were experiencing a moment of assertion, had their activities inserted and delimited within the frameworks of an oligarchic state, governed according to the interests of an agrarian bourgeoisie. What is at stake, however, is that the generalizations made about the Old Republic as a whole do not take into account the heterogeneity of the agrarian sectors in the different regions of the country, nor the specific arrangements made regionally with the non-agrarian fractions of the national bourgeoisie. (Pesavento, 1985, p. 57)[5]

At the time, Brazil fundamentally depended on exports of primary products, especially coffee, sugar, and cotton, among others. The São Paulo and Rio de Janeiro oligarchies, since the end of the Empire there was a dissenting faction from Minas Gerais, remained in power at the expense of the rest of the country. The ideas fostered from the 1920s onward, by movements such as the Revolt of *Forte de Copacabana*, the *Tenentist* movement, the Prestes Column, Modernism, and the *Manifesto for New Education*, constituted the political and cultural backdrop for the rupture with the already mentioned "coffee with milk" politics.

The years following Vargas's rise to power were marked by political unrest and changes in the decision-making patterns emanating from the capital, Rio de Janeiro, despite the attempt of São Paulo to return to power through the so-called Constitutional Revolution of 1932. Getúlio repressed and defeated the insurrection, though not

[5] Original: "*No decorrer da Primeira República brasileira, os industriais, que viviam o seu momento de afirmação, tiveram a sua atuação inserida e delimitada nos quadros de um estado oligárquico, conduzido segundo os interesses de uma burguesia agrária. O que se coloca em questão, todavia, é que as generalizações feitas para a República Velha como um todo não dão conta da heterogeneidade dos setores agrários nas diferentes regiões do País nem das composições específicas que são feitas, regionalmente, com as frações não agrárias da burguesia nacional*" (PESAVENTO, 1985, p. 57).

ISSN: 1984-6444 | http://dx.doi.org/10.5902/1984644475431

without a major agreement with the São Paulo elites, establishing a Constitution in 1934 strongly influenced by Germany. Meanwhile, Rio Grande do Sul experienced its first wave of development in transportation, with reforms and the creation of state agencies to support the modernization of its infrastructure, linking various regions of the state.

It should be noted that the ideas of Auguste Comte (1983) shaped Borges's policies at that time, aimed at changing societal paradigms and transforming state mentality. In this regard, Lessa (1985, p. 59) emphasized: "The creation of a progressive mentality, through public investment in Education and in the promotion of culture, attracting private sector participation and enabling social balance by incorporating the proletariat into society,"[6] was a principle rooted in Auguste Comte and in positivist doctrine.

Following this progressive and distinctly positivist mentality, education was implemented in Porto Alegre through the creation of schools of Medicine and Pharmacy, and later with the establishment of the Free School of Law, Engineering, Agronomy, and Veterinary Medicine. The philosophy guiding universities was based on concentrating investment in "professions truly necessary for development, relegating to a much lower level the merely speculative fields of study" (Lessa, 1985, p. 60).

From the positivist perspective, Rio Grande do Sul needed to take decisive steps toward modernity. The outdated extensive cattle ranching system, the *charqueadas* (jerked beef production facilities), and old methods of managing *estâncias* (ranches) could no longer meet the requirements of competitiveness with the Río de la Plata countries, whose refrigeration infrastructure dominated international markets with chilled beef exports. Hence the need to reformulate the foundations of this productive system, which would also enable support for the United States during World War II. Thus, Rio Grande do Sul began commissioning and financing

[6] Original: "*A criação de uma mentalidade progressista, a partir de investimentos públicos no Ensino e na promoção da cultura, atraindo a participação dos segmentos privados e viabilizando o equilíbrio social mediante a incorporação do proletariado à sociedade*" (Lessa, 1985, p. 59).

ISSN: 1984-6444 | http://dx.doi.org/10.5902/1984644475431

refrigerated ships and encouraging the creation of rural cooperatives. In regard to the national educational context, beginning in 1932, as previously mentioned, through the "Manifesto for New Education" (Dewey, 1980), the issue reached a new level, forcing the Vargas government to treat it with greater attention.

The first initiatives that shaped new policies for Brazilian education included the allocation of federal budget funds to education, the legitimization of education as a social right by the 1934 Constitution, debates on the creation of a Ministry of Education, replacing the Ministry of Health and Instruction, and, subsequently, the enactment of the Capanema Law in 1942. The period in which Getúlio governed as dictator was extremely rich in debates and studies regarding the paths Brazil should pursue for development. However, these debates shared a consensus: education was the route to development.

Getúlio was deposed in 1945, and Eurico Gaspar Dutra won that year's elections, who, to some extent, followed Vargas's political and economic framework. A military officer shaped under positivist influence, Dutra had studied at the Military Tactical School in Rio Pardo (Rio Grande do Sul) in the same era when Vargas was a student. Influenced by the ideas of Auguste Comte, he carried on Vargas's framework, and his government came to be known as "Continuism without Getúlio". It was in this historical context that Vargas encouraged the creation of technical schools, believing in Rio Grande do Sul's agrarian vocation. From this initiative emerged institutions such as the Agricultural School of São Vicente do Sul (1955), now the Farroupilha Federal Institute, and the Agricultural School of Alegrete. Borges de Medeiros (president-governor of Rio Grande do Sul between 1898–1908 and 1913–1928) had already established technical schools and faculties of Veterinary and Agronomy (in the Agronomy neighborhood of Porto Alegre). This was followed by governor Leonel de Moura Brizola, Vargas's political protégé in the former Brazilian Labour Party (*Partido Trabalhista Brasileiro* – PTB), who created hundreds of schools in Rio Grande do Sul, known as *Brizoletas*, some of which are still in operation today (Lessa, 1985).

Getúlio committed suicide in 1954, followed by an institutional crisis that culminated with the 1955 election of JK, Social Democratic Party (PSD), who only took

ISSN: 1984-6444 | http://dx.doi.org/10.5902/1984644475431

office after another political crisis. With the new government, industrialization advanced rapidly, launching Brazil into an ambitious national developmentalist project through the so-called Goal Plans, which included new objectives for National Education. It was under the JK government, in 1960, that the project of the University of Santa Maria (USM) was approved after years of political negotiations at both national and state levels. According to Isaia (2006, pp. 123–127), after a decade of planning and political arrangements, a plan was made for the construction of thirteen buildings for a Polytechnic Center, beginning with the Institute of Electrotechnics. Thus:

> In June 1958, a meeting of the Santa Maria Association for Higher Education was held, convened especially to evaluate and decide upon the draft proposal for the Polytechnic Center, idealized by Professor Mariano da Rocha following his return from the United States and Europe, where he had visited campuses of several universities. […] In December 1960, when the Law establishing the USM was signed, the concrete structure of the block was already built.[7]

The first programs to be implemented were Civil Engineering and Electrical Engineering, reflecting the technical priority of the training offered. The university, conceived essentially so that the elite's children would not need to travel to Porto Alegre for higher education, while the technical schools trained workers and foremen, spurred the growth of Santa Maria in commerce directed toward universities, religious centers, and the Army/Air Force, and previously supported by the railway, all of which involved a large number of people and facilities. Quadros (2012, p. 344) shows that, in the 1950s, Santa Maria became, through the railway, a center of circulation in the state's interior, generating diverse relations and opportunities.

Within this context originated the Agricultural School of Santa Maria, a teaching unit linked to the University, with the purpose of offering High School and Vocational Education in different levels and modalities. Its creation occurred through Federal Decree-Law no. 3.864 of January 1961, designating it as the Agricultural School of

[7] Original: *Em junho de 1958, realizou-se uma reunião da Associação Santa-mariense Pró-Ensino Superior, convocada especialmente para apreciar e decidir sobre o anteprojeto do Centro Politécnico, idealizado pelo Professor Mariano da Rocha, após seu retorno dos Estados Unidos e Europa, quando visitou campi de diversas universidades. [...] Em dezembro de 1960, quando foi assinada a Lei que criou a USM, a estrutura de concreto do bloco estava construída* (Isaia, 2006, pp. 123–127).

ISSN: 1984-6444 | http://dx.doi.org/10.5902/1984644475431

Santa Maria, subordinated to the Superintendence of Agricultural and Veterinary Education of the Ministry of Agriculture. However, it only began operating in 1963. The Polytechnic School of UFSM initially offered only the Agricultural Technical Program, which remained the sole program until 1996.

Since the enactment of the Capanema Law (1941), Brazil had not experienced such excitement and expectations in the field of education. The idea of creating technical schools linked to the Brazilian State, as Vargas had done (SENAI, 1942 and SENAC, 1946), was resumed under the JK government. After all, as Couto (2011, p. 288) highlights, the leader's motto was: "Brazil will live fifty years in five". At this point, the ideas of economist Celso Furtado formed the basis of new planning for structuring public policies, as did proposals from other thinkers such as Roberto Campos, San Tiago Dantas, and Osvaldo Bulhões.

The 1960s were marked, in the international scenario, by U.S. hegemony, despite the high level of development in the USSR, which dominated the arms and space races. The Americans understood that they had to race against time and once again demonstrate their inventiveness and capacity to overcome adversity. They launched the idea of sending a man to the Moon before the end of that decade. At the same time, they could not lose sight of what they considered their "backyard": Latin America, especially after the Cuban Revolution in 1959.

Thus, they directed their attention to Latin America with development and educational aid proposals. Examples include the well-known MEC/USAID agreements, increased food production, and the so-called "Green Revolution" (Alves, 1968). However, they also ensured that local armies remained aligned with the interests of foreign corporations entering capitalist periphery countries, corporations for which technical training schools were necessary, with curricula and teaching methods oriented toward "training" workers deprived of political participation.

Final considerations

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This study aimed to address how the positivist philosophical thought influenced the establishment of the first technical high school units at the UFSM campus, namely the Agricultural School and CTISM, during the 1950s and 1960s. To answer this query, it was necessary to delve into various branches of History: economic, political, and social paradigms addressed through the historical materialist method.

It became evident that the creation of these structures was decisively impacted by the political and economic events of the early 20th century. The history of popular revolts, military uprisings, the "Revolution of 1930," Vargas' rise, deposition, and return to power, the "JK" and Jânio/Jango governments, the civil-military dictatorship, and the paradox caused by the Cold War, as well as the MEC/USAID agreements and the "Green Revolution," significantly influenced the Brazilian educational model, motivating the implementation of technical education in public schools. At this point, it can be asserted that the history of implementing technical education grounded in positivist theoretical-philosophical foundations reshaped the educational paradigm shift in the country.

By claiming that vocational education was marked by epistemological and political disputes, it was concluded that professional and technical education in Brazil since the early 20th century has been shaped by positivist ideals of order, development, and progress. These ideals revolved around the state's executive function, aligned with the thinking of the intellectual elite, namely the business bourgeoisie, emphasizing hierarchy and discipline in the technical workforce's formation, to the detriment of a worker's emancipatory education.

At the state level, it was noted that positivist ideals effectively inspired the implementation of technical education, directly impacting the creation of structures for establishing a university in the interior, in this case, UFSM. Through the chosen method's analysis, it was inferred that those with access to technical education reached a simplistic status of technicians and foremen but did not advance beyond factory-floor work, aligning with the positivist ideal of raising the proletariat's condition through work without education linked to autonomy and independence perspectives.

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Thus, understanding the historical dimension of this education mode and the policies generating the schools established at the time, as well as the model they adopted, is crucial. This is where the relationship between the present and past resides. Many researchers, driven by past experiences, advocate that references for understanding the present lie in the past. History is merely one of the ways to deal with these representations.

An example of this is the relationship between the historical contexts that supported the expansion of technical education in Brazil and specifically in Rio Grande do Sul in the 1960s. At the time, the industrialization model implemented through JK's "Goals Plan" and intensified by the "National Development Plans" during the dictatorship period increased the demand for specialized labor and required the expansion of the technical education network focused on various economic sectors, namely industry, commerce, services, transportation, and agriculture.

As for the primary sector, the so-called modernization of Brazilian agriculture began in the latter half of the 19th century, and the "Green Revolution" in the 1960s and 1970s enhanced it. During this period, increased agricultural production as a tool for economic and social growth in "developing" countries resulted in Brazil stimulating the development of proprietary technologies by both private institutions and government research promotion agencies, such as foundations, companies, institutes, and universities.

The aforementioned historical contexts are significant indicators of the need to expand mid-level vocational technical education in the country, relevant to this study as they connect its object to the political context experienced at the time when the first mid-level technical units were established at UFSM. Furthermore, it is worth briefly adding in the final considerations the motivations for choosing the topic: observing structural changes in state institutions over time allows for a better understanding of why certain state choices were made and the critiques of those choices. It is reaffirmed that by relating the past and present, one can understand the conditions, ruptures, and continuities in the trajectory of Brazilian technical education in general and in the RS and UFSM in particular.

ISSN: 1984-6444 | http://dx.doi.org/10.5902/1984644475431

From this, it is suggested that the possibilities for technical education extend beyond its original implementation. According to Figari (2007, p. 173), the integration of knowledge ensures that theoretical understanding does not wane but roots itself in experiential learning. It is understood that technical institutions should not only meet the demand for specialized labor but also develop competent workers capable of critically and effectively intervening in reality, transforming it through enhancement and humanization in response to current global demands, while creating and managing, recognizing the importance and necessity of technical knowledge for people and society's formation, without underestimating it, but considering it as important as technology, accessible and interesting for all.

In a country where the labor base was predominantly enslaved for nearly three centuries, unbound through an act with little regard for its social consequences, better understanding can be gained regarding the elites' directives concerning public policies aimed at preparing workers for the market. As observed earlier, in the early 20th century, with Nilo Peçanha's schools for artisans and masters, efforts focused on incorporating the "unfortunate" into the labor market. The school's founding decree expressly aimed to prevent criminal activity, linking the issue to a policing rather than social concern.

Similarly, positivist ideals promoted the incorporation of the working class into the labor market without considering education for the subject's emancipation. Comte's ideals found fertile ground in Rio Grande do Sul from the government of Júlio de Castilhos and spread during Borges de Medeiros' nearly three-decade rule. With the import substitution project by Getúlio Vargas, politically shaped by positivist influences, educational changes did not diverge from the policies outlined during the previous First Republic.

At UFSM, this positivist ideology reached its peak with the establishment of mid-level technical training units in the 1960s, namely the Agricultural School and CTISM. The workers' children were thus given a place in the aristocratic space of the first university outside the federal capitals. Not any place, but the place that befits them in Comte's envisioned social staticity, recognizing through formative education the

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moralizing value of work. Thus, the dynamics of progress could be achieved, reserving higher education courses for elite offspring.

Finally, it is relevant to state that this work does not aim to conclusively "end" discussions on the creation of state institutions linked to professional education within the analyzed context. On the contrary, the future offers a rich potential for similar issues, considering the questions raised here. Education is a timeless subject and, considering the current Brazilian situation, it deserves continued exploration, especially to outline the causal links between past successes and failures.

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