



Work and pedagogy

Wojciech Andrzej Kulesza
Universidade Federal da Paraíba (Brasil)

Abstract

In this article we search to analyze the historical unfolding of the so-called "school of work" from its pioneer establishment in revolutionary Russia, identifying its relations with Western pedagogy and its appropriation by Brazilian education. Relating the general conception that work should be contemplated by the school with European industrial development, one can clearly see the connection of this idea with the emergence of the renewal movement in education from the second half of the nineteenth century. The pedagogical consequences derived from the inclusion of work as an educational principle, synthesized by the "learning by doing" formula, are present in the main contemporary pedagogical trends, influencing decisively the formulation of the school curriculum. Focusing specifically on basic education (elementary and high school), we identify several teaching methodologies inspired by this orientation that appears in school practice. Finally, the theoretical rationalizations developed are applied to analyze the current situation of the relationship between work and education in the Brazilian high school.

Keywords: Professional education. Technical education. High school. Educational policy.

1

Trabalho e pedagogia

Resumo

Neste artigo, procura-se analisar o desdobramento histórico da chamada "escola do trabalho" a partir de sua implantação pioneira na Rússia revolucionária, identificando suas relações com a pedagogia ocidental e suas apropriações pela educação brasileira. Relacionando a concepção geral de que o trabalho deve ser contemplado pela escola com o desenvolvimento industrial europeu, percebe-se claramente a vinculação dessa ideia com o aparecimento do movimento renovador na educação a partir da segunda metade do século XIX. As consequências pedagógicas derivadas da inclusão do trabalho como princípio educativo, sintetizado pela fórmula do "aprender fazendo", estão presentes nas principais tendências pedagógicas contemporâneas, influenciando decisivamente na formulação do currículo escolar. Focalizando especificamente a educação básica, identificam-se diversas metodologias do ensino inspiradas por essa orientação que figuram na prática escolar. Por fim, as racionalizações teóricas desenvolvidas são aplicadas para analisar a situação atual da relação entre trabalho e educação na escola secundária brasileira.

Palavras-chave: Educação profissional. Ensino técnico. Ensino médio. Política educacional.



Trabajo y pedagogía

Resumen

En este artículo se busca analizar el desdoblamiento histórico de la llamada "escuela del trabajo" a partir de su implantación pionera en la Rusia revolucionaria, identificando sus relaciones con la pedagogía occidental y sus reflejos en la educación brasileña. Al relacionar la concepción general de que el trabajo debe ser contemplado por la escuela con el desarrollo industrial europeo, se percibe claramente la vinculación de esa idea con la aparición del movimiento renovador en la educación a partir de la segunda mitad del siglo XIX. Las consecuencias pedagógicas derivadas de la inclusión del trabajo como principio educativo, sintetizado por la fórmula del "aprender haciendo", están presentes en las principales tendencias pedagógicas contemporáneas, influyendo decisivamente en la formulación del currículo escolar. Enfocando específicamente la educación básica, se identifican diversas metodologías de la enseñanza inspiradas por esa orientación que figuran en la práctica escolar. Por último, las racionalizaciones teóricas desarrolladas se aplican para analizar la situación actual de la relación entre trabajo y educación en la escuela secundaria brasileña.

Palabras clave: Educación profesional. Enseñanza Técnica. Enseñanza media. Política educativa.

Introduction

Studies on the relationship between work and education in Brazil have given particular emphasis to their social and economic aspects, notably due to the centrality of this relationship to the equation of the issue of youth professional education, a burning issue for the formulation of a consistent proposal for our high school. Commonly, we take the industrial conception, mechanical, and education as a mechanism whether it for social reproduction or for social transformation, using formulations, theoretical and practical, elaborated in several historical contexts in the first decades of the last century, with deep roots in both positivism and Marxism. These analyzes usually depart from an educator-student relationship with a strong Enlightenment appeal, not to say authoritarian, thus crystallizing educational practices that have been criticized by modern pedagogy as a consequence, indeed, of the very development of the educational sciences. Paradoxically, the treatment of the work-education relationship is updated to take account of contemporary Brazilian society, while maintaining the old traditional pedagogy precisely against the educators who proposed to register work as an educational activity in the mid nineteenth century.



In order to characterize the relation between education and society in modernity, Mario Manacorda distinguishes two aspects that he considers fundamental. Firstly, "[...] the presence of work in the process of technical-professional instruction, which now tends for all to take place in the separate place 'school', instead of learning at work, carried out close to adults" (MANACORDA, 1989, p. 304). The division of work, essential for the constitution of the great industry, by requiring the worker only certain specific operations, made impossible the long and careful artisanal training provided by the craft corporations. Even if the professional's initial training is concretized only after being incorporated into the work process, he should be prepared beforehand, as is shown by the extent and diversity of in-service training offered to the scholar. In putting quotation marks on the word school, Manacorda was certainly taking into account the various technical and professional education initiatives and not the general, elementary or high schools of education, responsible in Europe for the formation of the young person, inculcating in them behaviors and appropriate habits for their coexistence in society.

3

Secondly, the Marxist thinker lists "[...] the discovery of child psychology with its 'active' demands [...]" (MANACORDA, 1989, p. 305), which made children's play become elements characteristic of new schools. The term "active", as these schools are often called, besides emphasizing the fundamental role of the learner in the learning process, value their doing, referring directly to the category of work as a social relation: in the game is the embryo of future sociability of child. The tension between these two ways of working in modern education is clearly pointed out by the Italian educator: "[...] they sometimes ignore each other, sometimes, interlace, and sometimes, collide" (MANACORDA, 1989, p. 305).

It should be noted that Manacorda's classification of the modes of inclusion of work in modern school encompasses all the temporal constitution of the social being, the psychological aspect affecting mainly children and the productive aspect including mainly on adults. In every moment of life, education has to account for the relationship between the old and the new, between the grown man and the newborn, between tradition and innovation. In this broad sense, dichotomies of libertarian education versus conformist education, conservative education versus revolutionary education are depleted of meaning, since these dualities are intrinsic, constituents of education. In the liberal tradition, which considers society as the additive set of individuals, these oppositions



are antinomies permeated by the contradiction between human creation and its social realization, between being and existing in a given space-time. In the Marxist tradition (non-positivist, for which the individual must necessarily bow to the dictates of his ancestors), we sought to overcome this question dialectically in educational practice.

The advance of the great industry engendered by the accumulation of capital aggravated the divergence between a highly directive formation for the person performance in a process already underway in the society and its autonomous development. Due to the globalization of this process, this debate has become international and the proposals have multiplied: from the Danish Mikkelsen's methodology of the *slojd*, through the *arbeitsschule* of Kerschensteiner and the partialization of the manual work of the Russian Della Vos to the polytechnical school of the Soviet Pistrak. Among us, one can recognize clear reflections of this debate in the trajectory of the School of Arts and Crafts of São Paulo, from its creation in the last quarter of the nineteenth century, exactly where the industrialization vector in Brazil was moving more vigorously (MORAES, 2003).

This article examines the historical unfolding of the so-called "school of work" from its pioneer deployment in revolutionary Russia, identifying its relations with Western pedagogy and its appropriation by Brazilian education. We sought to circumscribe the idea of a school of work to the development of production through the manufacturing industry and its application to the pedagogical problems raised by the establishment of a mass education in the European national states since the nineteenth century. The pedagogical consequences derived from the inclusion of work as a fundamental pedagogical principle in the formulation of the school curriculum are identified by characterizing the different teaching methodologies inspired by this orientation. Finally, the rationalizations developed are used to analyze the current situation of the relationship between work and education in the Brazilian high school.

4

For a school of work

We shall begin our discussion of the dialectic between the autonomy of the person and the demands of society, taking as a conspicuous example the Russian experience, trying to describe the way in which the Bolsheviks sought



to equate the relation between work and education in the early days of the Soviet regime establishment. In the "Declaration on the fundamental principles of the single school of labor", which was issued by the Central Committee, in October 1918, that is, at the beginning of the first school year after the Russian revolution, one can glimpse the solution advocated by militant educators. In this document, a genuine National Education Plan endorsed by the People's Commissar for Education, Anatoly Lunacharsky, in proposing that the Soviet school be a school of work, we present justifications similar to those used by Manacorda, including the fact that it is a requirement of modernity in general, as can be seen in the following passage:

The new school must be the work one. For the school of the Soviet State, which is in the process of transforming the capitalist regime into the socialist, that is, of course, even more obligatory than for the school of the advanced capitalist countries, *even though it may also be perceived such necessity there, and in some level achieved* (LANACHARSKY, 2017, p. 288-289, emphasis added).

5

Next, the document presents "[...] two completely different reasons [...]" requiring teaching to be grounded in work. In the first place, psychology "[...] teaches us that only something actively assimilated is truly assimilated [...]", since it is undoubtedly possible that the child "[...] assimilates knowledge extremely easily when they are given to them in the form of games or active and cheerful work". In this way, "[...] the principle of work leads to a creative, lively and active knowledge of the world [...]" and, although it had been applied initially in kindergarten, "[...] we must demand the systematic development of teaching by this same principle also for the later levels of the school" (LUNACHARSKY, 2017, p. 289).

As it could not be otherwise, the second reason why work should support educational planning lies in appeals from the productive system:

Another source of tendency for *the modern and advanced school of work* is the student's immediate desire to familiarize himself with what he needs most in life, with what in current times plays a dominant role in it, with work in agriculture and business in all its different forms (LACHACHSKY, 2017, p. 289, emphasis added).



The document then seeks to detail the development of the proposal for the various levels of education by outlining a spiral curriculum that encompasses content characterized as an "encyclopedia of culture", a subject "[...]" whose methodology must be introduced in pedagogic institutes "[...]" and that "[...]" transformed into a course of sociology based on the evolution of work and the economic forms created by it "[...]", would have the purpose of "[...]" constituting the content of the encyclopedia of work "[...]" in high schools (LUNACHARSKY, 2017, p. 293). As a prescriptive statement to achieve an ideal condition for the whole educational system of the country, the document is notable for the number of questions it addresses, many of which would be taken up later both there and elsewhere, mainly by acknowledging the limits of the proposal and by do not bypass the challenges of their deployment. Thus, for example, although advocating a specialized technical education, "[...]" strongly protests against any specific narrowing of the circle of work education at the most elementary levels "[...]" (LUNACHARSKY, 2017, p. 289), since "[...]" the objective of the school of work is in no way the training for this or that craft "[...]" (LUNACHARSKY, 2017, p. 290), properly equating the false dichotomy school-workshop versus factory-school.

Referring to Marx's celebrated words about the transformation of the child work curse in factories into a pleasant source of knowledge, the proposal aimed to "[...]" take the student to factories and plants, to railways, salt flats, to any place where, in the local conditions, he finds access "[...]", clearly pointing out that "[...]" it will lead [the student] not only on excursions, not to see, but to work "(LUNACHARSKY, 2017, p. 294). Emphasizing that the work activity of the student must necessarily be accompanied by the teacher, the document declares that it is unacceptable that "[...]" it takes forms that are harmful to health "[...]" and that, in order not to lose its pedagogical character, it should be "[...]" made with intent, all time, for the expansion of both physical habits and knowledge" (LUNACHARSKY, 2017, p. 294).

Without neglecting both physical and artistic education, the declaration looks to the experiences of capitalist countries to support their arguments, as when challenging those who consider that the time spent on work would be detrimental to student achievement, since "[...]" by the testimony of American educationalist, time is saved" (LUNACHARSKY, p. 291). Again, reference to the experiences of the capitalist countries is worthy of note, although "[...]" the objectives of the school in bourgeois circles are repugnant "[...]" some of the



methods which follow some of the best bourgeois educationalist deserves attention" (LUNACHARSKY, 2017, p. 301).

For what we are interested in here, the path that leads to the overcoming of the antinomy between student autonomy and the social determinations imposed by its surroundings is clearly expressed in the statement. It begins by stating that "the renewed school principle is the complete most possible individualization of teaching", immediately removing any resemblance to individualism by stating that:

By individualization must be understood the analysis, on the side of the teacher, of the inclinations and specificity of the character of each student and the most possible complete adaptation to their specific needs in what the school gives him and what it asks of him (LUNACHARSKY, 2017, p. 297).

7 This differentiation is important because "[...] school individualism develops the desire to put itself always in the foreground and to use other people for that purpose [...], while socialist education, [...] uniting the desire for the construction of the psychic collectives with the precise individualization, leads the personality to take pride in the development of all the abilities to serve the collective" (LUNACHARSKY, 2017, p. 298). Thus, the student autonomy of action combines harmoniously with the collective lawsuits, leading to the construction of a solidarity sociability without underestimate the flowering of the personality, "the greatest preciousness of socialist culture", which must develop freely:

We have no reason to limit it, to deceive it, and to mold it into obligatory forms: the solidity of socialist society consists not in the monotony of barracks, in artificial dressage, neither in aesthetic and religious deception, but in the real solidarity of interests (LUNACHARSKY, 2017, p. 300).

Taking back the criticism of modern pedagogy to an education that privileges intellectual formation, "[...] forgetting the formation of the character and development of the will [...]" (LUNACHARSKY, 2017, p. 299), the document considers that only the school of work will be able to meet these objectives satisfactorily. Moving away from the fragmentation represented by the famous positivist formula of intellectual education, moral and physical, the statement get much closer to the unilateral formation of the Marxist tradition and to the integral



education of libertarian pedagogy. In contrast to the individualistic preoccupation with the future career of the student, characteristic of the modern bourgeois school, they proclaim themselves "[...] the ideals of developing the principles of solidarity and sociability in the younger generations" (LUNACHARSKY, 2017, p. 300).

Understandably, the statement points to the future the full realization of the educational proposal:

The educational school should seek to eliminate from the child's spirit, as much as possible, those traits of selfishness that have been inherited by the person of the past and, preparing him for the future, to seek from school benches, to forge strong collectives and to develop in the highest degree the capacity for collective living and for solidarity (LUNACHARSKY, 2017, p. 297).

Accompanying the tendency of the time to assign to education the solution to the serious social problems placed by World War I, the proposal considers the school as a small social cell to be nourished by the best human virtues so that its participants, through this exercise of democracy and fraternity, take these values to regenerate society as a whole. Using the right of self-organization, "[...] children should participate in the whole school life [...] and through the exercise of mutual, continuous and active help [...] to prepare for become a citizen" (LUNACHARSKY, 2017, p. 303). Somewhat like the Dewey school conception as a miniature society, the Russian Socialists credited to the educational action of their militants the success of their societal ideals. Therefore, in the application of the "[...] principle of profound unity with maximum diversity [...] in school, as opposed to the individualized method [...] the most beautiful task is the creation of the school collective, soldier with solid and cheerful camaraderie" (LUNACHARSKY, 2017, p. 301). And, it could not be otherwise, since the proposition is directed at the whole of humanity, the realization of the school of work breaks with the geographical limits of socialist Russia: "[...] we, in the school itself, introduced that great collectivizing force, which welds and forges the unity of the modern proletariat" (LUNACHARSKY, 2017, p. 302).



Methodological consequences

For the socialist educator Moisey Pistrak, the work is not simply the inclusion of a content or an extra method in school, but the only effective way of approaching the "present reality", i. e., "[...] whatever, in the social life of our time, is destined to live and to develop, everything that is grouped around the victorious social revolution and that serves the organization of the new life" (PISTRAK, 2000, p. 32). Rejecting those who postulate a continuity relationship between Western reforming pedagogy, no matter how advanced it may be, and the Soviet school of work, he considers that the main purpose of education in Russia at that time, in addition to the construction of the socialist State, "[...] is the formation of a man who considers himself a member of the international collective constituted by the working class in struggle against the agonizing regime [...]" in order to abolish once and for all social classes (PISTRAK, 2000, p. 31). This educator, at the forefront of the implementation of the new educational policy, writing a few years after the 1918 Declaration, radicalizes his prescriptions, designing the school as a fundamental ideological weapon for exporting the revolution to the rest of the world.

9

This extraordinary historical document, forged in the heat of the revolutionary movement, well illustrates the magnitude with which education is considered as a lever of progress and social advancement in modernity. Overcoming the Age of Enlightenment of the nineteenth century, it is not enough, for the educators of the twentieth century, the masses clarification through the reflection of "philosophers". They now want the students' enthusiasm to participate actively in this awareness as well, since, after all, they are all together on the road towards building a new society.

And the slogan – a magic word according to the Bolshevik declaration – to inform its educational proposals is work that, in spite of the semantic diversity attributed to it, always meant transformation, hence its close connection with the desired social changes. The circulation of this ideology affects the entire Western world, as can be seen from the approach given to this question by a Portuguese anarchist at the Lisbon Workshop School in 1925:

The school of work is an indispensable element of social progress. Why? Because it combines the manual and intellectual works, in such a way that they lead to the disappearance, in the minds of the individuals that left these schools, from the still existing antagonism



between the two kinds of work (EMÍLIO COSTA apud BARREIRA, 2011, p. 281).

This progressive conception is also firmly established among us, in close connection with the reformist aspirations of education, as illustrated by the monograph with which Paschoal Lemme competed and was approved in a contest held in 1938 for the position of education technician of the Ministry of Education:

The profound maladjustments, which reached all social classes after the war, produced a generalized movement toward school, to education. From all sides, education and school are called for the remedies for the disastrous effects of this painful event, which for many ended a time definitely. Throughout the world, to attend to this distressing call, the cycle of major school reforms is open (LEMME, 2004, p. 51).

Lemme, from the beginning of his career in 1923 (when he was appointed substitute teacher at the Professional School of Visconde do Rio de Janeiro, in the Federal District), because he was involved in teaching manual work in the school curriculum, he would absorb much of this debate about school of work throughout his career. Notable example is his description of the educational project of the Democratic People's Republic of Albania, in the midst of socialism building in 1960, made at the request of the Brazil-Albania Cultural Exchange Association in 1960. The text begins by explaining that his intention in focusing on this small country, "[...] the smallest and least known of the socialist camp [...]" is to seek [...] to give Brazilians an impression of what has been the effort and achievements of the brave Albanian people in the development of teaching, education and culture of their country" (LEMME, 2004, p. 124). Ready to retire, Lemme might want to demonstrate that the proposals were viable, since he considered his presentation of the Albanian experience "is a stimulus and an example for us, engaged in the same arduous task for the economic and cultural development of our people" (LEMME, 2004, p. 124).

More than 40 years later, one can clearly see the repercussion of the Bolshevik declaration on the organization of the Albanian educational system, as reported by Lemme:



The fundamental principle of organization is the organic link between teaching and education with productive work. The new school should prepare students to take part in productive work from a certain age and provide them with the general training necessary to continue their higher studies. On the basis of this principle, the proportion of general education, polytechnic education and professional education should be fixed in a fair manner, combining teaching and work with rest and normal physical development of children and young people. Thus, the link between education and life, with production and practice of building the new social system, must determine the content, organization and methods of teaching (LEMME, 2004, p. 128).

11 In addition to illustrate exemplarily the intimate relationship between education and society, the Russian revolutionary libel of 1918 helps us understand the challenges historically posed to the methods of pedagogy throughout the Western world, as well as its theoretical dependence on the educational objectives pursued by a given educational policy. In the case of the Soviet school of work, is remarkable the attempts to replace teaching by subject by teaching by "complex", understood as a result of the integration of contents around three main axes, nature, work and society (where work plays a role center), adapted to each age group and place of the school.

The pedagogue Nadezh of Krupskaya, Lenin's wife, when she was the head of the scientific-pedagogical body responsible for subsidizing the implementation of the socialist proposal, was one of the main educators to develop this methodology in the Soviet school (KRUPSKAYA, 2017). As she argued even before the revolution of 1917, the idea of the socialist proposal is to transform the school, considered as a "school of teaching", in which it deals with knowledge by knowledge, a disinterested knowledge of reality and student, in a "school of work", attentive to everything that happens in society (KRUPSKAYA, 2017).

In the Western world, the "project method" of the American Kilpatrick and the "centers of interest" of the Belgian Decroly were similar proposals that arose at the same time as the socialist proposal was being generated. The dialogue of Russian educators with the West, at least in the early 1920s, was intense, as can be seen from the internationalism found in the bibliography of the seminal methodological letter on teaching by complexes elaborated by the scientific-pedagogical section of the State Scientific Council of USSR in 1924. In



addition to Russian translations of works by Dewey and Ferrière there is also the Russian version of the work of the Portuguese pedagogue Faria de Vasconcelos published in 1915, *Une école nouvelle in Belgique* (KRUPSKAYA, 2017).

Facing essentially methodological difficulties in delivering individualized instruction within the rigidities of bachelor teaching in supposedly homogeneous classes, these approaches eventually questioned the curriculum's own present contents, thus approaching the socialist proposal. Contemporarily, the proposals for interdisciplinarity and transversal themes are based on methodological principles similar to the "complex method", since all of them aim to overcome the limitations of traditional teaching by disciplines. One can get an idea of the difficulties of implementing curricular proposals based on these principles by the concrete experience of the Vocational Basic Schools of São Paulo in the 1960s (CHIOZZINI, 2014).

The appropriation of the school of work by Brazilian education

In provoking pedagogy, these methodological challenges forced educators to rethink their practices in trying to conform to theoretical dictates with the educational reality in which they acted. We can identify vestiges of the "school of work" in the educational propositions and experiences of many countries, especially with regard to the so-called technical or professional education. In Brazil, it is important to point out the pioneering proposal of Rui Barbosa, who frequented the great international exhibitions held during the second half of the nineteenth century, encouraging the teaching of drawing in school, with a view to its application in industry. In opposition to the liberal arts, preferentially linked to intellectual activities, Rui Barbosa preached the development of the mechanical arts, involving manual work, instrumented in modernity by industrial design, in full abolitionist vogue (BARBOSA, 1882). Associated with intuitive teaching through the lessons of things, this plan of action would make the drawing, especially the study of forms, traditionally incorporated into the teaching of geometry, migrate to the discipline of manual work, hitherto reduced to activities related to domestic economy.

It is thus seen how the demands of an active school eventually introduced into education, not the industrial work of modernity, but rather forms of craftsmanship. From the social point of view, this retrogression was fulfilled in



the creation by federal decree, in 1909, schools of apprenticeship intended for the "disadvantaged of fortune", "[...] imbued with the old prejudice that gave to the learning of crafts secular features that destined it to the poor and the humble ones [...]" (FONSECA, 2010, p. 91), in an attempt to further prevail the overcome slave-like relations of work. It was necessary a long and painful process, led by both entrepreneurs, engineers and technicians to transform them into industrial schools after the revolution of 1930.

Converted later into technical high schools and technological training centers, these professional schools are the origin of the current Federal Institutes of Technology Education (IFETs, in Portuguese abbreviation). It is interesting to note that in the celebrations of the centenary of apprenticeship schools in 2009, the IFETs institutionalized in the previous year by the federal government, were induced to assume this heredity, forming a genealogy that maintains constant the social relations that determined its creation. The mere possibility of such identification among such disparate institutions is an unmistakable demonstration of the permanence in Brazilian society of conceptions about the relationship between work and education born in the early days of industrialization in Brazil, notably the character of social assistance attributed to professional education institutions (KULESZA, 2014).

But the introduction of forms of artisanal work was not limited to apprenticeship schools, extending to all elementary schooling by the inclusion of various forms of "manual work" in general training schools. Proof of this is that the first teacher-training institution to teach the occupations in apprentices' schools, to replace the master craftsmen initially requisitioned for this function, the Wenceslau Braz High School of Arts and Crafts created in the Federal District in 1917, in addition to the "[...] instruction and preparation of teachers, masters and counter masters" for professional schools, also had the purpose of training "[...] manual work teachers for elementary schools" (CARDOSO, 2013, p. 56).

As the feminization of school of teaching had practically extended to most elementary schools at the time, this school, originally intended for the training of teaching staff for male apprenticeship schools, eventually became a predominantly female school, including the creation of feminine sections in apprenticeship schools, following the worldwide movement of women's professionalization generated after the end of the World War I. On the other hand, the elementary schools' teachers formed by this school would propagate the



principle of "learning by doing" during the New School reforms of Carneiro Leão and Fernando de Azevedo in the 1920s, in Rio de Janeiro.

The engineer and professor of the Polytechnic School, Carlos Barbosa de Oliveira, cousin of Rui Barbosa and one of the founders of the Brazilian Association of Education, imbued with the conceptions of modern pedagogy, tried to apply them in Wenceslau Braz High School of Arts and Crafts, from 1924 to 1931. Conscious of the generalized prejudice in relation to manual work, Barbosa de Oliveira, who characterized the school he was directing as a "school of work", considered that one of its purposes was precisely to contribute to eliminate this prejudice. Thus, in his 1926 report to his superiors in the Ministry of Agriculture, Industry and Commerce he firmly proclaims: "[...] it is important to educate public opinion in Brazil in favor of the manual professions, by increasing the exercise of these professions at the level of intellectuals" (OLIVEIRA apud CARDOSO, 2013, p. 61).

Influenced by the liberal ideology, the engineer, even if he don't want to, by saying that it is necessary to level the two professions' standards upwards shows the same prejudice that he wants to combat, because, in order to have equity, it is necessary to do an identification between the work of the manual professions and the work of the intellectual professions. It can be compared to what Gramsci wrote in prison in 1932:

[...] it is necessary to convince many people that study is also a very tiring job, with their specific training not only intellectual but also muscular nervous: it is a process of adaptation, it is a habit acquired with effort, monotony and also suffering (GRAMSCI apud NOSELLA, 1992, p. 120).

These divergences are becoming more pronounced as machines and equipment tend to replace man's physical labor. The physical action initiated by the push of a machine's button, for example, is devalued against the result provoked, equivalent to the same work done manually during a whole day. The intellectual work of deciding when to press a button on a mechanism outweighs any physical effort required to perform a given job. Contrary to the valorization of manual work proposed by Barbosa de Oliveira, it is the intellectual work that is increasingly valued, simply because it is more productive for capital. However, the division of work, characteristic of production in capitalist society,



radically separates the decision to push the button of the effective realization of this act, increasingly reserving these actions to distinct classes of society.

Transformations in the world of work had repercussions on the educational systems that, basically, organized themselves to offer a popular education for the masses, associated with a superior formation for the elites. The growing importance of the field of production, developed under the eyes and hands of the workers, imposed a distinction between a scientific and a merely technical formation, precisely to prevent control of production from falling into the hands of subordinates. Since then, the capitalist school has abandoned the Age of Enlightenment project to provide an integral, humanistic and scientific formation, to turn increasingly to a formation connected directly with the demands of the market.

This process, in spite of the differentiation of the schools of one or another, aimed to update the mechanism of social reproduction carried out by education in society, minimizing the potential of social mobility opened by schooling, maintaining, and even expanding, social inequalities. As a result, primary the young people, who are struggling to reverse this situation in order to gain their majority in the world of work, have compromised themselves. For this reason, the main stage of this struggle is the high school, proper to this age of life. As depositaries of the future projects of society, the propositions and actions of young people find shelter in progressive sectors of society, advancing the discussion about the ways of how the integration of high school with the world of work should be conducted.

The current problematic of the relationship between education and work in Brazil

As we turn our attention to our high school education, we see that it has been entangled, since the end of the last century, in the dilemma between general education, the traditional preparatory high school education to higher education, or professional training, structured according to the job market. In this situation, professional training has been considered decontextualized from the reality of the student and superficial in approach to content and deficiencies, to a lesser or greater degree, shared with general education and resulting from the same needs, from financing to teacher training policies, going through the



precarious conditions of teaching work. The brief attempt to suppress this distinction by means of Law No. 5692 of August 11, 1971, which made compulsory professionalization in high school education and which even indicated an "initiation to work" in elementary education, served only to distinguish even more the two modes of formation.

In order to deepen this situation, the permanence of a professional education parallel to public education, also financed by the State, but directed by the entrepreneurs, is a clear evidence of the distortions in the equation of the relation between work and education by the Brazilian society. This collateral formation, initially materialized in the last years of the Vargas dictatorship through the National Service of Industrial Learning (SENAI, in Portuguese abbreviation), was later extended to other sectors of the economy, constituting today the so-called "System S" (abbreviation of "Service"). The current program of SENAI, "Legal Apprentice", a brand that the Roberto Marinho Foundation insistently advertises on television networks, besides offering a legal outlet to circumvent the restriction of child labor from the age of 14, shows well the neglect of entrepreneurship with the general training of the worker, since, only an indefinite schooling in elementary or high school education is required to enter the program, without foreseeing, much less stimulating, its continuity.

A recent work analyzing the public policies regarding the education and work of young people successively applied in Brazil shows that they have always maintained the dominant characteristic of "assisting" the young workers, underestimating their formation, both general and professional (VELOSO, 2015). This is because the professional education in Brazilian high school has been directed mainly to the young people coming from the low-income families, as if education were conjugated only with salaried work and not with the work in general. This school differentiation walks at the same pace with the social inequality, as we can distinguish different curricula in our schools according to the socioeconomic origin of the students.

The perversity of this curricular differentiation is to favor the higher education of the better-off socioeconomic portion of the population, reserving the precarious professional training for the less fortunate. The recent high school reform sanctioned by the federal government through Federal Law No. 13.415, of February 16, 2017, exacerbated this distinction by proposing an exclusively professional training path after a very precarious common base in relation to science. By defining possible training paths based on skills and competences,



and not on the knowledge offered by the various scientific subjects, the curricular dichotomy was simply eliminated, determining one type of training for some and the other for the majority, as soon as students entered high school teaching.

This indecent way of contemplating an "education for all" presupposes a curricular flexibilization that allows to attend students of the most diverse social strata enrolled in the great variety of our schools, public and private, satisfying the most disparate interests. Without any exaggeration, we can say that this reform instituted the flexible high school: it works for any student, from any school, serving any purpose. The modifications in the High School Curriculum Guidelines required by the reform, including the authorization for distance education, approved by the National Education Council and endorsed by the Ministry of Education on November 20, 2018, reaffirmed this orientation with greater emphasis.

However, in order for the reform of high school education to actually enter into force in 2019, it will be necessary to approve the National Curricular Common Base for High School, which has been finding strong resistance from the community of educators, which fears that the draft prepared by the government could be imposed by force. The evident doctrinal alignment of the current reform with neoliberalism in the service of the interests of international financial capital shows once again how the fundamental issues under discussion in society directly affect education, making pedagogy in a democratic society a political space for discussion and referral of the projects of society in dispute.

We hope that our reflections can contribute affirmatively to the struggle so that the school can better fulfill its formative role, adequately equating the relation between work and pedagogy. As Cesar Callegari (2018) wrote, reflecting, a century later, on the Russian revolutionary declaration of 1918, we want education that can contribute fully to "developing values such as freedom, solidarity, respect for diversity, collaborative work, appreciation for democracy, justice and peace".

Referências

BARBOSA, Rui. **O desenho e a arte industrial**. Rio de Janeiro: s/e, 1882.

BARREIRA, Luiz Carlos. Educação libertária: a experiência da Escola Oficina nº 1 de Lisboa (1908/1909/1918). In: CARVALHO, Marta Maria Chagas de; PINTASSILGO, Joaquim



(Org.). **Modelos culturais, saberes pedagógicos, instituições educacionais**. São Paulo: EDUSP, 2011.

BRASIL. **Lei nº 5692, de 11 de agosto de 1971**. Fixa Diretrizes e Bases para o ensino de 1º e 2º graus e dá outras providências. Disponível em: <<http://www2.camara.leg.br/legin/fed/lei/1970-1979/lei-5692-11-agosto-1971-357752-publicacaooriginal-1-pl.html>> Acesso em: 5 nov. 2018.

BRASIL. **Lei nº 13.415, de 16 de fevereiro de 2017**. Altera as Leis nº 9.394, de 20 de dezembro de 1996, que estabelece as diretrizes e bases da educação nacional, e nº 11.494, de 20 de junho 2007, que regulamenta o Fundo de Manutenção e Desenvolvimento da Educação Básica e de Valorização dos Profissionais da Educação, a Consolidação das Leis do Trabalho - CLT, aprovada pelo Decreto-Lei nº 5.452, de 1º de maio de 1943, e o Decreto-Lei nº 236, de 28 de fevereiro de 1967; revoga a Lei nº 11.161, de 5 de agosto de 2005; e institui a Política de Fomento à Implementação de Escolas de Ensino Médio em Tempo Integral. Disponível em: <http://www.planalto.gov.br/ccivil_03/_Ato2015-2018/2017/Lei/L13415.htm> Acesso em: 5 nov. 2018.

CALLEGARI, César. **Carta aos conselheiros do Conselho Nacional de Educação**. 2018. Disponível em: <<http://www.epsjv.fiocruz.br/carta-aos-conselheiros-do-conselho-nacional-de-educacao-cesar-callegari-renuncia-a-presidencia-da>> Acesso em: 5 nov. 2018.

CARDOSO, Tereza Fachada Levy. Uma Escola Normal, uma “Escola de Trabalho”. **Revista Contemporânea de Educação**, Rio de Janeiro, v. 8, n. 15, p. 56-70, 2013.

CHIOZZINI, Daniel Ferraz. As mudanças curriculares dos ginásios vocacionais de São Paulo: da “integração social” ao “engajamento pela transformação”. **Revista Brasileira de História da Educação**, Rio de Janeiro, v. 14, n. 3, p. 25-53, 2014.

FONSECA, Celso Suckow da. História do ensino industrial no Brasil. In: CIAVATTA, Maria; SILVEIRA, Zuleide Simas da (Org.). **Celso Suckow da Fonseca**. Recife: Editora Massangana, 2010 (Coleção Grandes Educadores do Ministério da Educação).

LUNACHARSKY, Anatoly Vasilyevich. Declaração sobre os princípios fundamentais da escola única do trabalho. In: KRUPSKAYA, Nadezhda Konstantinovna. **A construção da pedagogia socialista**. Tradução Natalya Pavlova e Luiz Carlos de Freitas. São Paulo: Expressão Popular, 2017.

KRUPSKAYA, Nadezhda Konstantinovna. **A construção da pedagogia socialista**. Tradução Natalya Pavlova e Luiz Carlos de Freitas. São Paulo: Expressão Popular, 2017.



KULESZA, Wojciech Andrzej. Cem anos da ideia de Escola Técnica no Brasil. **Temas em Educação**, João Pessoa, v. 20/21, n. 1/2, p. 165-176, 2014.

LEMME, Paschoal. **Memórias de um educador**. Brasília: Inep, 2004. (v. 5).

MANACORDA, Mario Alighiero. **História da Educação**: da Antiguidade a nossos dias. Tradução Gaetano LoMonaco. São Paulo: Cortez/Autores Associados, 1989.

MORAES, Carmen Sylvia Vidigal. **A socialização da força de trabalho**: instrução popular e qualificação profissional no Estado de São Paulo (1873-1934). Bragança Paulista: EDUSF, 2003.

NOSELLA, Paolo. **A escola de Gramsci**. Porto Alegre: Artmed, 1992.

PISTRAK, Moisey Mikhaylovich. **Fundamentos da escola do trabalho**. Tradução Luiz Carlos de Freitas. São Paulo: Expressão Popular, 2000.

_____. **Ensaio sobre a escola politécnica**. Tradução Alexey Lazarev e Luiz Carlos de Freitas. São Paulo: Expressão Popular, 2015.

VELOSO, José Rodrigo Paprotzki. **Aprendizagem**: metamorfose de uma política pública de educação e trabalho dirigida à juventude brasileira. 2015. Dissertação (Mestrado em Ciências) – Programa de Gestão de Políticas Públicas, Escola de Arte, Ciências e Humanidades, Universidade de São Paulo, São Paulo, 2015.

Prof. Dr. Wojciech Andrzej Kulesza
Universidade Federal da Paraíba (Brasil)

Centro de Educação

Grupo de Pesquisa Ciência, Educação e Sociedade

Pesquisador do Centro de Pesquisa em História da Educação (GEPHE/UFMG)

E-mail: kulesza@gmail.com

Recebido 25 nov. 2018

Aceito 4 dez. 2018