

Teaching in Higher Education and the New Relations between Education and Market

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ABSTRACT – Teaching in Higher Education and the New Relations between Education and Market. Teaching in higher education has been impacted by the changes promoted by the New Public Management and Industry 4.0, which demands private sector practices to maximize the efficiency of public management. This article is based on a qualitative and exploratory analysis. It examines the convergences between traditional curriculum theories and the New Public Management, and the repercussions for teaching. The research carried out in undergraduate courses, seeks to understand the phenomenon and its contradictions. The results show the influence of these changes on the regulation of institutional objectives, guiding universities actions towards the institutional reputation linked to the education-market relationship.

Keywords: Higher Education. Job Market. Curricular Theories. New Public Management. Teaching Work.

RESUMO – A Docência no Ensino Superior e as Novas Relações entre Educação e Mercado. A docência no ensino superior tem sido impactada pelas mudanças promovidas pela Nova Gestão Pública e pela Indústria 4.0, que impulsionam práticas do setor privado para maximizar a eficiência da gestão pública. Este artigo, baseado em uma análise qualitativa e exploratória, examina as convergências entre teorias tradicionais de currículo e a Nova Gestão Pública, discutindo as repercussões dessas mudanças para a docência. A pesquisa, realizada em cursos de graduação, busca compreender o fenômeno e suas contradições. Os resultados mostram a influência dessas modificações na regulação dos objetivos institucionais, demandando das universidades ações orientadas à reputação institucional vinculada à relação educação-mercado.

Palavras-chave: Educação Superior. Mercado de Trabalho. Teorias Curriculares. Nova Gestão Pública. Trabalho docente.

Introduction

Human integration into social relations of production has always had a preparatory process. Frequently, institutions other than production itself have been responsible for this process. However, the industrialization, starting from the late nineteenth century and driven by the Second Industrial Revolution, generated demands that found in schools the central mechanism for adapting the population to industrial relations and needs (Enguita, 1989).

Schools began to contribute to the formation and understanding of the inherent social relations of work. From mass schooling emerged curriculum studies as a specialized professional field, such as the Traditional Curriculum Theories (TCT) of Bobbitt (2004), in the early twentieth century (Silva, 2005). These theories advocated that schools should be efficient in developing useful competencies for the labor market. Hence the education-market relationship. Others deepened educational efficientism. Curricular rationality (Tyler, 1979) and instructional teaching (Bloom; Krathwohl; Masia, 1973) centralized curriculum and teaching work in the educational process.

In the twenty-first century, TCT are not explicitly studied. However, globalization, neoliberalism, and Industry 4.0 (Schwab, 2016; Santos; Alberto; Lima, 2018), by proposing new labor relations, complexify human formation. Given the competitiveness of this industry, the market resumes the efficientist assumption of holding education responsible for the complete education of workers.

The premise is that TCT converge with New Public Management (NPM) regarding the education-market relationship, which imposes private sector practices to quantitatively maximize the efficiency of public management, including public education, its universities, and professionals. Considering this relationship, this article aims to analyze the repercussions for teaching in higher education based on changes promoted by Industry 4.0 and NPM. This is an exploratory and qualitative research (Minayo, 2003), developed in undergraduate programs, which combines instruments that allow reaching the totality of the studied phenomenon and its contradictions.

The research fields were the four largest federal universities in the state of Rio Grande do Sul: the Federal University of Rio Grande do Sul (UFRGS), the Federal University of Santa Maria (UFSM), the Federal University of Pelotas (UFPEL), and the Federal University of Rio Grande (FURG). Data collection instruments included institutional documents from the investigated universities, such as Bylaws, Institutional Development Plans, Regulations for Teaching, Research, and Extension, Self-Assessment Reports, and Pedagogical Projects of Undergraduate Courses. Interviews were also conducted with representatives from Planning Vice-Rectorates, Self-Assessment Committees, Coordinators, and faculty from undergraduate programs at these institutions.

The analysis of findings was based on content analysis (Minayo, 2003). This allowed focus on the meaning cores related to the central issues of teaching in the context of the education-market promoted by

Industry 4.0 and NPM, namely: complete training for the market, innovative teaching methodologies, universal student support, faculty self-qualification, and co-responsibility for institutional goals. Data were analyzed according to their representativeness, homogeneity, or exhaustiveness (Bardin, 1977), acknowledging the significance of discourses and their potential for mutual reinforcement. Thus, insights were generated to understand the repercussions of such issues for teaching in higher education at public universities.

The Education-Market Relationship: convergences between TCT and NPM

Work defines human existence, constituting man in his reality through the production of his daily existence (Marx, 1996). Education, in turn, is a social and complex process through which humans engage in professionalizing experiences of individual and collective growth (Ozga, 2000). Education and work processes are foundations for the development of people and nations. The power of capital, however, has altered production and labor relations, aligning education toward business (Del Pino, 1997; Pinto, 2007; Antunes, 2008), requiring workforce training.

From the First to the Second Industrial Revolution, business owners were concerned with meeting the progressive demand for workers in the Taylorist industry (Pinto, 2007). This period narrowed the relationship between education, work, and social development, that is, economic. Productive efficiency objectives reached education (Tyler, 1979; Robertson, 2002; Bobbitt, 2004; Newman; Clarke, 2012; Parente, 2018), especially through the educational efficientism proposed by TCT, conveyed by Bobbitt, Tyler, and Bloom, addressed below.

At the beginning of the twentieth century, the peak of the Second Industrial Revolution, national development depended on productive efficiency (Rosa, 2019), enhanced by Taylorist practices. Inspired by these, TCT idealized efficientism in work training and established strategic obligations of education to the market. Even without being directly used by efficientists, the education-market relationship reorganized educational processes of that time (Hallwass, 2023). This dimension can still be perceived today.

Under Bobbitt's new education (2004), launched in 1918, the social function of education was employability. Schools should comprehensively develop individuals for work, that is, transform them into workers useful to Taylorist industries according to social specifications of quality (Bobbitt, 2004; Paraskeva, 2005; Silva, 2005).

In Bobbitt's view (2004), the school manager acts as a superintendent of the school/factory, researching available occupations in the market, their respective competencies, future work perspectives, and thus organizes curricula. Subsequently, the teacher, as operational foreman, challenges students to the desirable degree of productivity. And the student is the worker of himself, following the teacher's orders. Well

received, this perspective marked the beginning of education's bend toward the market (Kliebard, 1999).

Bobbitt's comprehensive development, despite emphasizing labor competencies, also encompasses social and general ones, which together define individuals' productive potential. He attributed to education professionals the responsibility of adjusting content and practices to present and future market demands, as a guarantee of maximum institutional and teaching efficientism in their market functions.

Later, in the 1940s, other efficientist theories emerged. Tyler's curricular rationality (1979) solidified the efficiency of worker production. By rationalizing the relationship between objectives, experiences, and curricular evaluation, it allowed for objective and specific focus on professions and results demanded by the market, eliminating from the curriculum knowledge or efforts without functional value for work.

Tyler indicates that educational managers should capture market demands that underpin the rational definition of curricular objectives, seeking information from content specialists. Teachers, in turn, should translate curricular objectives into practical and intentional learning experiences, efficiently engaging students in educational experiences. Finally, they should gradually evaluate student performance so that results serve for continuous remodeling of curricula toward the market.

Subsequently, Bloom's instructional teaching advanced the implementation of professional training proposed by Tyler. Invoking behaviorist psychology, it established taxonomies, that is, hierarchical sequences of learning objectives. The only completed taxonomy was that of the cognitive domain, with the objectives of *knowing, understanding, applying, analyzing, synthesizing, and evaluating* (Bloom; Krathwohl; Masia, 1973). Nevertheless, it represented a significant psychological analysis of learning stages.

Student progression and evaluation occur through overcoming challenges proposed by the teacher at the level of pre-established objectives (Bloom; Krathwohl; Masia, 1973). Thus, Bloom's Taxonomy outlines and regulates teaching work in terms of self-responsibility for didactic actions and professional learning assessment. That said, the teacher seems to hold the true mission of training students for the market.

These theories endorsed ideas that designate the school as factory, the curriculum as means of production, and instruction as the engine transforming individuals into workers (Hallwass, 2023). In the efficientist scene, the teacher is an influential figure in professional training and, therefore, in achieving education-market relationship objectives. Based on the social utility of education and individuals facing market demands, they elucidated a new educational scientific order, whose promises of results permeated the educational process of the twentieth century (Paraskeva, 2005).

Returning to the economic ends of the relationship between education, work, social development, and capital interests, it can be said that subsequent productive revolutions increased efficientist pressure on education, even after Bobbitt (Kliebard, 1999; Silva, 2005). With the Third

Industrial Revolution, due to the relevance of human autonomy for Toyotist efficiency, education assumed more responsibility for developing behavioral aptitudes (Pinto, 2007). That is, social, human, or soft skills (Rosa, 2019).

The current Industry 4.0, related to the Fourth Industrial Revolution, creates a productive ecosystem based on digital connectivity. It dissolves the physical company, appropriates the workforce through cloud and on-demand work, and expands the limits of competitiveness (Rosa, 2019). Training professionals for work in this still-developing industry (Schwab, 2016) presupposes knowing "where people will be situated in the future production process, and how the interaction between people and machines will occur" (Santos; Alberto; Lima, 2018).

Del Pino (1997) emphasized that productive revolutions led education to assume basic, general, scientific, and technological training, aiming at workers' insertion into the productive sphere. Education began seeking ways to overcome its obsolescence regarding competencies for work and life (Schwab, 2016). Evidence of this is Education 4.0, based on virtual and augmented reality technologies aimed at competencies related to digital work; and Education 5.0 (Vilela Jr.; Fileni; Martins, 2020), focused on socioemotional competencies necessary for individuals' integration into contemporary society.

In this sense, although TCT are not explicitly studied in the twenty-first century, educational efficientism remains in force (Paraskeva, 2005). Amid the current productive revolution, they empower market designs in the educational field, under or incorporated into new theories. One of them is NPM, with which it has substantial convergences, mainly with the studies of Bobbitt and Tyler (Hallwass, 2023).

NPM's theoretical frameworks pervade global public management (Newman; Clarke, 2012), exposing it to the greater purpose of the globalized economy: quantifiable efficiency (Normand, 2008). To this end, it endorses the adoption of private sector theories and practices by its segments, entities, and actors, including public education, its universities, and professionals.

In the context of globalization, although knowledge is a central aspect (Newman; Clarke, 2012; Schwab, 2016), the university's role is questioned. It is a knowledge provider, but also an organization and, as such, must attend to market demands, as efficientists treated.

Therefore, it cannot be said that the education-market relationship is a new idea within Industry 4.0. The challenges proposed by this industry outline human formation in universities and affect knowledge, curricula, educational supply, action, and management (Newman; Clarke, 2012; Parente, 2018; Sguissardi, 2020). Efficientism touches these institutions, measuring, evaluating, classifying, comparing. Moreover, it acclimatizes them to entrepreneurship, strategic planning, marketing, and governance (Robertson, 2002; Ball, 2005). Efficientism reaches, plans, measures, evaluates, classifies, and compares everything.

The capitalist scenario fosters efficientist ideals (Del Pino, 2020), whether or not associated with TCT and NPM. They emerge as pro-

employability legal guidelines (Brasil, 1988; 1996; 2014; Brasil, 1997; 2001; 2018; Brasil, 2021; 2022), or as evaluations by regulatory bodies, such as on-site evaluations and the National Student Performance Exam (Enade) (Brasil, 2004). The *Enade* composes the General Course Index (IGC), which encompasses quality criteria for physical, academic, pedagogical, teaching, and administrative structure (Brasil, 2004; 2017a; 2017b), establishing national rankings of undergraduate programs and higher education institutions (Normand, 2008).

These indices privilege global standards of market quality, to which universities, programs, and professionals are subject. In the case of faculty, their performances are quantified in numbers of meetings, feedback, reports, publications, as well as their students' results. Quantification amounts to a series of goals, assessments, and comparisons that underpin internal and external rankings, aiming to tangibilize education based on individual efficiencies. At the extreme, Ball (2005) emphasizes, they make teachers feel as if they never do enough.

The faculty body not infrequently becomes a group of "subjects divided between distinct and often contradictory ethics and demands: bureaucratic, moral, personal, professional, technical, etc." (Garcia; Hypólito; Vieira, 2005, p. 55), represented by numbers and their capacity to calculate themselves. However, the effectiveness of educational institutions' cherished objectives depends on their performance. This perception is shared by both efficientists and other authors who study NPM and education broadly (Bloom; Krathwohl; Masia, 1973; Tyler, 1979; Bobbitt, 2004; Ball, 2012; Parente, 2018). The exacerbated focus on governance prioritizes quantitative aspects of efficiency (Sguissardi, 2020), which can leverage their results or mischaracterize teaching action and efforts toward social process and human formation, including those aimed at the world of work (Ozga, 2000).

The Education-Market Relationship and Teaching in Higher Education

This section aims to analyze the repercussions for teaching in higher education based on changes promoted by Industry 4.0 and NPM, in the context of public universities. In the field of teaching activities, it should be emphasized from the outset that comprehensive education is the ideal present in the documents of all analyzed universities (UFPEL, 2003; UFRGS, 2016; UFSM, 2016; FURG, 2019a). In their missions, visions, and institutional commitments, the aforementioned comprehensiveness implies promoting all the factors for effective professional practice, with social development on the horizon. The basis of this professionalization is tied to the knowledge offered to students (UFPEL, 1969; 2003; 2014; UFRGS, 2016; UFSM, 2016; 2019; FURG, 2019a; 2019b). According to the texts, programs are predominantly based on professional knowledge relevant to the labor market, so that students can confidently launch themselves into this market. Such formalization corresponds to legal premises oriented by employability (Brasil, 1988; 1996; 2004; 2014; Brasil, 1997; 2001; 2018; Brasil, 2021; 2022).

To varying degrees, all investigated universities assumed in their formal commitments the relationship between knowledge, professionalization, work, and social development, according to the theoretical models of efficientism (Robertson, 2002; Ball, 2005; Paraskeva, 2005; Pinto, 2007; Antunes, 2008; Parente, 2018).

In this field, UFPEL (2003), in its institutional project, summarizes the initial expectations about the teaching role. The professor must produce and share professional theories, practices, techniques, and technologies, through current and stimulating pedagogical methods from the students' perspective. Their compass is the course syllabus based on which they must promote professionalization (UFPEL, 1969; 2003; 2022). It is no different in other universities (UFSM, 1987; 2016; UFRGS, 1996; 2016; 2017; FURG, 2009; 2019a; 2019b). With this, it is possible to anticipate how much the university's obligations to the market weigh on the professor. It falls to them to account for experiences that articulate knowledge to student training for the market (Bloom; Krathwohl; Masia, 1973; Tyler, 1979; Bobbitt, 2004; Ball, 2005).

Here underlie the first identifiable teaching challenges. The first is achieving integral education. This expression presupposes education endowed with all useful competencies according to social specifications of market quality. However, it is worth noting that, regarding Industry 4.0, not all competencies have been mapped (Schwab, 2016; Santos; Alberto; Lima, 2018; Rosa, 2019). Even so, according to interviewees, professors are aware of what is relevant for student education, leaving only the task of establishing the means to develop them to market standards. In an apparently harmless way, this understanding entrusts the professor with achieving integral education, assuming they know what should be taught and learned.

The second deals with promoting professionalizing knowledge. As a preliminary observation, universities and their representatives praised social and general competencies, but above all, prioritized professional knowledge (Bloom; Krathwohl; Masia, 1973; Tyler, 1979; Bobbitt, 2004). For interviewed faculty, this is due to the representativeness of this content in the Enade (Brasil, 2004). Other knowledge is addressed to the extent that legislation requires or becomes relevant to students' practical lives (Bloom; Krathwohl; Masia, 1973). However, for them, the Enade requires specific efforts.

It is true that this prioritization should be a relief for teaching action, since comprehensive education may be utopian. However, it is not. The fact that professional knowledge is so relevant to an educational market that measures, compares, generates rankings (Afonso, 2000; Ball, 2005; 2012; Normand, 2008; Cervi; Blümke, 2019; Sguissardi, 2020), charges the professor with promoting all knowledge predominant to the Enade, delivering it to students and preparing them for the complexity involved in these exams. This is because this exam, currently, has been seen by interviewees as the great educational ordeal. Even more seriously, this situation delegates to the professor formal co-responsibility regarding the reputation of the program and educational institution at the national level.

Although not the focus, it is worth emphasizing that such prioritization weakens the development of social and general competencies that have proven relevant throughout productive revolutions (Ozga, 2000; Pinto, 2007; Rosa, 2019; Vilela Jr.; Fileni; Martins, 2020). The market directs education toward quantifiable efficiency, adding to what is explained in the investigated literature (Kliebard, 1999; Afonso, 2000; Bobbitt, 2004; Paraskeva, 2005; Silva, 2005; Normand, 2008; Newman; Clarke, 2012; Parente, 2018; Sguissardi, 2020).

Along these lines, the development of contemporary competencies (Rosa, 2019) can also constitute a challenge to teaching in higher education. Teaching legally prescribed content forges safer ground. Moreover, as already stated, they are important for the Enade. Thus, the education-market relationship is confirmed in professional content captured from the market that underlies curricular guidelines (UFPEL, 2014; 2022; UFRGS, 2016; 2017; UFSM, 2016, 2019; FURG, 2019a; 2019b). However, interviewees' apprehension was seen about how, beyond content, to teach and evaluate soft skills, considering that content has governed education for a long time and is associated with the technical quality expected from public university students. This reverberates in institutional reputation in national rankings. Convergences with TCT become evident.

Internalizing the overcoming of content teaching in favor of competency development, as well as mapping them, is one of the great challenges of the education-market relationship (Pinto, 2007; Rosa, 2019). Particularly due to the pressure that the concept of competency has been generating in the context of Industry 4.0 (Hallwass, 2023). Legally, it is worth noting, education recognizes this change in official documents (Brasil, 1988; 1996; 2004; 2014; Brasil, 1997; 2001; 2018; Brasil, 2021; 2022).

Equally, as a challenge, there is the lack of definition of methodological guidelines that support the promotion of formalized competencies. As a rule, education must have a practical character close to the current market's labor reality, as immersion in professional practices makes knowledge functional. Therefore, methodological guidelines that support teaching-learning processes are essential, as prescribed by Bloom, Krathwohl and Masia (1973) and Tyler (1979). Apart from UFSM (2019), however, no document or interviewee mentioned any learning theory that subsidized teaching action.

By itself, the lack of definition is not impeditive to developing competencies in classrooms. However, without guidelines, faculty expressed that they end up following their own methods, in isolation, and do not seek didactic improvements. According to one interviewee, the faculty member who has pedagogical knowledge applies it; those who do not, replicate the theoretical way they learned. But for them, current students are not content with theory, as they perceive that knowledge alone has no value; they want to be challenged to think. And adds that such a class model does not meet professionalization objectives.

This challenge reveals related others. The focus on innovative teaching methodologies aimed at professionalization seems to be making professors face their pedagogical limitations. This is because not every

higher education professor has training for teaching. Thus, understanding the theories of Bloom, Krathwohl and Masia (1973) and Tyler (1979) in terms of defining objectives and/or learning experiences—or even evaluation criteria and instruments—would require pedagogical knowledge that is not common to all professors, particularly those teaching in bachelor's degree programs.

The expansion of teaching action makes professors face students' limitations. According to university documents (UFRGS, 2016; UFSM, 2016) and interviewees, the expansion of university access conditions brought concerns about the integral needs of students, extrapolating teaching, learning, and training issues. Indeed, universal student support is required (Bloom; Krathwohl; Masia, 1973; Tyler, 1979; Bobbitt, 2004), aiming at qualifying their university trajectories (UFRGS, 2016; UFSM, 2016; 2019; FURG, 2019a), which also falls to faculty.

Universities attributed to faculty the responsibility for student performance, delegating procedures to harmonize individualities, level prior knowledge, and identify specialized student assistance needs (UFPEL, 2003; UFRGS, 2016; UFSM 2016; FURG, 2019a; 2019b). This consolidates a faculty commitment to institutional goals of university quality, good academic performance, and student retention. Even without proper broad pedagogical training, faculty must be attentive to situations that might impact these goals, as they will testify against or in favor of institutional reputation.

This understanding materializes teaching action in achieving quantitative institutional objectives (Afonso, 2000; Normand, 2008; Newman; Clarke, 2012; Cervi; Blümke, 2019). Efficientism, originating from TCT and NPM, and characteristic of the education-market relationship at hand (Hallwass, 2023), alludes to an inevitable overflow of typical higher education teaching activities.

Meanwhile, issues related to the field of self-qualification arise. Universities refer to faculty as qualified professionals, holders of academic degrees, scientific production, educational knowledge, theoretical, practical, and technological knowledge of their area of expertise, and also about work and the market (UFRGS, 2016; UFSM, 2016; 2019; UFPEL, 2022). However, they consider continuous qualification up to work standards as faculty responsibility (UFPEL, 2003; 2022; FURG, 2019a). According to interviewees, professors must commit to their pedagogical qualification and market trends due to the evaluations they undergo. Some regret that there is no mandatory permanent qualification, as it would bring fruitful improvements in education aimed at meeting the demands of a highly demanding market.

Additionally, the professor needs to be sensitive and dedicated to educational needs, seeking ways to update for all typical higher education teaching activities: teaching, research, and extension (UFPEL, 1969; 2003; UFSM, 1987; UFRGS, 1996; FURG, 2009). Dedicating oneself to education means mastering content and practices in their area of expertise, as this dictates their teaching and evaluation methods, according to interviewees. For some of them, it goes against the fact that many

professors do not work professionally, as they are thus not updated on current labor market demands.

According to UFPEL (2003), the globalized world requires teaching capacities at the level of innovative teaching experiences for work. The continuing education required of students is also required of professors. In this, despite the work and curricular adjustments made by managers (UFPEL, 2003; UFRGS, 2016; UFSM, 2016; 2019; FURG, 2019a), in practice, educational innovation falls to the professor. Thus, educational superintendence requires operative skill from the professor, as much as from any other worker (Bobbitt, 2004). And validation of their own competencies becomes necessary (Robertson, 2002; Pinto, 2007; Rosa, 2019). The professor is equally subject to quality specifications (Bobbitt, 2004; Paraskeva, 2005; Silva, 2005). This makes much sense within new forms of knowledge production (Newman; Clarke, 2012; Schwab, 2016; Santos; Alberto; Lima, 2018).

Such statements refer to the systematic readjustment of pedagogical practices to market demands, as an educational strategy, consistent with efficientism (Tyler, 1979; Bobbitt, 2004). In this direction, it is also associable with Industry 4.0 demands, which being dynamic must be accompanied (Santos; Alberto; Lima, 2018; Rosa, 2019). These discourses reinforce that professional knowledge is prioritized. Even pedagogical issues are tied to them (Bloom; Krathwohl; Masia, 1973; Tyler, 1979; Bobbitt, 2004). That is, in the context of the education-market, within Industry 4.0, the faculty member is required to understand the market as a guide for their craft and activities (Schwab, 2016; Vilela Jr.; Fileni; Martins, 2020). However, the qualification that will be called here academic-pedagogical-professional, is also the faculty member's own responsibility.

In the fields of research and outreach, university demands attributed to faculty were jointly addressed by universities. In these, all universities stated they expect consistent faculty performance (UFRGS, 2016; UFSM, 2016; 2019; FURG, 2019a; 2019b; UFPEL, 2022). First, because it is truly inherent to higher education teaching (Brasil, 1988; 1996; 2014; Brasil, 1997; 2018). Second, for the knowledge feedback that imputes to teaching activities. Finally, because it is through this action that professors engage students in these activities (UFRGS, 2016). The professor is a reference for the student, so if it is important for the student to be active and participative, the professor should be so. This will make a difference in training for work, as well as improve institutional indices relevant to quantitative evaluations, pertinent to efficientism, as highlighted by interviewees.

It can be stated that legislation dictates efficientist assumptions. It prescribes objectives to be met within universities by professors and students (Brasil, 1988; 1996; 2004; 2014), leading them to narrow their relationships with the market, since it highlights the importance of these activities for professionalization and employability purposes. That said, the alignment between teaching, research, and extension is established in achieving institutional objectives, which are measured through higher education regulation and evaluation processes (Brasil, 2004; 2017a;

2017b). Nevertheless, if the university has more projects, it has more visibility in the market, this brings more students and they increase the budget. This logic once again substantiates the quantitative efficiency praised by TCT and NPM (Tyler, 1979; Bobbitt, 2004; Normand, 2008).

Faculty co-responsibility is suggested for institutional goals that public universities are accountable for to society — or rather, the market — and to regulatory bodies. Interviewees mentioned the commitment to publicizing institutional results, as they are essential to institutional reputation that is demanded by the broad and educational market. For interviewees, the university must be attentive to demands of different orders (pedagogical, academic, market, management), and work strongly to satisfy them, as numbers strengthen its brand, as addressed by various authors (Ball, 2005; 2012; Normand, 2008; Cervi; Blümke, 2019; Sguissardi, 2020). As previously explained, this aligns with efficientist thoughts of TCT and NPM, emphasizing the existence of an education-market relationship.

In the management field, perspectives about faculty presence in directive, consultative, and/or collegiate bodies are recorded. These bodies constitute formal and systematic mechanisms of institutional integration. Therefore, their consistent presence in them can generate engagement with the educational institution and its objectives, whether pedagogical, technical, administrative, legal, or market-oriented (UFPEL, 2014; UFRGS, 2016; UFSM, 2016; 2019; FURG, 2019a; 2019b). However, given the dynamism of relevant market and legal demands, universities also encourage informal — though regular — communication and interaction between professors, documents, and institutional results (UFPEL, 2014; 2022; UFSM, 2019; FURG, 2019a; 2019b). Such integration is fundamental for delivering a fully educated student to society, but also for professors to understand the totality of their commitments to institutional results.

Interviewees also agree that professors should be involved in institutional planning. This dynamic brings management goals into their view, as in a company. And each professor defines how they will contribute to achieving these goals. Even if not everyone participates, this increases engagement. One interviewee gave as an example the exposure of concern about the Enade in 2022, when all professors were informed about the action plan and indicators to be improved.

This integration, given the proportions, returns to the efficientist idea that the professor is an executor of the educational process planned by managers (Tyler, 1979; Bobbitt, 2004), within an organization that faces its own difficulties in achieving its development goals. Professors are vectors of its administrative process. Their role, therefore, is not exhausted in pedagogical functions. It also contemplates amplified functions aimed at the social function of education which, as presented in this text, is complex and goes back to ideas originating from TCT. The faculty member is at the center, but this orders them to various fronts of action (Ball, 2005; 2012; Garcia; Hypólito; Vieira, 2005).

Finally, and equally important, the university is seen as an educational market organization, moving by efficientism (Brasil, 2017a;

2017b; Cervi; Blümke, 2019), deepening aspects inherent to the education-market relationship at hand. And, given the endorsement of analyzed discourses about the professor's role, this finding cannot be refuted.

An ideation about the professor is perceived in this discussion. A professional with so many responsibilities who, apparently autonomously, should handle educational demands of training and employability. In efficientism, even dating from the Second Industrial Revolution period, the professor was thus portrayed (Bloom; Krathwohl; Masia, 1973; Tyler, 1979; Bobbitt, 2004). To do so, they need to master knowledge about the profession, the labor market, and teaching-learning methods, aimed at promoting demanded competencies, like their students' results. This situation has deep links with TCT and NPM perspectives, as well as the application of these perspectives in the Industry 4.0 context. In other words, it is as if the professor feels firsthand the same difficulties as other workers in this industry: grasping competencies, understanding their space, their role, and their opportunities within a changing and not fully organized reality (Pinto, 2007; Schwab, 2016; Santos; Alberto; Lima, 2018; Rosa, 2019).

Thus, efficientism proves heavy on the faculty member, in the same proportion that the education-market relationship brings complex expectations about their role in the educational process. Beyond typical higher education teaching activities, it requires pedagogical action notably aimed at the labor market, engagement in institutional results, and universal student support aimed at good academic performance and results in national exams. Moreover, teaching, in an era of NPM guideline hegemony, requires from the professor autonomous management of their qualification and results, that is, their efficientism in meeting market demands.

Final Considerations

Teaching in higher education has historically been the subject of many debates and studies regarding its training, action, and contribution to human development and the dissemination of scientific and technological knowledge. With the establishment of NPM in Brazilian universities, including public ones, concurrent with the productive restructuring caused by Industry 4.0, universities now occupy a new role in the education-market relationship, generating unprecedented attributions and responsibilities for teaching professionals.

Productive revolutions have made higher education embrace responsibilities that bring it closer to efficientist theories which, consequently, theoretically converge with NPM. The results of this investigation make explicit that, under efficientism, the teaching role presupposes performance linked to market training, with teaching being charged with engagement in training processes and indices and university reputation. Thus, teaching revolves around endowing students with useful competencies for work, and facing all the inherent difficulty of this feat in the Industry 4.0 environment.

Nevertheless, one cannot lose sight of the knowledge prescribed by current legislation, which is evaluated and ranked. It is necessary to emphasize, then, that initially the target market of institutional concern is labor. However, this concern with professionalization required by the labor market merges with the objectives of the educational market, imposed by equally efficientist legal guidelines. This implies competition between higher education institutions for positions in rankings, aiming to guarantee, in the educational market, a certain institutional reputation.

In the context of the education-market, the weight goes against the professor, extrapolating and modifying typical higher education teaching activities. They receive demands arising from an institutional ideal that simultaneously wants to serve both labor and educational markets. These ends require means. It falls to them to readjust their practices to the market, establish and manage their teaching goals with students who are their work groups in this process. Similarly, they are responsible for qualifying students' university trajectories, as performance and academic retention indices equally affect institutional accounting. These demands are tied to efficientist purposes of institutional reputation.

Generally, faculty are required to act notably oriented toward these two markets, ensuring content, practices, and universal support aimed at achieving competencies appropriate to work and education. They themselves must, during this process, constitute and maintain themselves at the level of useful competencies. This assumption of responsibilities occurs amid a gap in methodological guidelines and academic-pedagogical-professional qualification. Qualification, although encouraged, is seen as an individual commitment to development, so that faculty become competent on their own to handle the demands of their craft and the paradigmatic markets for which they train.

Extension and research activities, under the justification of feeding back into teaching, are used as a key for student engagement. They are important insofar as they contribute to students' formation, as much as they contribute to institutional indices that can lead to financial results. Efficientism here reflects legal prescriptions, but its execution is also attributed to the professor.

Management activities require faculty presence as a way to maintain their engagement with institutional results. The consistency of this presence allows directing efforts toward institutional objectives defined in a dynamic reality of pedagogical, legal, and market variables. About this, the types of institutional objectives to which the teaching role is relevant have already been noted. In this perspective, it is interesting to report the apparent naturalness with which discourses and institutional representatives treat the varied aspects of the teaching role, agreeing with the attributions and challenges assigned to these professionals. What is perceived in the discourses themselves is the analogy of the university as an educational market organization. No less important, due to the faculty centrality found in it, based on their executor function.

Therefore, the ideation about the teaching role in the discourses undoubtedly returns to the efficientism discussed in this document. Beyond that, these discourses align with the perspectives of both NPM and the challenging reality of the current work environment. Respectively, they point out that the public organization must behave as a company in its market; and that all its workers, without exception, must be autonomous and managers of their own tasks, responsibilities, and competencies, even though the dynamism of labor does not always allow knowing exactly what they are. In Industry 4.0, the professor who trains the worker is also seen as a worker within a productive process.

In these terms, teaching effectiveness in the education-market relationship encompasses endless responsibilities, complex expectations, and also competencies, making it imprecise what its magnitude is in the educational scenario. What to teach? How to teach? What to evaluate? Competencies for work or content for exams? How to engage students? How to identify their difficulties? How to support them? Which institutional results are priorities? How to contribute? Such questions hover in the university environment among managers and faculty, underlining the strategic co-responsibility of the professor with student formation and with the performance of programs and the university. Nevertheless, they expose the maladjustment of the current world of work, which also affects teaching work, as well as the present and future of higher education.

Such a statement, it is worth remembering, is indeed efficientist, as it represents a discourse circulating in the university, which associated with the paradigmatic context of Industry 4.0, reveals the insistent force of the market in regulating and controlling institutional objectives, processes, and educational results, and demands actions oriented by an institutional reputation that ultimately is managed by the education-market relationship.

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References

- AFONSO, Almerindo Janela. **Avaliação Educacional**: regulação e emancipação: para uma sociologia das políticas avaliativas contemporâneas. São Paulo: Cortez, 2000.
- ANTUNES, Ricardo Coltro. **Adeus ao Trabalho?** Ensaio sobre as metamorfoses e a centralidade do mundo do trabalho. 13. ed. São Paulo: Cortez, 2008.
- BALL, Stephen. **Global Education Inc.**: new policy networks and the neoliberal imaginary. New York: Routledge, 2012.
- BALL, Stephen. Profissionalismo, Gerencialismo e Performatividade. **Cadernos de Pesquisa**, São Paulo, Fundação Carlos Chagas, v. 35, n. 126, p. 539-564, set/dez. 2005. DOI: <https://doi.org/10.1590/S0100-15742005000300002>.
- BARDIN, Lawrence. **Análise de Conteúdo**. Lisboa: Edições 70, 1977.
- BLOOM, Benjamin; KRATHWOHL, David; MASIA, Bertram. **Taxionomia de Objetivos Educacionais**. Porto Alegre: Globo, 1973.

BOBBITT, John Franklin. **O Currículo**. Lisboa: Plátano, 2004.

BRASIL. Constituição da República Federativa do Brasil de 1988. **Diário Oficial da União**, Brasília, DF, 1988. Disponível em: <https://www2.camara.leg.br/legin/fed/consti/1988/constituicao-1988-5-outubro-1988-322142-publicacaooriginal-1-pl.html>. Acesso em 30: set. 2025.

BRASIL. Lei n. 9.394, de 20 de dezembro de 1996. Estabelece as diretrizes e bases da educação nacional. **Diário Oficial da União**, Brasília, DF, 1996. Disponível em: https://www.planalto.gov.br/ccivil_03/leis/l9394.htm. Acesso em 30: set. 2025.

BRASIL. Conselho Nacional de Educação. Câmara de Educação Superior. Parecer n. 776, de 03 de dezembro de 1997. Orienta para as diretrizes curriculares dos cursos de graduação. **Diário Oficial da União**, Brasília, DF, 1997. Disponível em: https://portal.mec.gov.br/setec/arquivos/pdf/PCNE776_97.pdf. Acesso em: 30 set. 2025.

BRASIL. Conselho Nacional de Educação. Câmara de Educação Superior. Parecer n. 583, de 04 de abril de 2001. Orientação para as diretrizes curriculares dos cursos de graduação. **Diário Oficial da União**, Brasília, DF, 2001. Disponível em: <https://portal.mec.gov.br/cne/arquivos/pdf/CES0583.pdf>. Acesso em: 30 set. 2025.

BRASIL. Lei n. 10.861, de 14 de abril de 2004. Institui o Sistema Nacional de Avaliação da Educação Superior – SINAES e dá outras providências. **Diário Oficial da União**, Brasília, DF, 2004. Disponível em: https://www.planalto.gov.br/ccivil_03/_ato2004-2006/2004/lei/l10.861.htm. Acesso em: 30 set. 2025.

BRASIL. Lei n. 13.005, de 25 de junho de 2014. Aprova o Plano Nacional de Educação - PNE e dá outras providências. **Diário Oficial da União**, Brasília, DF, 2014. Disponível em: https://www.planalto.gov.br/ccivil_03/_ato2011-2014/2014/lei/l13005.htm. Acesso em: 30 set. 2025.

BRASIL. Lei n. 9.057, de 25 de maio de 2017 (Revogado). Estabelece as diretrizes e bases da educação nacional. **Diário Oficial da União**, Brasília, DF, 2017a. Disponível em: <https://legislacao.presidencia.gov.br/atos/?tipo=DEC&numero=9057&ano=2017&ato=5f4ITQE1UeZpWT4a6>. Acesso em: 30 set. 2025.

BRASIL. Decreto n. 9.235, de 15 de dezembro de 2017. Dispõe sobre o exercício das funções de regulação, supervisão e avaliação das instituições de educação superior e dos cursos superiores de graduação e de pós-graduação no sistema federal de ensino. **Diário Oficial da União**, Brasília, DF, 2017b. Disponível em: https://www.planalto.gov.br/ccivil_03/_ato2015-2018/2017/decreto/d9235.htm. Acesso em: 30 set. 2025.

BRASIL. Conselho Nacional de Educação/Câmara de Educação Superior. Resolução n. 07, de 18 de dezembro de 2018. Estabelece as Diretrizes para a Extensão na Educação Superior Brasileira. **Diário Oficial da União**, Brasília, DF, 2018. Disponível em: https://portal.mec.gov.br/index.php?option=com_docman&view=download&alias=105102-rces007-18&Itemid=30192. Acesso em: 30 set. 2025.

BRASIL. Conselho Nacional de Educação. Conselho Pleno. Resolução n. 01, de 5 de janeiro de 2021. Define as Diretrizes Curriculares Nacionais Gerais para a Educação Profissional e Tecnológica. **Diário Oficial da União**, Brasília, DF, 2021. Disponível em: https://portal.mec.gov.br/index.php?option=com_docman&view=download&alias=167931-rcp001-21&category_slug=janeiro-2021-pdf&Itemid=30192. Acesso em: 30 set. 2025.

BRASIL. Conselho Nacional de Educação. Conselho Pleno. Parecer n. 19, de 07 de julho de 2022. Aproveitamento, em Cursos de Graduação, de saberes, conhecimentos e competências constituídas em diferentes situações, formais e não formais, inclusive no trabalho. **Diário Oficial da União**, Brasília, DF, 2022. Disponível em: https://portal.mec.gov.br/index.php?option=com_docman&view=download&alias=238771-pcp019-22&category_slug=julho-2022-pdf&Itemid=30192. Acesso em: 30 set. 2025.

CERVI, Cleber; BLÜMKE, Adriane Cervi. Avaliação da Evolução do Índice Geral de Cursos – IGC das Instituições de Ensino Superior de Santa Catarina. **Gestão Universitária na América Latina (GUAL)**, Florianópolis, Universidade Federal de Santa Catarina, v. 12, n. 1, p. 162-182, jan. 2019. DOI: <http://dx.doi.org/10.5007/1983-4535.2019v12n1p162>.

DEL PINO, Mauro A. Burkert. **Educação, Trabalho e Novas Tecnologias: as transformações nos processos de trabalho e de valorização do capital**. Pelotas: Editora Universitária, 1997.

DEL PINO, Mauro A. Burkert. A Universidade Pública e o Future-se: a valorização do capital como centro das relações acadêmicas. **Revista da Educação Pública**, Cuiabá, Universidade Federal de Mato Grosso, v. 29, p. 01-12, jan/dez. 2020.

ENGUITA, Mariano Fernández. **A Face Oculta da Escola: educação e trabalho no capitalismo**. Porto Alegre: Artes Médicas, 1989.

FURG (Fundação Universidade Federal do Rio Grande). **Regimento Geral da Universidade Federal do Rio Grande**. Rio Grande, 2009. Disponível em: <https://www.furg.br/a-furg/regimento>. Acesso em: 02 mar. 2022.

FURG. **Plano de Desenvolvimento Institucional 2019-2022**. Rio Grande, 2019a. Disponível em: <https://pdi.furg.br/>. Acesso em: 04 dez. 2019.

FURG. **Projeto Político Pedagógico do Curso de Administração**. Rio Grande, 2019b. Disponível em: <https://www.furg.br/graduacao/administracao-rg>. Acesso em: 04 dez. 2019.

GARCIA, Maria Manuela; HYPÓLITO, Álvaro Moreira; VIEIRA, Jarbas Santos. As Identidades Docentes como Fabricação da Docência. **Educação e Pesquisa**, São Paulo, Universidade de São Paulo, v. 31, n. 1, p. 45-56, jan/abr. 2005. DOI: <https://doi.org/10.1590/S1517-97022005000100004>.

HALLWASS, Lia C. Lima. **Formação para o Mundo do Trabalho no Século XXI: relações entre teorias curriculares, nova gestão pública e transformações na educação superior**. Pelotas: UFPel, 2023. 381 p. Tese (Doutorado) – Programa de Pós-Graduação em Educação, Faculdade de Educação, Universidade Federal de Pelotas, Pelotas, 2023.

KLIEBARD, Herbert. **Schooled to Work**. Vocationalism and the american curriculum. New York: Teacher College, 1999.

MARX, Karl. **O Capital**. Crítica da economia política. São Paulo: Nova Cultural, 1996.

MINAYO, Maria Cecília de Souza (Org.). **Pesquisa Social: teoria, método e criatividade**. ed. 22. Rio de Janeiro: Vozes, 2003.

NEWMAN, Janet; CLARKE, John. Gerencialismo. **Educação & Realidade**, Porto Alegre, Universidade Federal do Rio Grande do Sul, v. 37, n. 2, p. 353-381, maio/ago. 2012. Disponível em:

<https://seer.ufrgs.br/index.php/educacaoerealidade/article/view/29472>. Acesso em: 30 set. 2025.

NORMAND, Romuald. Mercado, Performance, Accountability. Duas décadas de retórica reacionários na educação. **Revista Lusófona de Educação**, Campo Grande, Universidade Lusófona, n. 11, p. 49-76, 2008.

OZGA, Jenny. **Investigação sobre Políticas Educacionais** – terreno de contestação. Porto: Porto Editora 2000.

PARASKEVA, João. **Tensões Gerais no Campo do Currículo**. Lisboa: Plátano Editora, 2005.

PARENTE, Juliano Mota. Gerencialismo e Performatividade na Gestão da Educação Brasileira. **Educação em Revista**, Belo Horizonte, Universidade Federal de Minas Gerais, v. 19, n. 1, p. 89-102, jan/jul. 2018. DOI: <https://doi.org/10.36311/2236-5192.2018.v19n1.06.p89>

PINTO, Geraldo Augusto. **A Organização do Trabalho no Século 20**: Taylorismo, Fordismo e Toyotismo. São Paulo: Expressão Popular, 2007.

ROBERTSON, Susan Lee. Política de Re-Territorialização: Espaço, Escala e Docentes como Classe Profissional. **Currículo sem Fronteiras**, revista independente sem vínculo institucional, Brasil, v. 2, n. 2, p. 22-40, jul/dez. 2002.

ROSA, Elisa. **A Quarta Revolução Industrial e o Futuro do Trabalho**. São Paulo: SEBRAE, 2019. Disponível em: <https://l1nq.com/E46BT>. Acesso em: 30 set. 2025.

SANTOS, Beatriz Paiva; ALBERTO, Agostinho; LIMA, Tânia Miranda. Indústria 4.0: desafios e oportunidades. **Produção e Desenvolvimento**, Rio de Janeiro, Centro Federal de Educação Tecnológica Celso Suckow da Fonseca, v. 4, n. 1, p. 111-124, jan/abr. 2018. Disponível em: <https://portal.amelica.org/ameli/jatsRepo/167/1671510006/1671510006.pdf>. Acesso em: 30 set. 2025.

SCHWAB, Klaus. **A Quarta Revolução Industrial**. São Paulo: Edipro, 2016.

SGUISSARDI, Valdemar. Um Projeto Neoliberal de Heteronomia das Federais e Passo a mais Rumo a sua Privado-Mercantilização. In: GIOLO, Jaime; LEHER, Roberto; SGUISSARDI, Valdemar (Org.). **Future-se**: ataque à autonomia das instituições federais de educação superior e sua sujeição ao mercado. São Carlos: Diagrama Editorial, 2020, p. 153-194.

SILVA, Tomaz Tadeu. da. **Documentos de Identidade**. Uma introdução às teorias do currículo. 2. Ed. Belo Horizonte: Autêntica, 2005.

TYLER, Ralph. **Princípios Básicos de Currículo e Ensino**. 6. ed. Porto Alegre: Globo, 1979.

UFPEL. Universidade Federal de Pelotas. **Regimento Geral da Universidade Federal de Pelotas**. Pelotas, 1969. Disponível em: <https://wp.ufpel.edu.br/scs/regimento/>. Acesso em: 12 ago. 2021.

UFPEL. **Curso de Bacharelado em Administração - Projeto Político Pedagógico**. Pelotas, 2014. Disponível em: <https://l1nq.com/ghtYO>. Acesso em 30 set. 2025.

UFPEL. **Plano de Desenvolvimento Institucional 2022**. Pelotas, 2022. Disponível em: https://wp.ufpel.edu.br/planejamentoufpel/files/2022/09/PROPLAN-CDIP_PDI-2022-2026_rev15-23SET22.pdf. Acesso em: 30 set. 2022.

UFPEL. **Projeto Pedagógico Institucional**: elaborado em 1991 e atualizado em 2003. Pelotas, 2003. Disponível em: <https://wp.ufpel.edu.br/ppi/>. Acesso em: 04 dez. 2020.

UFRGS. Universidade Federal do Rio Grande do Sul. **Regimento Geral da Universidade Federal do Rio Grande do Sul**. Porto Alegre, 1996. Disponível em: <https://www.ufrgs.br/institutodeartes/wp-content/uploads/2018/03/Estatuto-e-Regimento-Geral-da-UFRGS.pdf>. Acesso em: 30 set. 2025.

UFRGS. **Curso de Graduação em Administração - Projeto Pedagógico**. Porto Alegre, 2017. Disponível em: <https://www.ufrgs.br/escoladeadministracao/wp-content/uploads/2018/03/PPC-Administra%C3%A7%C3%A3o.pdf>. Acesso em: 30 set. 2025.

UFRGS. **Plano de Desenvolvimento Institucional 2016 - Construa o futuro da UFRGS**. Porto Alegre, 2016. Disponível em: <https://www.ufrgs.br/governanca/wp-content/uploads/2023/10/PDI-2016-2026.pdf>. Acesso: 30 set. 2025.

UFSM. Universidade Federal de Santa Maria. **Regimento Geral da UFSM**. Santa Maria, 1987. Disponível em: <https://www.ufsm.br/pro-reitorias/proplan/regimento-geral-da-ufsm-1987>. Acesso em: 12 ago. 2021.

UFSM. **Curso de Graduação em Administração - Projeto Pedagógico**. Santa Maria, 2019. Disponível em: <https://www.ufsm.br/cursos/graduacao/santa-maria/administracao/projeto-pedagogico>. Acesso em: 15 set. 2021.

UFSM. **Plano de Desenvolvimento Institucional - 2016-2026**. Santa Maria, 2016. Disponível em: <https://www.ufsm.br/pro-reitorias/proplan/pdi/>. Acesso em: 02 mar. 2021.

VILELA Jr., Guanís de Barros; FILENI, Carlos H.; MARTINS, Gustavo Celestino. Você está preparado para a Educação 5.0? **Revista CPAQV - Centro de Pesquisas Avançadas em Qualidade de Vida**, Campinas, Centro Esportivo Virtual, v. 12, n. 1, p. 02-08, 2020.

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