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WORKLOAD MANAGEMENT IN TEACHING ACTIVITY: A CASE STUDY IN PRIVATE HIGHER EDUCATION¹

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Abstract:

In Brazil, from the 1990s, there was a significant increase in higher education, both in the public and private sectors. This article focuses on teaching work at a private sector HEI (Higher Education Institution) located in the Southeast Region of Brazil. The general objective is to analyze the teaching workload, in its multiple aspects, in light of the expansion in this sector. For its development, researches were carried out: bibliographical, documentary and field. The latter consisted of two sequential and complementary steps. In the first phase, quantitative data were obtained and then a bottleneck was made for an individual case study with a qualitative approach. The daily teaching was accompanied and described in an ergonomic and ergological perspective that is also the theoretical reference adopted. The research mapped the multiple dimensions of the workload and its repercussion on all teachers. The results show that there is a movement between what is collective and the singular, in an unstable equilibrium in which both the collective fulfillment of institutional rules operates, and an individual management that can, ultimately, significantly impact the teaching work.

Keywords: Activity, Teaching Workload, Ergology, Ergonomics, Teaching.

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1. INTRODUCTION

The Education Guidelines and Bases Law (LDB) – Law 9,394, enacted in 1996, substantially changed the parameters for higher education in Brazil. The existence of private institutions is not a recent fact, as is the charging of fees and monthly fees from students, however the explanation of the commercial purposes for education had impacts on its conception. What we want to highlight is that there are changes in the “private nature of the means and ends of higher education” (BERTOLIN, 2009).

The advent of the LDB opened the doors to the expansion of higher education in Brazil, considering that the changes arising from this process established, among other aspects, the commercial nature of Higher Education Institutions (HEIs)³, new parameters for student admission and supply of courses, opening or expansion of institutions. According to Bertolin (2009), the LDB and Decree No. 2,207, of April 15, 1997, founded, from a legal point of view, the emergence of the commercialization of Brazilian higher education. Marketization is understood as the process in which the development of the ends and means of higher education, both at the state and private levels, undergoes a reorientation in accordance with the principles and logic of the market and under which higher education, gradually and progressively, it loses its status as a public good and assumes the status of a commercial service (BERTOLIN, 2009, p. 352).

³ The terminology public and private HEIs is recurrent in this work and, for the purpose of clarifying the terms, the INEP conceptualization is adopted, in which private HEIs are higher education institutions with an administrative category equal to private for-profit or private non-profit institutions. profitable; while public HEIs are higher education institutions with an administrative category equal to federal public, state public or municipal public (INEP, 2013).

The supremacy of private HEIs corroborates this reorientation, since data from the 2012 Higher Education Census - Technical Summary (BRASIL, 2014), prepared by the National Institute of Educational Studies and Research Anísio Teixeira (INEP), confirms that 2,416 HEIs participated in the 2012 Census, 304 public (12.6%) and 2,112 (87.4%) private. Given the increase in courses and institutions, the job market for higher education teachers is also expanding. One of the possibilities for hiring is by workload in which the hourly teacher's salary is based on that assigned to him/her that semester. This hiring occurs on demand for the institution, configuring floating contracts according to the workload of the subjects that will be under the responsibility of the teacher.

Faced with such peculiarities, it is necessary to know the teaching activity⁴ and its consequences in the context of teaching work. Therefore, the importance of focusing on teachers in the private sector from the perspective of the workload in their activity is reaffirmed. Thus, the general objective is to analyze the workload in teaching activities in higher education in its multiple aspects in light of the expansion of the private sector.

Theoretical Reference

The references of ergonomics and ergology were adopted, thus employing a theoretical and technical set that

⁴ The use of the term ‘activity’ (in the singular) is of particular importance as it highlights what the worker takes into account to perform their work. From now on, this concept will be explained in order to anchor the analysis of teaching activity. In turn, the word 'activities' (in the plural) is used here in its usual form, according to its common sense understanding and is also maintained when located within direct quotes from the authors and documents listed here.

highlighted and privileged the point of view of activity (GUÉRIN, 2001).

Ergonomics contributed to the concepts of prescribed work, real work and the activity point of view; of ergology, adopted, in particular, the notion of the use of oneself, focusing on debates on standards, renormalizations and management dimensions, from the perspective of managing the workload as the activity unfolds.

When referring to workload, Wisner (1994) argues that “all activities, including work, have at least three aspects: physical, cognitive and psychic. Each of them can determine an overload” (1994, p. 13). He further argues that the three aspects are interrelated and that an overload on one of the aspects may be accompanied by a very high load on the other two.

Workload is “a phenomenon that science can hardly grasp, but is nevertheless real, as each person can see through experience”, and is therefore a complex function of: duration of activity, pace and intensity of effort, type of task, regulation strategies (which, in turn, depend on the worker's skills and working conditions in a broad sense), cycles and breaks (hourly, daily, between shifts, weekly and annual, with their holidays and longer vacations, implication, interest and meaning of work for the worker) (LIMA, 2010, p. 1- 2).

Specifically in teaching work, Tardif (2012) considers that, as in any other profession, there are teachers who are so engaged with their work that they can even allow it to invade their private life, their weekends and their activities. nights. He proposes thinking that “this notion 'workload' is complex because it refers to different phenomena – of which several are not quantifiable – that intersect without ceasing and whose reciprocal influence is difficult or even impossible to separate completely” (TARDIF, 2012, p 113). In line with the engagement referred to by Tardif (2012), the concept proposed by Schwartz (2000) about the “use of self” is evoked. For this author, work is “a place of debate, a space of possibilities always negotiate where there is no execution, but use, and the individual as a whole is summoned to the activity”, in which “work always involves use of oneself”

(SCHWARTZ, 2000). Thus, each person's engagement with their activity is a form of “using oneself”. The expression “use of oneself” contains, in itself, two of the fundamental terms for the ergological approach. The combination of the two words, contrary to what common sense might indicate, will outline the power of a basic notion for ergology. Initially, the word “use” vehemently declares that, contrary to what seemed like an immutable certainty, work does not merely perform its work. There is a call, a demand for the subject, to some extent, to be involved in carrying out the activity and this is where the “use” lies. In other words, no worker, in any work activity, stands before his work arguing that he only does what he was told to do. On the contrary, if this were the current stance, there would be unfinished work, since the subject, by “using himself”, making use of his reserves of alternatives, is what allows the work to effectively be carried out. In this sense, Schwartz (2000) states that “work is a place of debate, a space of possibilities always to be negotiated where there is no execution, but use, and the individual as a whole is called into the activity” (p. 34). More specifically and categorically, the author states that all work “is always use of oneself, considering it, simultaneously, use of oneself by others (which ranges from economic norms to operational instructions) and use of oneself by oneself (which reveals micromanagement commitments)” (SCHWARTZ, 2000, p. 25) (italics in the original).

Schwartz (2006) argues that ergology dilates the difference between 'prescribed work' and 'real work', taking into account the formulation of ergonomists, and argues that “we greatly expand this notion of real work with the notion of 'antecedent norms'. ' (...) regarding the tendency of each person to re-normalize their way of life and their way of work” (SCHWARTZ, 2006, p. 459).

In a similar way, Brito and Athayde (2011) state that ergology goes beyond “the notion of prescribed work, distinguishing it from 'preceding norms', with the latter

notion bringing into play elements previously not considered” (BRITO; ATHAYDE, 2011, p. 259).

The norm is antecedent not only to work, but to existence itself. There is something in the standard that concerns the heritage of the human species, not only in its biological aspects, but cultural and social, among others. Norms can and “should help to frame, to transform into protocol what may be, but we cannot dismiss the activity that is invited, fortunately, to manage the meeting of meetings at all times” (SCHWARTZ, 2011, p. 138).

Every work situation has, on the one hand, protocols that are called antecedent norms and that encompass the entirety of the situation, and, on the other hand, reality, the context.

The concepts of ‘antecedent norms’, ‘norm debates’ and ‘renormalization’ are conducted in ergology, locating the dramas present in carrying out the activity. Ergology weaves a web that intertwines these three concepts, which relate to each other, either validating or proposing another form of existence.

In a field such as teaching activity, ergology allows us to move beyond the job description, providing contributions to understand the subject's engagement and the dramas that are posed for its accomplishment, therefore for this ‘use of self’. Teaching work defined in institutional rules does not represent the entirety of what is at stake in the work situation, specifically in an activity, in which human relationships and interactions go beyond institutional prescriptions.

Schwartz (2011) evokes the moment of the teacher’s entry into the classroom, in which “the state, on that day, of that encounter indefinitely undone and remade, which is the diversity of trajectories, aspirations, and resistances that constitute a class” (p. 133). He argues that this teacher asks himself “how to combine his professional, civic values, concern for the course program; about how to manage the interfaces between the multiplicity of probable and unlikely paths of young people and the objectives that he, the teacher, would like to set himself” (p.

133-4). In Schwartz's (2011) description, there are notes of the reality of teaching activity permeated by questions and dramas of the “use of self” that inevitably summon the subject.

The activity in its development course entails a simultaneity of actions to be detailed and establishes distinct and complementary temporal dimensions: past, present and future.

In the present case study, in addition to describing teaching activity, the ergological assumption that human activity is the synthesis between what is prescribed and what is actually carried out was taken into consideration. By carrying out this synthesis, the subject makes choices, hierarchizes and renormalizes his environment and this is the matrix of history.

The study that follows sought to reveal the burden embedded and hidden in everyday life, contributing to giving visibility to the everyday situations that a teacher at a private sector HEI faces.

2. METHODOLOGY

2.1 Materials and Methods

The research carried out consisted of two sequential and complementary stages. The initial data was obtained using a quantitative approach and, with this data, a funneling was carried out towards a qualitative approach.

Each of the stages brought its contribution to the unveiling of teaching activity in a specific sector, subject to determined conditions and requiring the subject to manage themselves and their workload.

In line with Gil (2002), the case study was adopted with the aim of collecting as much information as possible about teaching activity in a private higher education institution, seeking to glimpse aspects that may affect the teaching workload. It was decided to conduct this study in a single institution so that the activity in a given work organization could be understood with the greatest possible reliability, under equally determined conditions.

The first phase of the research emphasized the quantitative approach, starting in February 2012 at IES Alfa5, which had

693 teachers, 138 full-time, 119 part-time and 436 hourly. The sample was intentionally selected considering hourly teachers with 20 or more hours of work in the classroom, totaling 144 teachers. The questionnaire was online between October 2012 and January 2013 and was answered by 47 teachers.

From the quantitative data, a profile of the hourly professor at IES Alfa emerged and among the respondents, we chose professor Melissa⁶, who was monitored “on site” for approximately 50 hours.

3. Results

Respondents in the qualitative stage were distributed between 59.6% female and 40.4% male. The Master's degree was indicated by 38 professors, equivalent to 80.9% of respondents, 14.9% doctorate and 2.1% for one respondent with a post-doctorate and another specialist. The age of respondents ranged from less than 30 to over 60 years of age, with the highest percentage, 53.2%, in the range of 31 to 40 years.

Regarding teaching experience, 48.9% of respondents have been teachers for less than 5 years and 31.9% have been at HEI for between 6 and 10 years. In addition to the profile outlined in the first stage, the qualitative sought to understand the norms that facilitate or impede load management, what their structuring factors are, and to learn about strategies teachers discovered to deal with institutional constraints.

The questionnaire included the physical, cognitive and psychological aspects recommended by Wisner (1994) to approach workload. However, as pointed out in the bibliographical research, the “notion of workload” is complex because it refers to several phenomena that are related to each other, which influence and influence each other.

⁵ Fictitious name of the HEI researched.

⁶ Fictitious name chosen by the teacher who was accompanied in her teaching routine.

interpenetrate, thus making it difficult, perhaps impossible, to isolate a variable.

In light of this proposition by Wisner (1994), the instrument used sought to classify everyday situations into three aspects. It should be noted that, despite some disagreement about the framing of this classification, there is no denying that such situations can be structuring factors for the workload for the professional category. Questions arise from the point of view of classification, even though these are everyday and concrete situations for teachers at IES Alfa.

Frameworks are not static, on the contrary, they are interdependent. This is the case, for example, when the instrument deals with the physical aspects of the workload, referring to a classroom with unfavorable environmental conditions. It is not just a matter of discussing the existence of heat in the room, since the activity performed there involves other aspects of the workload. Despite the unfavorable physical condition, it is necessary to prepare a class, which impacts the cognitive load and, at the same time, establish relationships and interactions with students, which, in turn, can impact the psychic load.

The analysis of qualitative data begins with observation of the first class, here called Class 01. This is a very significant moment, as it is when the first contacts were established between the teacher and students. This is also the moment in which the physical space of the classroom and the number of students were known, among many other aspects that will directly influence the teaching activity in terms of workload.

At the beginning of Class 01, teacher Melissa presents the Teaching Plan and schedule of dates for the subject. The Teaching Plan itself is an antecedent standard, as it is a requirement of the IES and also anchors in the past, as it is already posted in the virtual environment. At the present time, the teacher is faced with a much larger number of students in the classroom than the list she received from the course coordinator. So at the present time, some adjustments have to be made to minimize the problems arising from the entry of these new students throughout the semester, which

that refers to the future. Professor Melissa mobilizes personal and collective assets to face unforeseen events. In

the present, she says that “she needs to think about what she is going to do with students who are not on the list”, that is, she has to manage how to balance the norm with the variability inherent to work situations.

In the example in question, there are concrete variables, such as the Teaching Plan and class schedule, but there are also other aspects that are not so objective, such as, for example, the concern of teacher Melissa who addresses her own activity, the student and the HEI. She knows that there are multiple times to manage, such as class time, both this one and the following, and the work that will still be distributed and carried out by students. Her concern has a subjective meaning and can minimize several strains: her own workload throughout the semester, since she can anticipate and, for example, avoid preparing additional exercises to assign a grade. It is also possible to anticipate the demand of students who, at some point, may request replacement of assessment tasks, considering that the more exceptions, the more workload. In the course of analyzing the activity, one is faced with the past, present and future. The past is present in the teacher's experience, in the collective heritage, in the learning that has already occurred in previous situations, the present is what is being managed in the 'here and now' of the activity and, in turn, the anticipation of problems becomes it directs to the future, composing the totality of the activity in action. When striving to resolve or provide solutions to problems that occur in the classroom, it shows that the subjective experience “is based on the field of activity, which ensures the functioning of the whole, including the 'proper functioning of norms'” (LIMA, 2005) (quotes in the original). There, as in so many other work situations, the activity is managed by the subject and, paradoxically, creates the erroneous notion that norms or rules are sufficient or that they resolve work situations, leaving 'forgotten' that whoever actually gives meaning to the standards and relativizes its importance is the subject in his contextualized activity.

The “use of self” is presented categorically. At the same time that teacher Melissa makes “use of herself for herself” revealing her micromanagement commitments, in which in the space and time of the classroom, she manages or anticipates problems or unforeseen events, equally, she allows “the use of oneself for others.” In the

present case, “the use of oneself by others” appears in the form of management she carries out in the classroom, when she preserves the IES and reviews its Teaching Plan. It can be seen that they are not exclusive movements, on the contrary, they complement and interact with each other in the course of their activity. This is also not done apart from the commitments made by each professional, due to their engagement and values that guide their activity.

The monitoring highlighted the antecedent norms that give weight to the activity and how circulation, drama and choices made in everyday life occur and which impact the multiple dimensions of the workload.

Thus, as in a panopticon, the workload can be identified in a more objective way for the teaching collective and also in a more subtle and subjective way for each subject involved and involved in carrying out their teaching work.

4. CONCLUSION

The conclusions of this study point to the global workload present in teaching activities. In its quantitative data, aspects of the workload were analyzed and structuring factors were identified in the physical, cognitive and psychological aspects of the workload. The results of the quantitative research were compared to dialogue with the case study with a view to discussing the singular and the collective in workload management.

The research conclusions indicate that there are circumstances that affect all teachers, such as working hours, shifts, number of students and subjects, classroom conditions, among other aspects. And, because they have an impact on all teachers, they occupy or should occupy possible agendas for teaching representation. Despite the repercussion on the teaching collective, the impact of these same circumstances is unique.

Observing Professor Melissa's activity brought into play, in real time, the countless actions that she must mobilize to complete the task assigned to her by the institution. Thus, to develop her activity, the teacher articulates the means and instruments available, the antecedent norms, the reality of the activity in the present time, here and now, the relationship with the students, among countless other variables, renormalizing what is prescribed, mobilizing knowledge and values in its realization. This dramatic

movement engenders efforts to not only carry out the activity, but also take care of itself, considering the workload engendered in the countless developments during its completion.

Daily observation made it possible to give visibility to the way in which a teacher, based on what was mapped from the collective work context, manages and deals with the load embedded in her teaching activity, carrying out management that is individual, unique and in line with her values .

5. BIBLIOGRAPHIC REFERENCES

- BERTOLIN, J. **Avaliação da Educação Superior Brasileira**: relevância, diversidade, equidade, e eficácia do sistema em tempos de mercantilização, *Avaliação*, v 14 n 2, 351-383, jul 2009. BRASIL. Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira. Censo da educação superior: 2011 – resumo técnico. – Brasília: Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira, 2013. Disponível em http://download.inep.gov.br/educacao_superior/censo_superior/resumo_tecnico/resumo_tecnico_censo_educacao_superior_2011.pdf Acesso em Ago 2013
- BRASIL. Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira. **Censo da educação superior 2012**: resumo técnico. Brasília: INEP, 2014. Disponível em:
- <http://download.inep.gov.br/download/superior/censo/2012/resumo_tecnico_censo_educacao_superior_2012.pdf>.
- Acesso em: 14 nov. 2014.
- GIL, Antônio Carlos. **Como elaborar projetos de pesquisa**. 4 ed. São Paulo: Atlas, 2002.
- GUÉRIN, F. *et al.* **Compreender o trabalho para transformá-lo**: a prática da ergonomia. São Paulo: Edgard Blucher, 2001.
- LIMA, F. P. A. Norma e atividade humana: modelos dinâmicos da prescrição e historicidade das situações de trabalho. In: DIEESE; CESIT (Org.). **Trabalho e abordagem pluridisciplinar**: estudos Brasil, França e Argentina. São Paulo: DIEESE; Campinas: CSIT/IE/Unicamp, 2005.
- LIMA, F. P. A. Carga de Trabalho. In: OLIVEIRA, D. A.;
- DUARTE, A. M. C.; VIEIRA, L. M. F. **Dicionário: trabalho, profissão e condição docente**. Belo Horizonte: UFMG. Faculdade de Educação, 2010. CDROM.
- SCHWARTZ, Y. **Trabalho e usos de si**. Pro-posições, São Paulo, v.1, n.5, p.34-50, julho, 2000.
- SCHWARTZ, Y. Trabalho e gestão: níveis, critérios, instâncias. In: FIGUEIREDO, M. *et al.* (Orgs.). **Labirintos do Trabalho**: interrogações e olhares sobre o trabalho vivo. Rio de Janeiro: DP&A, 2004c.
- SCHWARTZ, Y. **Entrevista**: Yves Schwartz. *Revista Trabalho, Educação e Saúde*, Rio de Janeiro: Fundação Oswaldo Cruz, v. 4, n. 2, p. 457-466, 2006.
- SCHWARTZ, Y.; DURRIVE, L. (Orgs.). **Trabalho e Ergologia**: conversas sobre a atividade humana. 2. ed. Niterói: Editora da UFF, 2010.

SCHWARTZ, Y. Manifesto por um ergoengajamento. In: BENDASSOLLI, P.; SOBOLL, L., (Orgs.). **Clínicas do trabalho**. São Paulo: Atlas, 2011.

TARDIF, M. A carga de trabalho dos professores. In: TARDIF, M., LESSARD, C. **O trabalho docente: elementos para uma teoria da docência como profissão de interações humanas**. Petrópolis: Vozes, 2012.

WISNER, A. A inteligência no trabalho: textos selecionados de ergonomia. São Paulo: Fundacentro. 1994.