
Educational Environment Ecology as Factor of University Teacher Health Saving in Context of Education and Science Reforms in Modern Russia

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Abstract

The relevance of the article is because the modern era of globalization and rapid digital development requires timely transformation of all social institutions, including the Institute of higher education, which in turn entails a change in the environment of the educational environment for University teachers themselves, which affects their health, workload and personal life. The article considers the ecology of the educational environment as a factor of health saving of teachers in the conditions of reforming education and science. It is shown that in the modern University in the conditions of reform the ecology of the educational environment for teachers is violated: in universities there are no conditions necessary to find a certain balance that would allow quickly and easily perform the full range of diverse tasks facing teachers, there are no formed templates, programs that would simplify the process of working with electronic document circulation. Now, all the requirements set by the management only complicate, not optimize the work of teachers, which in turn violates the ecology of the educational environment of teachers. It is determined that most of their working time teachers spend not on teaching and working with students, but on electronic document management, filling out various types of papers, working with a computer both for themselves and for senior colleagues. It is revealed that in the personal system of teachers' values in the priority of the activities that are most expected within the declared profession are research, getting into various ratings, professional growth, as well as teaching and working with students. The article also shows the forms of teachers' activity at the University (teaching, work with students, research, administrative work, and work with electronic documents). The data obtained in the work can be used in the psychology of labor, social psychology, pedagogy, psychology of education, as well as for further theoretical development of this issue.

Keywords: educational technologies, teachers, ecology of educational environment, health care

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INTRODUCTION

The second half of the XX century forever changed the face and the very essence of the system of higher education. Changes in the organizational structure and socio-economic needs of society have led to changes in the institution of education, its goals, objectives and content (Ladyzhets and Saburova 1996, Pokrovsky 2004, Zaslavskaya 1997, Dolzhenko 1995). It is the transformation in socio-economic terms, the emergence of post-industrial type of society demanded

from the system of higher education restructuring of its basic parameters (Barnett 2001, Povzun 2005, Kislov and Shmurygina 2009). Taking into account all these changes, trends and processes, the question of the concept, mission, tasks of the modern University arise, which, on the one hand, are becoming more democratic, on the other - show the features of neoliberalism and *managerealizm*. In the global aspect, higher education has become the only tool that is able to adequately and quickly respond to new demands

from the intellectual needs of society (Newman 1998, Humboldt 2002, Manakhova 2004). This seemed all the more achievable because, thanks to the processes of globalization and Informatization, the modern University has gone beyond its traditional borders and has become a more flexible, socially diversified institution. For example, it began to include open forms of distance and online learning that made education accessible to citizens with disabilities (Jaspers 2006, Vorobyova 2012, Popova 2001). Thus, through the system of open education, there is a transition from the principle of *education for life* to the principle of *education through life*. The University, in fact, turns out to be everywhere where there is a computer with access to the Internet; turns into an intercultural medium. The purpose of open education is to prepare students for full and effective participation in public and professional fields in the information society. In addition, the modern educational paradigm has changed under the influence of new demands of society and its economic and cultural needs: a single state or Corporation less regulates the labor market. Under these conditions, it becomes impossible to provide all students with work, and the knowledge economy offers them to design their employment on their own, building their career strategies from the University bench (Abramov et al. 2015, Rusanova 2011).

LITERATURE REVIEW

The modern University manifests as democratic properties, being a kind of springboard and training platform that offers students all the conditions for their self-determination and self-realization, and on the other hand, carries the qualities of the neoliberal paradigm, commercializing science and higher education in General (Strogetskaia 2009, Ortega y Gasset 2010, Jaspers 2006).

The system of higher education in Russia has its own specifics, which is explained by the historical development of our country, both global and local factors and trends, and it must be considered in a separate order to show how fundamentally changed the structure of the Russian University under the influence of global trends in the development of higher education.

In the analysis of Russian higher education, special attention should be paid to the role of the state in the structural dynamics, as the Russian system has been and remains deeply centralized and has always been under the control of the state (Mironov 2001, Klyachko 2011).

In the case of orientation to the population-ecological approach, another important factor in the processes of structural changes in the system of modern Russian education is the role of its previous development in the course of post-Soviet transformations (Cherdymova et al. 2019, Faleeva 2019, Cherdymova et al. 2018, Bubnova et al. 2018).

In the analysis of the concept of *environment*, a set of conditions and influences surrounding the person is understood. A.I. Artyukhina (2007) points out that in modern scientific and pedagogical literature there are two views on the concept of *ecology of the educational environment*. On the one hand – "this is a set of material and moral conditions for the successful implementation of environmental education, on the other – the ecology of the educational environment is understood as health-saving" (Artyukhina 2007). In our article, we adhere to the second definition and consider the ecology of the educational environment as a factor in the health saving of teachers in the context of reforms of education and science in modern Russia.

In the system of multilevel higher education, the qualitative characteristics of the educational environment's ecology are system integrity; variability; interactivity; subjectivity; openness; poly-functionality; excessive information saturation; dynamics; functional comfort; multimedia; emotional tension.

Innovation policy of modern universities can be defined as a set of attitudes and methods of influence that universities use to create modern educational products. The innovative type of the University development involves the development of innovation as a priority and key feature of the University activity, as the main driving force of its development and preservation of its leading positions in the system of higher education (Altbach 2010, Mansurov 2008, Yakupova 2017).

A key trend in the modern development of higher education is a powerful enrichment of universities with modern information and communication technologies, the widespread use of the Internet and the intensive development of distance learning of students.

STUDY OBJECTIVES AND SAMPLE

During the research, we solved the following tasks:

- To find out which of the selected parameters entails a violation of the ecology of the educational environment for teachers in the context of reforms of education and science in modern Russia:

- To identify what types of professional activities are engaged in teachers of the modern University;
- To analyze the scope of functions and activities that teachers have to perform;
- To find out the sequence of work distribution among teachers according to the degree of importance of activity in the labor process;
- To determine which activities for teachers are the most important in their personal system of values and what they would like to give the maximum amount of time;
- To describe how teachers are satisfied with the budget and structure of their working time;
- To identify the problems encountered by teachers in the allocation of working time;
- To analyze the ratio of working and personal time in the life of teachers.

The study interviewed respondents of three age groups (from 23 to 35 years, from 36 to 45 years, from 46 to 55 years). The first group corresponds to teachers who are starting their scientific career, with minimal teaching experience, but at the same time, the most *well informed* in the field of interaction with modern information technology. The second group takes an intermediate position, when the teacher about 10 years is working at the University, familiar with its internal administrative and managerial structures, and has sufficient experience in working with computer programs of the University. The third group includes teachers working in the higher education system for more than 15 years, with a high personal status, high academic degree, position, and who are faced with a *technological imperative* in adulthood. The average age of respondents was 43 years, the minimum working experience of informants - 3 years, and the maximum - 27 years. In the first and second groups, three people were interviewed, in the third group - 6, which is explained by the General trend of aging of the teaching staff.

EDUCATIONAL ENVIRONMENT ECOLOGY AND DISTRIBUTION OF UNIVERSITY TEACHERS WORKING TIME

First, the study raised the question of what kinds of professional activities teachers are engaged in modern University, how this affects the ecology of the educational environment, their health and well-being.

As it turned out from the interviews, in addition to conducting lectures, curating term papers and theses, writing research papers, conducting various forms of administration, supervision and moderation, teachers need a significant part of their working time to spend on working with electronic document management and computer systems of the University in principle. Currently, 89% of teachers noted it. At the same time, the answers to this question, firstly, were the same both in terms of the performance of all activities by each of the respondents, and in terms of the total amount of time spent on the execution of works related to various computer systems, software, e-mail, downloading materials to the Department or University sites, etc.

From the answers of the respondents it is not difficult to trace that most of their time they spend on work in various computer programs, both related directly to the work of the University (maintaining the website of the University or Department, downloading the necessary materials into the computer program, and necessary for their personal work - in e-mail, in the official student communities in social networks, in various applications and so on. Some respondents (43%) note that the interest in working with electronic systems depends not so much on the age and the necessary competencies for such work, but on the lack of proper amount of motivation for its implementation or lack of working time, which affects the overall result of the Department or faculty.

It is natural that with the increase in work in the field of electronic document management and computer systems, teachers began to spend much less time on the activities that were initially determined as the primary in their profession and the most anticipated, namely - to engage in science and research, publication activity, participation in various research projects, collaborations of both national and international scale. This trend was noted by 92% of teachers. Thus, teachers become, we can say, hostages of circumstances: forced to spend most of their working time on the maintenance of electronic document management, they, first, cannot properly engage in science and conduct research, and secondly, to present the results of these studies to grow professionally.

The majority of teachers (62%) ask questions about the lack of necessary technical staff, secretaries in the departments, who could instead perform the necessary work in electronic systems and thus *unload* the teaching staff. According to respondents, very often they find themselves in a situation of urgent necessary work,

which they are asked to do by a higher management, from which it is often impossible to refuse. At the same time, the daily processing reaches up to 8-10 hours, with an average working day of 8 hours, and many teachers even have to abandon the annual paid leave to perform all their work on time.

TRANSFORMATIONAL OF EDUCATIONAL ENVIRONMENT ECOLOGICAL NATURE IN MODERN UNIVERSITY

Academic systems in many countries are currently in a state of active change, which is caused by a variety of social and information technology factors: an increase in the segment of online education, the transfer of library resources in electronic systems, increasing competition from the non-academic sector, which produces new knowledge and provides various educational services.

In addition to the above-mentioned factors, the Russian academic system is under additional pressure due to the rapid transition from the Soviet model to European and international standards, as well as the goal set by the state to take an active position in the field of competition in the global knowledge market. The whole range of initiatives and reforms, both external and internal, makes the system of higher professional education radically and in the shortest possible time to adapt the features of the Soviet model to new tasks, requirements, parameters of work in the modern educational system.

In connection with these *overloads*, in the conditions of break of former organizational hierarchies, new roles of academic professionals which are defined by challenges of the present time are outlined, and former roles recede on a background or at all lose the value that, respectively, is reflected in ecology of the educational environment as a factor of health saving of teachers. However, new roles or even types of academic professionalism cannot always be discovered openly, so they can only be discovered through research.

That is why the question of how to change the ecology of the educational environment for the University teacher in the context of reforms of education and science in modern Russia becomes acute,

as in this period of time working time budget of higher education's modern teachers is distributed, especially since today these areas of research again become relevant due to the acceleration of all production processes.

CONCLUSION

The essence of the profession of modern universities' teachers in the reform of education and science is gradually changing: they begin to perform the functions of managers of educational processes, changing their role in relation to students. Despite the introduction of managerial innovations in the system of higher education, which are designed to facilitate the work of academic staff, the latter are also forced to be involved in management processes in addition to fulfilling their main tasks, which, with the associated stress, lack of monetary compensation and a sufficient amount of personal time, frustrates teachers, which, accordingly, affects their health and well-being. In connection with the breakdown of the Soviet educational system, which was very hierarchical and where the teacher held a special status, all the previous status-role hierarchy erased, and to achieve a new status, based on new requirements, modern teachers have to put a lot of effort. Despite the fact that it is the academic staff that make up the key link of the modern *knowledge society*, producing the most relevant and in-demand product of the post-industrial era, today the social status of teachers has a complex structure. It is influenced by a number of factors that have developed because of the processes of neoliberalism, managerialism, intensification of labor, the inability to provide sufficient remuneration for their activities and the scrapping of previous status-role models.

Summing up the above-mentioned, it should be noted that currently there is a serious transformation of the environmental friendliness of the educational environment as a factor of health saving of University teachers, which has a negative impact on the state of teachers in emotional, professional, economic terms. Reforms in science and education of the Russian Federation led to increased administrative pressure, the role of bureaucracy in the work of the University increased.

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