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DEVELOPMENT OF A SYSTEM FOR ASSESSING THE QUALITY OF THE WORK OF UNIVERSITY RESEARCH AND TEACHING STAFF TO IMPROVE THE EDUCATIONAL ENVIRONMENT

DESARROLLO DE UN SISTEMA DE EVALUACIÓN DE LA CALIDAD DEL TRABAJO DEL PERSONAL INVESTIGADOR Y DOCENTE UNIVERSITARIO PARA LA MEJORA DEL ENTORNO EDUCATIVO

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ABSTRACT

To improve the quality of knowledge and the effectiveness of the higher education system, it is necessary to evaluate the professional activity of teachers. The analysis of the work of a research and teaching staff member requires the use of appropriate methods that consider the features of the functioning of a higher education institution. This paper aims to evaluate the effectiveness of university research and teaching staff, considering students' opinions. To achieve the goal set in the study, the following research methods were used: theoretical generalization, structural and logical analysis and synthesis, and the anonymous survey method. The paper describes the content and essence of the evaluation of research and teaching staff at higher education institutions, as well as the criteria for evaluating the professionalism of a teacher by students. It also presents the results of students' evaluation of the quality of teachers' work at the Faculty of Philology of the Peoples' Friendship University of Russia. The authors conclude that to develop higher education, the evaluation of the activities of research and teaching staff should be supplemented with indicators of the student-centered evaluation of the educational process. Only an integrated approach to the use of quantitative and qualitative evaluation indicators will give objective results of a teacher's activities and their contribution to improving the quality of higher education.

Keywords:

Higher education, research and teaching staff, teachers, quality of teaching work.

RESUMEN

Para mejorar la calidad del conocimiento y la eficacia del sistema de educación superior, es necesario evaluar la actividad profesional de los docentes. El análisis del trabajo de un miembro del personal investigador y docente requiere el uso de métodos adecuados que consideren las características del funcionamiento de una institución de educación superior. Este trabajo tiene como objetivo evaluar la eficacia de la investigación y del profesorado universitario, considerando las opiniones de los estudiantes. Para lograr el objetivo planteado en el estudio se utilizaron los siguientes métodos de investigación: generalización teórica, análisis y síntesis estructural y lógico y el método de encuesta anónima. El artículo describe el contenido y esencia de la evaluación del personal investigador y docente de las instituciones de educación superior, así como los criterios para evaluar la profesionalidad de un docente por parte de los estudiantes. También se presentan los resultados de la evaluación de los estudiantes sobre la calidad del trabajo de los profesores de la Facultad de Filología de la Universidad Rusa de la Amistad de los Pueblos que lleva el nombre de Patrice

Lumumba. Los autores concluyen que para desarrollar la educación superior, la evaluación de las actividades del personal investigador y docente debe complementarse con indicadores de evaluación del proceso educativo centrado en el estudiante. Sólo un enfoque integrado del uso de indicadores de evaluación cuantitativos y cualitativos dará resultados objetivos de las actividades de un docente y su contribución a la mejora de la calidad de la educación superior.

Palabras clave:

Educación superior, personal investigador y docente, docentes, calidad del trabajo docente. entrepreneurship promotion. It is concluded that a good business organization is constantly growing with productive projects, but properly structured.

INTRODUCTION

A university's competitiveness in the market for educational services is determined by many factors. An important role is played by the following: the theoretical and practical relevance of the educational and methodological content in use; the quality of education and control over the implementation of educational activities; the stability of communication with employers; the possibility of state support; the effectiveness of the internal management system. Another important factor in a university's competitiveness is the quality of human resources, primarily, research and teaching staff (RTS) (Kolganov et al., 2022).

The personality of a teacher and the level of their professional training play an important role in education (Hernández García de Velazco, 2022). Without a highly professional teacher, it is impossible to provide quality training for the student. Thus, the modern university teacher should have several professional and cultural competencies, be aware of new theories and technologies, and apply them not only in their subject area but also in pedagogical and innovative spheres (Miloradov & Eidlina, 2022). The modern teacher is a researcher, translator of knowledge, consultant, organizer of various activities, navigator and motivator in the formation of students' competencies, supervisor and curator of their work, etc.

Quality control of a teacher's work is important but difficult (Gadzaova et al., 2023a). Currently, universities work in a situation where each educational institution uses its methods. Such developments are based on the joint activities of the RTS at universities and certain efforts of their administrations.

The introduction of a system for evaluating the effectiveness of educational activities based on a personal

assessment of each teacher has a positive effect on the activities of the RTS. It allows not only considering and comparing the quantitative and qualitative characteristics of their professional activity but also creating economic motivational mechanisms for the effective development of their university (Otrokov et al., 2023).

It is important not only to evaluate the work of the representatives of the RTS at different departments but also the contribution of each teacher to the work of their departments. Even more important is the purposeful and effective activity of each structural unit for solving tactical and strategic tasks facing the university (Titenkova et al., 2022).

There is practically no scientific substantiation in the literature for a comprehensive analysis of the results of teachers' activities, and most researchers consider certain components of internal assessment that are not integrated into a single system. Thus, the formation and application of sound methods and models for evaluating the activities of higher education institutions to manage the effectiveness of this activity in the system of knowledge quality formation is relevant. The social significance of solving this issue lies in the direct and indirect impact of a teacher's assessment procedure on the quality of educational services.

The issue of assessing the quality of the work of a higher education teacher is considered by many researchers. They note that a strategic means of improving the quality of higher education is the introduction of a transparent system for monitoring and evaluating the development of teaching staff and coordinating the professional development of teachers with motivational activities.

Various tasks are set before evaluating the activities of the RTS (Angermuller, 2017; Brogt, 2020):

1. to identify and evaluate the effectiveness and quality of the professional activity of the RTS for a certain period;
2. to establish a personal rating of the RTS and the department;
3. to collect material, the processing of which will allow the management of the university to make managerial decisions on the personnel potential of the university, professional development of the RTS, the creation of favorable working conditions, and the development of their professional competence;
4. to determine and evaluate the professional achievements of RTS and plan their further growth.

Research shows that the evaluation of a teacher's activity is carried out in the fields of the organizational and

methodological aspects of conducting classes (Grishkin, 2019); the level of communicative culture development; the presence of professionally important personality traits that ensure the effectiveness of the behavioral side of the teacher's activity and their relationship with students.

According to Valko (2018), the evaluation of a teacher's work is determined not only by the effectiveness of their teaching or the results of research activity but also by the systematic improvement of pedagogical skills, the desire for self-improvement, participation in scientific conferences, holding public events, attitude to work, past achievements, the effectiveness of using individual teaching methods, etc. Sometimes, when assessing the quality of the work of the RTS, the formal and informal rating of a teacher among colleagues and students, the opinion of the educational and methodological council, the content of lecture courses, the desire for improvement, the introduction of innovative technologies, etc. are considered (Semenova et al., 2022).

Several Russian universities are developing various methods for evaluating the effectiveness of the RTS, but there are no generally accepted methods. For example, when conducting competitions for filling vacant positions, certification, and selection of candidates for promotion, it is traditionally provided for the preparation of a reasoned conclusion containing a brief description and assessment of the educational, methodological, scientific, and educational work of a teacher and their professional development (Gadzaova et al., 2023b). A motivated conclusion is drawn up by the staff of the department where the teacher works, based on the study of their contribution to the types of work and attendance of several of their lectures and practical classes, followed by analysis and evaluation of professional and methodological skills. Thus, the main experts in assessing the activity of a teacher are other teachers and the head of the department.

The evaluation of departments is inherent in Russian universities. We regard this as a positive trait since the RTS are allowed to see and compare the collective achievement with the achievements of other departments and to evaluate their activities more objectively. The work of Natochaya & Zubkova (2019), which introduces the information model of the system for forming rating lists of university departments and the system of indicators for determining the rating of a department, deserves attention.

The evaluation of the RTS activities at universities requires a proper information system through which information is collected, processed, stored, etc. To do this, universities create appropriate information systems. The paper of Lazarenko et al. (2016), substantiates the place and role of RTS ratings in the system of state quality management

of higher education. It emphasizes the need for analytical and predictive processing of the results, comparing the achievements and potential of the RTS based on the results of several annual ratings.

Special attention should be paid to the participation of direct consumers of educational services, i.e., undergraduate, postgraduate, and doctoral students in the RTS assessment procedure described in several studies (Otrokov et al., 2023; Denisova et al., 2023), which present criteria for assessing the quality of teachers' pedagogical activity.

The analysis of literary sources concerning the issue allows us to find similar and different approaches to the assessment of the activities of the RTS in Russian and Western universities. The similarity is manifested in the autonomy in the evaluation and interpretation of the results. The main difference is that the generally accepted evaluation criteria are the scientific achievements of the RTS, and the indicators are their publications in nationally and internationally indexed journals (Nerantzi & Chatzidamianos, 2018). This can be explained by the fact that in the global rankings, the prestige of universities is largely determined by the achievements of the teaching staff in research, rather than teaching. The following features are new compared to Russian practices (Darroch & Colledge, 2016; De Fraja et al., 2019):

- indication of the plans for the next year and the help expected from the management, as well as the prospects for professional growth in the RTS self-assessment form;
- the assessment focuses on the professional development of a teacher and the annual growth of achievements, in particular, the main achievements and difficulties in achieving the set tasks and opportunities for professional growth and areas of additional training;
- evaluation of the RTS activity is an integral part of professional career management;
- not the RTS are subject to evaluation, but the disciplines taught by them according to the following criteria: the quality and usefulness of the discipline, the quality and effectiveness of its teaching, and the overall assessment.

As stated in the study of Bhalla & Welch (2019), in the quality assessment of the work performed by RTS, rating evaluation prevails where attention is focused on quantitative indicators of the teacher's work and not the qualitative criteria of pedagogical activity. The rating assessment of a teacher's educational activity is influenced by the number of completed academic hours. When evaluating methodological and research work, the dominant role is played by the number of published methodological recommendations and their volume (in printed sheets), the number of

articles, monographs, and talks at scientific conferences. The effectiveness of educational work is evaluated by the number of educational events (competitions, tournaments, excursions, conversations with students, etc.). However, a teacher's lecturing skills or ability to apply advanced didactic technologies, pedagogical techniques, and teaching methods are not considered.

Thus, the purpose of the study is to assess the effectiveness of university RTS, considering students' opinions.

MATERIALS AND METHODS

In the first stage of the study, we selected scientific sources on the issue with a restriction on the publication date (not older than 15 years). To achieve the set goal, we determined an indicative set of theoretical research methods, such as theoretical generalization to understand the content and essence of the evaluation of RTS at higher education institutions, as well as structural and logical analysis and synthesis to determine the criteria for evaluating the quality of a teacher's work by students.

In the second stage, the RTS was evaluated from the students' point of view. Students' assessment of the quality of a teacher's work was carried out using an anonymous questionnaire based on several criteria (Table 1).

Table 1. Criteria for evaluating the quality of a teacher's work by students

No.	Criterion	Rating, in points
1	Accessibility, consistency, and clarity of teaching material	
2	Application of innovative technologies in the educational process	
3	Motivation for self-education, development of creative abilities and personal qualities	
4	Ability to encourage and maintain the interest of the audience in the subject	
5	Organization of students' research work	
6	Objectivity in the evaluation of students' knowledge	
7	Standard of speech and clarity of diction	
8	Kindness and tact towards students	
9	Ability to create a positive microclimate in the audience	
10	Professional and personal qualities of the teacher that meet students' ideas about a teacher of the highest scale	

Source: Preparation of authors

Students of different courses and groups working with teachers took part in the assessment. Each indicator of the questionnaire (1-10) was evaluated based on a 10-point scale, and the maximum amount of points was 100. Then the average value of each indicator was calculated. A teacher's overall assessment (X_{overall}) from the students' point of view was defined as the sum of the average values of each indicator divided by 100 (≤ 1).

If $0.85 \leq X_{\text{overall}} \leq 1$, the teacher is characterized by a high level of professionalism, enjoys authority among students, and skillfully forms their interest not only in their subject but also in research work and self-education, which positively affects the quality of higher education (the «successful» teacher group);

If $0.45 \leq X_{\text{overall}} \leq 0.84$, the level of professionalism of the teacher is satisfactory. However, there are some shortcomings in their work as an RTS member, which are indicated by the evaluation scores of one or another indicator (the «quite successful» group);

If $0 \leq X_{\text{overall}} \leq 0.44$, the level of pedagogical skill of the teacher is very low and does not meet the requirements of a higher education institution (the «problematic» group).

The participants of the study were the students of the Faculty of Philology at the *Peoples' Friendship University of Russia* (125) from the Foreign Language Department (FLD), General and Russian Linguistics Department (GRLD), Russian and Foreign Literature Department (RFLD), and Journalism Theory and History Department (JTHD).

RESULTS AND DISCUSSION

The results of students' assessment of the teachers' quality of work at the Faculty of Philology are presented in Table 2.

Table 2. Results of students' assessment of the teachers' work quality

Groups	Measurement unit	Departments			
		FLD	GRLD	RFLD	JTHD
Successful	%	27.9	34.6	35.7	40.6
	people	12	9	10	13
Quite successful	%	58.1	53.9	53.6	50.0
	people	25	14	15	16
Problematic	%	14.0	11.5	10.7	9.4
	people	6	3	3	3
Number of RTS	people	43	26	28	32

Source: Preparation of authors

The assessment showed that «successful» teachers were most represented at the JTHD, which also had the lowest proportion of «problematic» teachers (9.4%). The share of «problematic» teachers on the faculty ranged from 9-14%, and the maximum number of them (14.0% of the department) worked at the FLD.

Ten criteria were offered to students as the main indicators for assessing the professionalism of a teacher, which partially coincided with the proposals of some researchers on the selection of criteria for evaluating the professional activity of the RTS by students (Nerantzi & Chatzidamianos, 2018): the ability to interest students in studying a particular academic discipline; the scientific background and the skill to teach an academic subject; the wide awareness on the discipline; the mentality and outlook; the quality of teaching the discipline and the ability to organize the educational process in a higher education institution; the ability to explain new educational material; the oratorical abilities; the objectivity and accuracy in the learning process; the ability to prepare available educational material; the use of additional material on the subject; the ability to eliminate difficulties in the process of studying an academic discipline; honesty and fairness in determining the qualitative level of knowledge of students; organizational abilities to manage a group; relationship with students; the ability to teach students to ask questions and conduct a conversation and develop critical thinking among students and their ability to express their own opinion; understanding and respect for students as unique personalities; the pedagogical ability to help students.

The list shows that students mainly evaluate the educational, methodological, and organizational activities of the RTS and do it from different positions. This task is much more difficult than it may seem. Universities provide educational services to students whose learning motivation can differ considerably (Denisova et al., 2023). Some are only interested in obtaining a diploma of higher education, others are motivated to gain knowledge and form professional competence, while yet others dream of research work. Each of these groups perceives the work of the same teacher in different ways. Consequently, the points teachers receive from them are significantly different. The work of Brogt (2020), describes the traits and qualities of the RTS that students prefer, and it is established that it is important for them that the teacher is a bright personality who motivates self-development by example.

Attention should be paid to the 12 qualities of effective teachers based on a long-term study of the qualities of a teacher by analyzing essays of college students: 1) readiness for the practical seminar (knowledge of the material, timely start and completion of the class); 2) optimistic, positive attitude towards students and teaching activities in general (they can set up an optimistic mood for students or note the positive aspects of their work); 3) high expectations towards all students (belief that all students will achieve success); 4) creativity (willingness to introduce new learning technologies, the use of non-standard and sometimes extraordinary methods in teaching); 5) honesty (providing the same opportunities for all students, transparent and fair assessment); 6) personal approach to everyone, accessibility for students (showing interest in students, their views and life, the transfer of their own experience to them); 7) creating a relaxed and comfortable atmosphere in the classroom (can form a sense of belonging to the team for each student); 8) compassion (understanding the student's problems, the ability to put themselves in the student's shoes); 9) a sense

of humor (do not take everything too seriously and make learning fun); 10) respect for students (never intentionally humiliate students); 11) the ability to forgive (do not hold a grudge against students for inappropriate behavior, can start each lesson with a clean slate); 12) the ability to admit their mistakes. It was found that students paid much more attention to a teacher's attitude toward students than to their competence in the chosen field. This ranking of indicators demonstrated that the most important quality of the ideal teacher, according to students, was their sociability.

CONCLUSIONS

The assessment of the quality of university RTS work is an information product that characterizes the professional achievements of the RTS in educational, scientific, methodological, and organizational fields and indicates their place among colleagues. The assessment of the quality of professional activity of the RTS at universities is a component of the internal quality assurance of higher education. The process and results of the evaluation of the work performed by RTS have social, professional, and pedagogical significance, allow for making optimal management decisions to ensure the quality of higher education, and, together with other measures, contribute to the formation of the positive image of the university.

Evaluating the activities of the RTS is monitoring their successes and achievements, including the effectiveness of educational and methodological work.

Currently, the methodological foundations for assessing the activities of the RTS at Russian universities are under development. The results of the assessment allow university management to choose effective ways to improve the educational environment, increase the activity of the RTS in all types of professional activities, and carry out their moral and material stimulation. This makes it possible not only to objectively characterize the state and results of the professional activity of RTS but also to predict and prevent possible shortcomings in their work and the evaluation procedure.

The results of the study indicate that the methods of evaluating the teachers' work will change, as the requirements for universities and the quality of student training are constantly growing. Only an integrated approach to the use of quantitative and qualitative assessment indicators will give objective results of teachers' activity and their contribution to improving the quality of higher education.

Further research should be aimed at substantiating the need and possibility of considering the evaluation results when developing effective incentive mechanisms for teachers.

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