

SCIENTIFIC JOURNAL

**HIGHER ECONOMIC - SOCIAL SCHOOL IN
OSTROLEKA**

4/2022(47)

Łomża, 2022

PROGRAMME BOARD

Prof. zw. dr hab. dr H.C. Antoni Mickiewicz - Zachodniopomorski Uniwersytet Technologiczny w Szczecinie, **Prof. David Gerard Alber** - Pennsylvania State University USA, **Prof. Jonathan Tuthill** - Pennsylvania State University USA, **dr hab. Andrzej Borowicz prof. UŁ** - Uniwersytet Łódzki, **prof. James W. Dunn** - Pensylwania State University USA, **dr hab. Bogusław Kaczmarek prof. UŁ** - Uniwersytet Łódzki, **dr hab. Paweł Mickiewicz, prof. ZUT** – Zachodniopomorski Uniwersytet Technologiczny w Szczecinie, **dr hab. Wojciech Popławski prof. WSB** – Wyższa Szkoła Bankowa w Toruniu, **prof. Enrique Viaña Remis** - University of Castilla-La Mancha Hiszpania, **dr hab. Wojciech Wiszniewski prof. AHNS** - Akademia Handlowa Nauk Stosowanych w Radomiu, **dr hab. Piotr Bórawski prof. UWM** - Uniwersytet Warmińsko-Mazurski w Olsztynie, **dr hab. Agnieszka Brelik prof. ZUT** – Zachodniopomorski Uniwersytet Technologiczny w Szczecinie, **dr hab. Mariola Grzybowska-Brzezińska prof. UWM** - Uniwersytet Warmińsko-Mazurski w Olsztynie, **dr Manfred Müller** - SiegmundsbürgerHausWerraquelle GmbH Niemcy, **dr Radosław Szulc** - Uniwersytet Warmińsko-Mazurski w Olsztynie, **associate professor Volodymyr Ternovsky**, – Tavriya State Agrotechnological University, Ukraina, **dr hab. Elżbieta Jadwiga Szymańska prof. SGGW** - Szkoła Główna Gospodarstwa Wiejskiego w Warszawie, **dr hab. Agnieszka Sapa, prof. UEP** – Uniwersytet Ekonomiczny w Poznaniu, **dr Kazimierz K. Parszewski** – Ostrołęckie Towarzystwo Naukowe im. A. Chętnika, **dr Marta Bloch** – Wyższa Szkoła Ekonomiczno-Społeczna w Ostrołęce, **dr inż. Iwona Pomianek** – Szkoła Główna Gospodarstwa Wiejskiego w Warszawie.

DRAFTING COMMITTEE

dr inż. Ireneusz Żuchowski (editor-in-chief), **mgr Kazimierz Krzysztof Bloch** (secretary), **dr Agnieszka Sompolska-Rzechula** (statistical editor), **mgr Alina Brulińska** (language editor), **Jeffrey Taylor** (language editor – English language), **dr hab. Bogusław Kaczmarek prof. UŁ** (theme editor),
dr hab. Andrzej Borowicz prof. UŁ (theme editor),
dr hab. Piotr Bórawski prof. UWM (theme editor), **dr hab. Mariola Grzybowska-Brzezińska prof. UWM** (theme editor)

PUBLISHER
INTERNATIONAL UNIVERSITY OF APPLIED SCIENCES IN LOMZA
18-402 Łomża, ul. Studencka 19, tel./fax. +48 86 216 94 97
www.mans.edu.pl



Punkty Informacji Europejskiej w Ostrołęce
Europe Direct



Publikacja wydana ze wsparciem
finansowym
Komisji Europejskiej w ramach projektu
Europe Direct

© Copyright by
INTERNATIONAL UNIVERSITY OF APPLIED SCIENCES IN LOMZA
Łomża, 2022

ISSN 2391 - 9167

SCIENTIFIC JOURNAL – nr 4/2022(47)

Olena Bachynska

Kamenetz-Podolsk State Institute

ORCID ID: <https://orcid.org/0000-0001-6994-469X>

THE ROLE OF MOTIVATION IN THE QUALITY ASSURANCE SYSTEM OF HIGHER EDUCATION

Introduction

The quality of higher education is a social category that determines the results of the educational process, and their compliance with the requirements and expectations of stakeholders in the formation and development of personal qualities and professional competence of an individual. The quality of training of specialists is greatly influenced by the resource support of the educational process. All the resources of higher education institutions (hereinafter referred to as HEIs) can be divided into three groups: resources that provide educational activities; infrastructure resources; renewable resources for solving strategic tasks.

The quality of higher education is achieved by meeting the requirements for the level of training of applicants, for resource support of the educational process, for planning and organization of the educational process, for research activities of teachers and students, for the final state certification of bachelors and masters, which is reflected in a number of stages of training (Fig. 1).

The most important component of the human resource of a higher education institution is its academic staff. Numerous publications on this topic demonstrate the relevance of the issues of labour incentives in higher education institutions. In particular, theoretical and practical aspects of motivation are considered in the works of O. Bilichenko, M. Doronina, A. Klymchuk, A. Mykhailov, H. Zakharchyn, N. Liubomudrova and others. The works of O. Kuzmin, L. Zhuk, Y. Maistrenko, S. Rudchenko, A. Shostakovska, G. Mukhina and others reflect certain issues of the problem of stimulating the work of employees in the field of higher education.

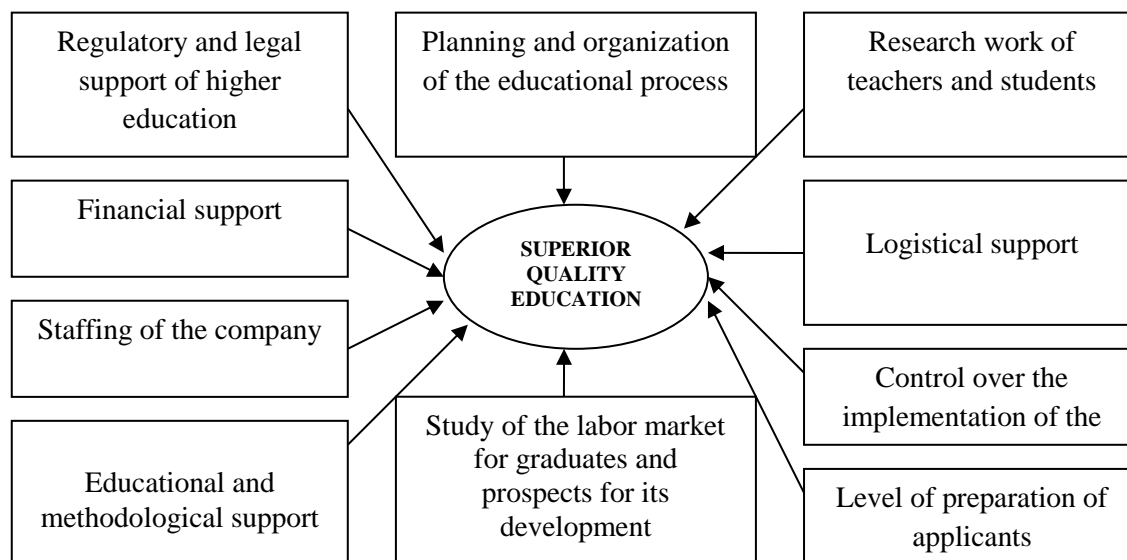


Figure 1. Stages of quality assurance in the training of specialists with higher education

Source: developed by the author

Currently, most higher education institutions do not have a clear system of motivating the work of university teachers, which leads to a decrease in their interest in the process of performing work processes and, as a result, to a decrease in labour productivity and dedication.

Purpose, subject and methods of the study

The study aims to identify the factors influencing the efficiency of the teaching staff of higher education institutions and to propose our own addition to the mechanism of motivation of teachers in the system of formation of the quality of educational services.

The subject of the study is a set of theoretical and methodological provisions and practical aspects of managing the professional development of research and teaching staff of higher education institutions in the structure of ensuring the quality of educational services.

To achieve the goal and solve the outlined tasks, the work uses general scientific and specific methods, methodological techniques and research tools, in particular:

- abstract and logical method, analysis and synthesis;
- economic and mathematical tools;
- methods of statistical data processing;

- mathematical methods and methods of economic and mathematical modelling;
- tabular and graphical methods.

Results of the research

The analysis of the number and quality of research and teaching staff of higher education institutions should consist of two main parts.

The first part is an analysis of the composition of the teaching staff in the whole HEI. This part, like the others, includes several interrelated stages (blocks).

The first stage analyzes the total number and qualification structure of research and teaching staff. The total number of employees is analyzed by categories of academic staff (Doctors of Sciences, Professors; Candidates of Sciences, Associate Professors; Senior Lecturers; Lecturers and Assistants), with the allocation of full-time and part-time employees. Such groupings make it possible to draw general conclusions about the number of academic staff, their qualification composition and dynamics during the period under review, to obtain information to identify the reasons for the movement of academic staff, and to assess the involvement of employees of other educational institutions, enterprises and institutions in the educational process.

The second stage involves analyzing the age composition of academic staff both in general for higher education institutions and in each category. This information is used to determine age-related changes in the composition of academic staff, the proportion of teachers of retirement age, and the prospects for staffing in the short and medium term, and to develop plans for training highly qualified teachers.

The third stage analyzes the workload of academic staff and its changes over several years, including by individual categories.

The second part of the analysis considers the number and composition of research and teaching staff involved in the training of specialists in certain areas of training and specialties [3].

As a result of numerous surveys of teachers of educational institutions and studying the experience of similar studies, scientists have developed a scheme that allows to assessment of the quality of work of the teaching staff of higher education institutions in general and each teacher in particular (Fig. 2).

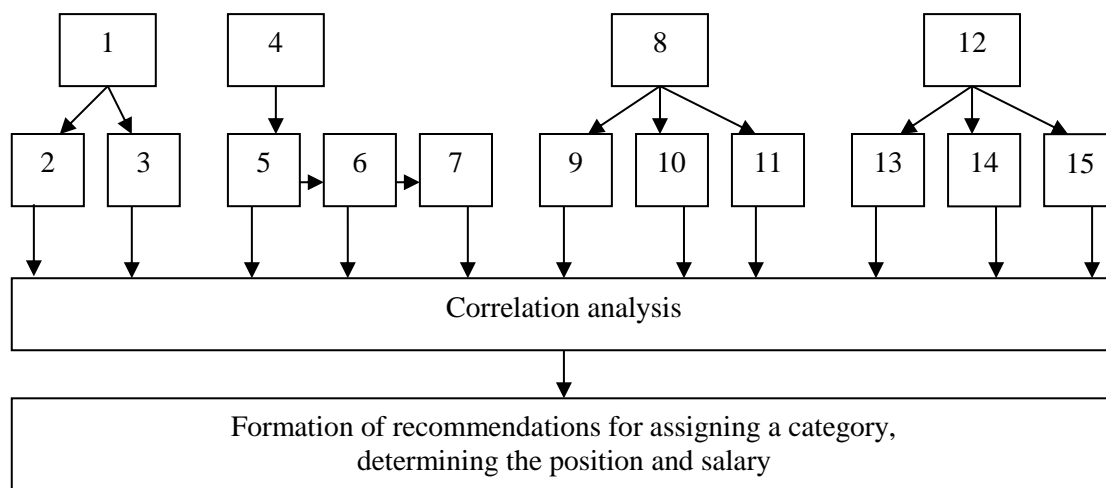


Figure 2. Scheme of conducting a study on a comprehensive assessment of the quality of teaching staff and developing recommendations for the certification commission

where, 1) socio-psychological assessment of the quality of work of teaching staff; 2) by teaching staff; 3) by students; 4) sociometric studies; 5) determination of the social status of each teacher; 6) identification of informal leaders; 7) assessment of the quality of work of each teacher by informal leaders; 8) assessment of the quality of work of teaching staff; 9) by heads of departments; 10) by each teacher of his/her colleagues; 11) by students of their teachers; 12) assessment of the quality of work of management staff; 13) assessment by the rector of the professional and managerial qualities of his/her replacement

Source: Rosenbaum M., Grechenkova L., Ignatovich M., Grechenkov S. Comprehensive socio-psychological assessment of the quality of work and professionalism of teaching staff of higher education institutions. Vysshaya shkola, 2009. № 4. C. 62-81.

The quality of work of the academic staff of higher education institutions largely determines the quality of work of specialists of various profiles - doctors, teachers, engineers, etc. - on whom the quality of life of the whole society depends.

The efficiency of teachers' work should be considered as one of the factors in ensuring the quality of educational products of higher education institutions. In turn, the performance of the teaching staff is determined by a set of factors, the implementation of which is impossible without an effective system of motivation for researchers.

The results of the work of research and teaching staff are of a long-term nature and differ significantly from the work in the production sector, which is aimed at achieving short-term material results. The performance of teachers

cannot be assessed within a short period of time, since its expected product - training of educated specialists - is a long-term process. Therefore, when developing effective mechanisms for motivating and stimulating scientific and pedagogical work, it is necessary to overcome the contradiction between temporary interest and long-term expediency.

Today, the situation with the level of brain drain from Ukraine, which is one of the largest in the world, is alarming. This is due to a number of reasons, including:

a) the outflow of highly qualified scientists from the field of education to other sectors of the economy due to the loss of interest in teaching as a way of material support and satisfaction of spiritual needs;

b) low motivation of young professionals to continue their studies and embark on scientific and pedagogical activities, which leads to the ageing of the teaching staff of higher education.

According to the State Statistics Service of Ukraine, the number of scientists has decreased by almost 18% over the past 3 years, and by 78% since 1991. The largest share of scientists left independent Ukraine in the period from 1991 to 1995, the second wave of intellectual migration occurred from 2008-2010, and the third wave - was from 2014-2015. It should be noted that the salary level of Ukrainian teachers is one of the lowest in the world. According to official government data, in 2020 the average teacher's salary is about \$250 per month (Table 1). As you can see, overall, salaries in 2020 increased by only 19.3% compared to 2018. At the same time, the requirements for the competitiveness of higher education institutions and compliance with accreditation requirements are constantly increasing, which in turn leads to a steady improvement in the qualification level of academic staff.

Table 1: Unified tariff scale of grades and coefficients for remuneration of research and teaching staff

№	Positions	Discharge	Tariff coefficients	Salary, UAH, rounded up			Deviation of 2020 to 2018.	
				2018	2019	2020	+/-	%
1	Senior laboratory assistant	6	1,45	2555	2785	3048	493	19,3
2	Assistant	16	2,79	4916	5360	5865	949	
3	Senior lecturer	17	3,0	5286	5763	6306	1020	
4	Associate Professor	19	3,42	6026	6570	7189	1163	
5	Professor	20	3,64	6414	6992	7651	1237	

6	Head of the Department	21	3,85	6784	7396	8093	1309	
7	Rector	25	4,51	7947	8664	9480	1533	

Source: State Statistics Committee of Ukraine

Motivation is an effective tool for managing the staff of a higher education institution, provided that external and internal factors of the institution's functioning are taken into account. The motivational policy of an educational institution should be based on existing theories of motivation that provide a basis for determining the system of incentives and motives.

Human needs are the main source of labour activity. Awareness of the significance of the need and the idea of the expected benefits are transformed into interest, which is an activator of the search for satisfaction of needs. At the stage of searching for means to satisfy the need, the goals of the activity are determined taking into account personal preferences, the expediency of engaging in labour activity is assessed, or the activity is abandoned due to the realization that the goals are unrealistic. The analysis of numerous theoretical studies on labour motivation has influenced the formation of the author's own vision of the motivational mechanism of the employee's labour activity (Fig. 3).

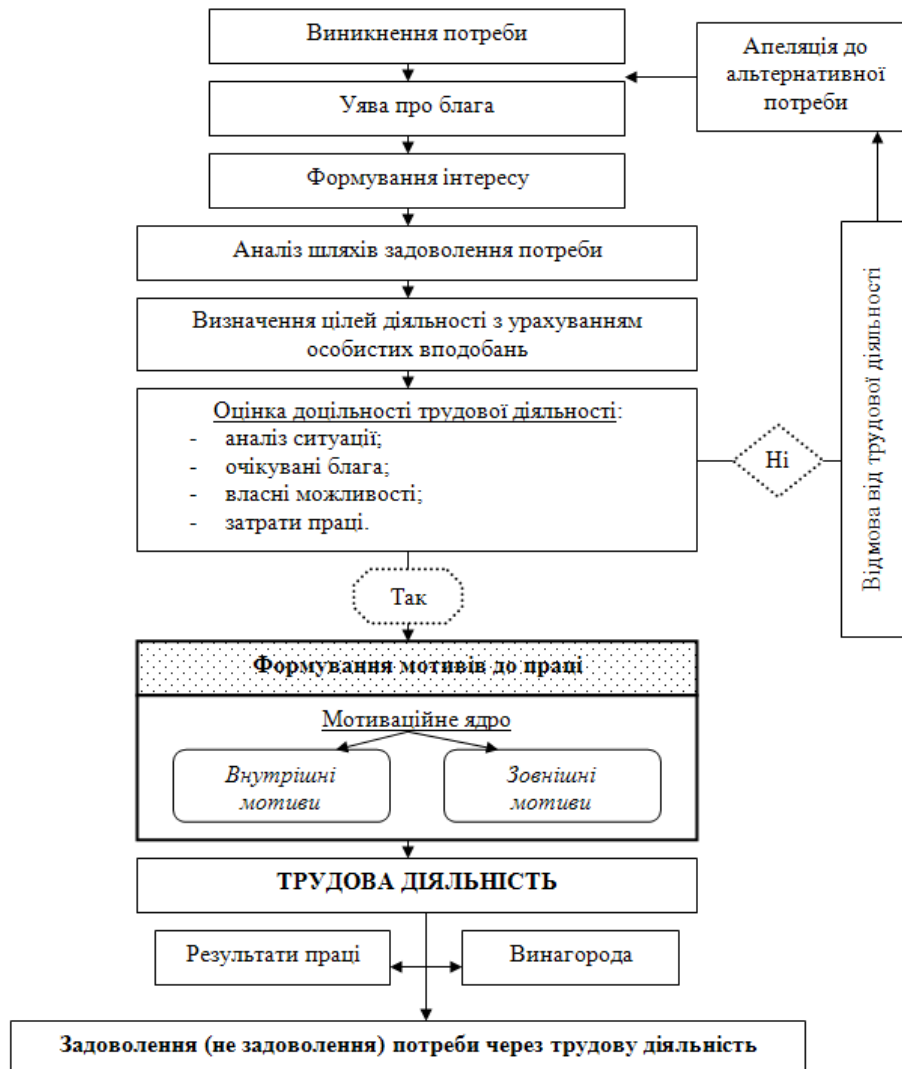


Figure 3. The mechanism of motivation of labour activity of a scientific and pedagogical worker of a higher education institution

Source: Bachynska O., Olshevskiy V. Paradigm of ensuring the competitiveness of higher education institutions in the context of modern challenges: a monograph. Lviv: Lviv University of Trade and Economics Publishing House, 2018. 276 c.

The key instrument of the motivational mechanism is the formation of a motive to work and the decision to work (or not to work) in order to satisfy a need. The motivational core includes two groups of motives: extrinsic and intrinsic.

Intrinsic motivation is related to the content of work and its significance for the employee, while extrinsic motivation is aimed at stimulating work by the company's administration.

In order to encourage teachers to engage in scientific and pedagogical activities, it is necessary to identify their attitude to motivational factors, i.e. to assess the importance and level of satisfaction of motivational needs. The technology for assessing motivational factors is carried out by the test method.

We propose to diagnose the professional motivation of higher education teachers using the methodology "Motives for Choosing a Teacher's Activity" by E. Ilyin (with our own additions in accordance with the peculiarities of the national higher education system), which is intended for a qualitative analysis of the teacher's motivational structure of his/her own pedagogical activity, to identify the most significant reasons for choosing the profession of a higher education teacher [2, p. 463].

The methodology allowed us to determine the dominant type of professional motivation of a university teacher:

1) intrinsic motivation arising from the needs of the specialist and reflecting the social and personal significance of the profession: the satisfaction that works brings due to its creative nature; opportunities to communicate with highly developed, educated people, and intellectuals; opportunities to communicate with young people; opportunities for self-expression, self-affirmation, self-realization, scientific growth; opportunities to lead the educational activities of others, etc;

2) external positive motivation, which comes from the possibility of satisfying material needs for oneself and family, material incentives; career opportunities, the possibility of obtaining a high position through scientific activity, obtaining the status of a research and teaching employee with the corresponding long-term leave, research and teaching experience, pension, etc. According to the level of importance of each motive, a conclusion was made about the extent to which the teacher's pedagogical vocation is expressed and the extent to which the accompanying and secondary motives are expressed [4].

Each teacher, answering the questionnaire, expresses his or her view of the importance of a particular motivational factor on a 10-point scale, from "1" - no importance to "10" - has the most significant impact. In the next column, the respondent is asked to measure the degree of satisfaction of needs for each motivational factor on a scale from 1 to 10. The value of "1" characterizes complete dissatisfaction with the motivational need, and "10" - is complete satisfaction (Table 2).

Table 2: Factors of work motivation of academic staff of higher education institutions

Group name	Motivational factors	Assessment.	
		<i>weighting levels</i>	<i>degree of satisfaction</i>
Self-delivery (X_2)	Interest in teaching		
	Passion for the subject area		
	Opportunity to engage in scientific work, obtain a degree, academic title		
Self-realization (X_1)	Awareness of the usefulness of their activities, the importance of educating and raising young people		
	An opportunity to contribute to science		
	Striving for self-expression		
Self-affirmation (X_4)	Willingness to share knowledge and experience		
	The desire for self-affirmation, to increase one's status and prestige		
	An opportunity to satisfy your desire for power		
Material. (X_3)	Desire to perform well-paid and socially significant work		
	Opportunity to earn extra income		
	Availability of a long vacation		
Social. (X_6)	A desire to communicate with young people		
	Desire to be among educated people		
	Public recognition of work		
Conditions. labour (X_5)	Favourable intellectual and cultural environment		
	Creative nature of work		
	No need to be at work "from call to call"		

Source: developed by the author

The motivational potential of a scientific and pedagogical employee is formed under the influence of external and internal incentives of labour activity.

To assess the level of motivational potential of a university teacher ($MPI_{\text{працівника}}$), one should add all the values of the level of importance of the motivational factor (X_i) of scientific and pedagogical activity [1]:

$$MPI_{\text{працівника}} = \sum_{i=1}^6 X_i \quad (1)$$

Next, the test results (points) are transferred to the graph of the motivational profile of a research and teaching staff member of a higher education institution (Fig. 4).



Figure 4. Model of the motivational profile of a university teacher

Source: developed by the author

As a result of the studies of the dependence of motivational potential on the degree of satisfaction of motivational needs, it is possible to build an econometric model, which will generally look like this:

$$y = \alpha_0 + \alpha_1 x_1 + \alpha_2 x_2 + \alpha_3 x_3 + \alpha_4 x_4 + \alpha_5 x_5 + \alpha_6 x_6, \quad (2)$$

where y is an indicator of motivational potential;

$x_1, x_2, x_3, x_4, x_5, x_6$ - assessment of the degree of satisfaction of motivational needs.

Creating an effective system of motivation for university staff is impossible without an important foundation in the form of a system of financial incentives. Today, specialists are not satisfied with their working conditions (outdated material and technical facilities, etc.), salaries, or prospects for scientific growth (the path from PhD to doctoral studies sometimes takes decades). When

introducing a financial incentive system, no less attention should be paid to a set of non-monetary types and forms of incentives for researchers and teachers. In his writings, A. Maslow emphasizes that not only material needs, but also other needs, such as the need for recognition and career growth, play an important role for each person.

Non-material incentives include social and psychological methods related to social relations and moral and psychological influence. They are based on the use of moral incentives to work, creating an impact on the individual through psychological techniques in order to transform an administrative task into a conscious duty, an internal human need. These methods include:

1. Forming teams, taking into account the types of personality and character of employees, creating a favourable psychological climate and creative atmosphere.
2. The manager's personal example to his/her subordinates (the image of a manager who has a motivational impact).
3. Orientation conditions, i.e. the goals of the organization, and its mission. Each employee should know them because by satisfying personal needs, he or she works to achieve the goals set for the organization.
4. Employee participation in management, i.e. participatory management.
5. Satisfaction with cultural and spiritual needs means opportunities for social communication among employees.
6. Establishment of social norms of behaviour and social incentives for team development.
7. Establishing moral sanctions and incentives, i.e. a reasonable combination of positive and negative incentives [5].

Conclusions

The motivation of a teacher's professional activity should be considered as one of the factors of his/her labour efficiency, and the effectiveness of pedagogical work as a factor of ensuring the quality of the educational process. The motivational potential of a scientific and pedagogical worker is formed under the influence of external and internal incentives for labour activity.

Thus, one of the main tasks of the management of higher education institutions should be to form a holistic mechanism for applying tangible and intangible methods of motivation, and their adaptation to the characteristics of each employee, because only the integrated use of the entire range of motivational methods can maximize the efficiency of their work.

References

1. Bachynska O., Olshevskiy V. Paradigm of ensuring the competitiveness of higher education institutions in the context of modern challenges: monograph. Lviv: Lviv University of Trade and Economics Publishing House, 2018. 276 ?.
2. Ilyin E.P. Motivation and motives. Peter: SPb, 2000. 512 ?.

3. Lomonosov A.V. Analysis of staffing of the educational process in higher education institutions of III-IV accreditation levels. *Economic space*, 2008. ? 20/1. ?. 206-216.
4. Obles I.I. Methodological tools for researching the professional adaptation of a university teacher. URL: <http://www.pedagogy-journal.kpu.zp.ua/-archive/2010/8/64.pdf>.
5. Omelchenko L.M. Methods of forming the internal motivation of the activity of scientific and pedagogical workers of higher education institutions. URL: <http://journals.nubip.edu.ua/index.php-/Pedagogica/article/viewFile/3085/3011>.
6. Rosenbaum M., Grechenkova L., Ignatovich M., Grechenkov S. Complex socio-psychological assessment of the quality of work and professionalism of teaching staff of higher education institutions. *Vysshaya shkola*, 2009. ? 4. ?. 62-81.

Abstract

The purpose of the study is to determine the factors influencing the effectiveness of the staff of the IHE and justify their own approach to the system of motivation of research and teaching staff. The subject of the research is a set of theoretical and methodological provisions and practical aspects of managing the professional development of scientific and pedagogical workers of the IHE in the structure ensuring the quality of educational services.

The article defines the category "quality of higher education" and outlines the stages at which the quality of training specialists with higher education is ensured.

It is proven that motivation is an effective tool for managing the staff of the IHE, taking into account external and internal factors of the functioning educational institution. The key tool of the motivational mechanism is the formation of motivation for work and decision-making on work (inaction) to meet the need. The motivational core includes two groups' motives: external and internal. Internal motivation is related to the content of work and its significance for the employee, and external motivation is aimed at stimulating work by the administration of the enterprise. The motivational potential of a researcher is formed under the influence of external and internal incentives to work.

The main task of the management of higher education should be the formation of a holistic mechanism for the application of tangible and intangible methods of motivating research and teaching staff.

Keywords: quality of higher education, scientific and pedagogical workers, work motivation, motivational potential, tangible and intangible incentives

JEL Classification: M00, P36,