Improving motivation systems for scientific and pedagogical staff in Kazakhstani universities: Insights and recommendations

Dilnara Zakirova*
Turan University
050013 16A Satpayev Str., Almaty, Republic of Kazakhstan

Shara Shakual
Turan University
050013 16A Satpayev Str., Almaty, Republic of Kazakhstan

Madina Abaidullayeva
Turan University
050013 16A Satpayev Str., Almaty, Republic of Kazakhstan

Assel Sissenova
Turan University
050013 16A Satpayev Str., Almaty, Republic of Kazakhstan

Raushan Makasheva
Turan University
050013 16A Satpayev Str., Almaty, Republic of Kazakhstan

Abstract

Relevance. The effectiveness of education hinges significantly on the quality and motivation of teachers, making the study of motivation systems in higher education crucial.

Purpose. The purpose of this research is to comprehensively analyse the existing motivation systems for scientific and pedagogical personnel in Kazakhstani universities. It aims to assess current levels of teacher satisfaction and formulate targeted recommendations to strengthen motivation strategies within the academic sector.

Methodology. The study employs a multifaceted approach including synthesis, comparative analysis, economic and statistical methods, and interpretation of data sourced from the Bureau of National Statistics of Kazakhstan. Additionally, insights are derived from an Internet survey conducted via Google Forms to capture diverse perspectives from university faculty.

Results. Analysis reveals nuanced dynamics in motivational factors among university teachers in Kazakhstan, highlighting varying levels of satisfaction across demographic groups and academic disciplines. Key findings underscore the importance of enhancing career advancement opportunities and implementing robust recognition mechanisms to foster teaching excellence. Aligning institutional objectives with individual aspirations emerges as critical for promoting a motivated and engaged academic workforce.

Suggested Citation:

*Corresponding author
Conclusions. To effectively enhance motivation among university teachers in Kazakhstan, tailored strategies are recommended, including performance-based incentives, targeted professional development initiatives, and supportive work environments conducive to teaching innovation.

Keywords: motivation system; digital education practices; professional development; work environment; labour behaviour.

Introduction
One of the main figures that is present in the system of higher education and carries out various kinds of transformations in relation to teaching activities is an employee who carries out pedagogical activities. In a number of studies conducted by many specialists from different countries, it is noted that today scientific and pedagogical workers of universities have found themselves in a rather difficult situation, which is caused by a decrease in their social status of a higher school employee and public recognition of their profession, personnel gap, aging and turnover of teaching staff. As one of the key issues, experts call a rapid deterioration in the emotional well-being of teachers, professional burnout, a crisis of motivation and professional identity, a semantic conflict in professional activity against the background of a significant complication of the work of the modern university teacher [1].

Motivation in the field of higher education acts as a process of conscious choice by a university teacher of goals and models of their work behavior, which can be formed and developed under the influence of a whole variety of factors, which makes it possible to determine the specifics of the employee's relationship with the objects and means of a certain work, and also it becomes possible to form the result of their activity [2]. It is worth noting that incentives for the work of a higher school teacher can be formed not only under the influence of internal (needs, values, attitudes) and external factors (incentives) together, but also under the influence exerted by the characteristic features of its interdependence with subjects, means, and the results of their own work [3].

The motivation of professional and pedagogical activity is specific in view of the fact that this type of activity is quite multifaceted, and there are also a number of factors that complicate the measurement of its results. For employees of intellectual labor, which can include TS, predominantly weighty motives of professional activity are: recognition, self-actualization and self-development, which are considered as individual components not only of labor motivation, but also the motivational environment of the individual. The key goal of an educational institution is to provide high-quality educational services to the population, and this directly depends on how motivated the teacher is to work [4; 5].

An important factor in the effective management of a higher education institution, along with regular monitoring, is the encouragement of creativity and initiative, that is, the balance through which the teacher is able to fully unleash their full potential. Creating opportunities for the creative realization of the teacher within the work program is required in order to carry out productive, results-driven preparation and conduction of classes [6]. Putting a teacher, as well as a representative of any creative profession, into a rigid framework, the energy to create and implement interesting ideas is destroyed. It is necessary to be capable of varying the ways to achieve the goals of the program, building a lesson in each case for a particular student group, selecting the material appropriate for a particular audience [7].

In the conditions of transformation of Kazakhstani universities, teaching activity attracts more and more attention of researchers. With the next reform that is taking place today in the education system of the Republic of Kazakhstan, experts note the focus of universities on teaching, the separation of science from universities, rather low funding of universities, and their scientific activities, in particular. In addition, there is a relatively low degree of freedom of teachers in forming a set of work tasks and deadlines, which can lead to subsequent experience of stress and alienation from their professional activity, which is no longer seen as work on vocation, and is perceived as executive work in the office [8]. Today, the system of higher education in the Republic of Kazakhstan is at the stage of modernization, accompanied by radical changes in the specifics of the work of the modern university teacher. This circumstance makes it necessary to search for more and more progressive approaches to creating the most effective system for managing the labor motivation of teachers of higher educational institutions, capable of bringing results [9].

The purpose of the study: to analyze the motivation system of higher school teaching staff, to assess the satisfaction of the SPW with the current motivation system that exists in the university and, based on the results of the analysis and evaluation, to formulate recommendations that will be aimed at improving the motivation system of teaching staff in universities of the Republic of Kazakhstan. Research objectives: to consider the theoretical aspects of the management of the motivation system of university teaching staff; to analyze and evaluate the existing system of motivation of TS in universities of Kazakhstan; to develop recommendations that will be aimed at improving the motivation system of TS in universities of the Republic of Kazakhstan.

Materials and Methods
The basis for this study was the scientific works of Russian, European, American and Kazakh researchers who are engaged in studying the motivation of TS working in universities. In the course of the research, the following methods were used: synthesis, comparison, economic and statistical analysis, generalization and interpretation of the results obtained, graphical representation of data.

The study of this topic by the author was carried out in three stages. The first stage, within the framework of which the author of the article conducted a study, was to consider the theoretical aspects of the motivation of SPW working in universities, to identify the elements of the motivation of teaching staff of Kazakhstani universities, the socio-psychological typology of teachers. Having considered the theoretical aspects of the research topic, the analysis of the
main indicators related to the research topic was carried out at the second stage.
The second stage of the research conducted by the author of this article was associated with the analysis of the main indicators related to the research topic. In particular, according to the official data published on the website of the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, such indicators were analyzed. These include the number of universities by forms of ownership located in the territory of Kazakhstan. The data also cover the number of students in different forms of education, the number of students by gender and age, and the number of graduates in all forms of ownership. Additionally, it includes the number of undergraduates, residency students, and doctoral students.

The analysis further details the number of teachers who work in public universities, private universities, and foreign universities. It also covers the number of full-time personnel in universities who, as of 2020-2021, hold various degrees and titles. These include an academic master’s degree, a Doctor of Philosophy (PhD) degree, a Doctor by profile degree, a Candidate of Sciences degree, an academic title of Professor, and an academic title of Associate Professor. Moreover, the data include the number of part-time employees (external part-time workers) and the number of TS (teaching staff) by age in higher education institutions, analyzed in the context of the gender aspect.

In order to understand how motivated university teachers in Kazakhstan today are motivated to work effectively, capable of bringing their high results of work, a survey was conducted among teachers from 20 universities regarding the current motivation system in their universities. The sample included 120 people who work in universities of various forms of ownership, whose average age was 42.5 years, men – 40%, women – 60%. The survey was conducted through the online application “Google Forms”. The choice of the survey format was due to the impossibility of holding face-to-face meetings and conversations with respondents, as well as the need for geographical diversification of participants. The survey was conducted from August 1 to August 30, 2021.

First, the general (emotional) attitude of teachers to the implementation of their professional activities was determined, then the teachers' satisfaction with the relationship with colleagues was assessed, the content characteristics of the relationship with colleagues within the work teams were considered, the content characteristics of the business interaction with colleagues were highlighted. Next, respondents were asked to answer a series of questions that were designed to reveal who the interviewee was, more of a scientist or a teacher, and how interested they were in doing science or teaching.

Further, the author analyzed the answers that related to the study of the significance of individual motives in the professional activity of a university teacher, as well as the answers to the question: “Why did you choose this university to work as a teacher?”. Then the author of the article analyzed the results of a point assessment of factors that have a stimulating effect on learning and development, as well as factors that can act as an obstacle to their professional growth. After that, the author analyzed the answers to the question: "Are you satisfied with the salary you receive at the university?", as well as: “Do you combine your professional teaching activities with any other?”. When working on the second question, the teachers had to assess the motives of part-time work, which may be and whether, in this regard, there is a need for self-realization, as well as the motives for expansion and enrichment of professional competence. These responses also entailed work that involved working through the answers to questions about scheduling free time with a possible reduction in the class schedule.

After that, as a result, the author of the article conducted a point-based assessment of the motives according to the degree of importance and, depending on the points received, assigned a rank to each motive. The advantage of this assessment is that this assessment took into account the gender aspect, regardless of age, academic degree, as the rates were average. Based on the results of the analysis and evaluation, the author of the article formulated recommendations aimed at improving the motivation system of TS of universities located on the territory of the Republic of Kazakhstan.

As part of the ongoing research, at the third stage, recommendations were developed aimed at improving the motivation system of teaching staff of universities located on the territory of the Republic of Kazakhstan. These proposed recommendations can be used as a basis for the development of a new motivation system in universities, both in the territory of the Republic of Kazakhstan and other CIS countries.

Results and Discussion
Motivation (from lat. movere) is considered as a push to perform certain operations; a psychophysiological process that has the ability to determine a person's behavior in a particular situation, the level of their activity and stability, setting them the direction where to move next; and also it is a person's ability to fully or partially satisfy all their needs for today [1]. The motive (lat. moveo – “I move”) is a generalized representation (vision) of material or sublime things that act as leading values for a person, capable of determining the purpose of their activity, the acquisition of which becomes the meaning of activity [1]. Psychologists, sociologists, and philosophers have been trying to describe and classify the motives/stimuli that determine the activity of each individual person over the past century [1].

Motivation is also a whole set of processes with the ability to be responsible for the motivation and activity of each [1]. Motivation – is the most important factor in improving the efficiency of all employees of the organization and the entire organization as a whole [1]. The development of an effective motivation system capable of bringing positive results in work is considered the most important indicator of the professional skills of the head of the university [2]. Motivational incentives work only if they are carried out on a regular basis, in this regard, they take into account both external and internal motivators, their interrelationships and consideration of personal qualities and needs of personnel [2].

In the current economic conditions, the creation and development of an all-encompassing system of personnel motivation is for many organizations the main link in the management system of most organizations. Each
organization tries to determine, on the basis of surveys conducted, to what extent employees are motivated, since their attitude to the goals of the organization depends on this, as well as the ability to achieve and guarantee the desired result, because this is the basis for the successful work of the organization as a whole [1]. Many experts focus on two key causes of demotivation: material dissatisfaction and psychological discomfort. At the same time, various factors may be prerequisites for lowering the level of motivation [1; 4]. The effectiveness of work motivation is determined by the extent to which the management tools and methods used can lead to the solution of any organizational tasks [4]. The success of activities aimed at improving the motivation system is determined by the correspondence of the results that were achieved over a certain period of time after the introduction of the motivation program and the expenses incurred for its implementation.

Methods of motivation of university teachers, which are used today, have a number of difficulties. Any leader thinks about how to accurately encourage employees to carry out professional activities, yet without spending a significant amount of money, but at the same time with the highest possible results [4]. The formation of a successful motivation system for university teachers is one of the most time-consuming practical issues of modern universities [5]. In personnel management, the analysis and improvement of all kinds of work incentives, the development of the latest forms, methods and systems of incentive organization are constantly carried out [6].

In order to develop an effective motivation system, many universities monitor the degree of employee satisfaction with the current motivation system and analyze its flaws, as well as study the positive experience of motivation and stimulation demonstrated by foreign universities. The most interesting and progressive motivators and incentives are processed by leading universities for Kazakhstani specifics and then applied in universities everywhere [7; 10].

In modern studies of experts from different countries, it is noted that the motivation of a higher school teacher appears as a factor that has an impact on the economy of higher education as a whole. At the same time, it is emphasized that the systems of material remuneration and incentives used in universities in Kazakhstan often do not have the ability to establish an objective relationship between the amount of remuneration received and the real results of teachers' work. Moral incentives should only complement, not replace, material incentives [11].

The indicators of assessing the quality of work of a modern teacher, on which the indicators of motivation and stimulation at the university depend, include: the presence of an academic degree/title; the experience of teaching in general, the profile of the disciplines taught. Moreover, the total value of scientific publications; the teacher's focus on improving the quality of their own work. Additionally, personal growth; disclosure of potential in scientific activity; prizes and awards for scientific performance. Furthermore, participation of teachers in international scientific conferences; the possibility of conducting scientific work abroad; the training of graduate students and doctoral students; obtaining research grants, patents for inventions, etc. Also, the ability to conduct practical research and inventions; the degree of teacher workload (the number of disciplines taught); the number of hours of classroom work. In addition, the ability to manage projects within the disciplines taught; the total number of publications in the publications indexed in the Web of Science and Scopus abstract and bibliographic citation databases. Finally, the amount of funds raised for scientific research and development [12].

The following types of incentive payments are accrued to achieve the indicators: for intensity and high performance; for the quality of work performed; bonus payments at completion of various types of work [13]. The system of remuneration of Kazakhstani universities consists of a number of elements, among which are: the establishment of a fixed part of wages, incentive payments, allowances, surcharges, financial assistance. The system of motivation of teachers in universities of the Republic of Kazakhstan includes the use of material and non-material incentives (Figure 1) [9; 14].

<table>
<thead>
<tr>
<th>Material incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td>a system for assessing teaching staff based on rating;</td>
</tr>
<tr>
<td>bonuses;</td>
</tr>
<tr>
<td>payments provided for receiving an honorary title and awards;</td>
</tr>
<tr>
<td>one-time payments of funds provided for anniversaries of employees;</td>
</tr>
<tr>
<td>gifts to children for the New Year</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-material incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td>providing teachers and students with access to electronic libraries;</td>
</tr>
<tr>
<td>providing teachers with literature on the disciplines they teach;</td>
</tr>
<tr>
<td>the opportunity to provide TS with tickets to cultural events held at the university and outside it;</td>
</tr>
<tr>
<td>providing the opportunity to undergo training under programs of professional development and retraining</td>
</tr>
</tbody>
</table>

Figure 1. Elements of labor motivation of the teaching staff of Kazakhstani universities

Many experts today note that certain universities are implementing effective contracts into their practice, as a result of which teachers lack confidence in the future, temporizing needs are actualized, the needs for creativity and self-realization are suppressed, the motivation of achievements is replaced by the motivation of avoiding failures [8].

Unlimited opportunities for part-time work (including internal) against the background of objective need (since the salaries of teachers of both universities and vocational schools are still relatively low) provokes the phenomenon of workaholism. Moreover, it leads to a sharp increase in material motivation and underdevelopment of other work motives, which may be accompanied by the actualization of psychological protection. It, in turn, can lead to
emotionally detached, formalism in the performance of professional duties against the background of a rapid depletion of psychophysical resources [13].

Despite the increase in salaries, a relatively high level of income of teachers is most often provided by additional part-time work both in other universities and in any companies, which, in turn, can lead to internal dissatisfaction, a feeling of underestimation of their work among teachers, an increase in material motivation and motivation to obtain more comfortable working conditions. Without developing a system of non-material incentives, one can come to the conclusion that in the future universities will face a decrease in the prestige of the teaching profession and incomplete satisfaction with the profession, which leads to professional burnout even among young teachers after 3-5 years of work. All this is already observed in modern universities not only in Kazakhstan, but also in Russia, among others. Lowering the prestige of a university teacher provokes dissatisfaction with work, a decrease in the overall level of motivation for work. The progressive idea of an effective contract, which should ensure the implementation of the development program by each SPW, turned the motivation system into a system of demotivation and inefficiency [8].

Modern research on the identification of motivating factors of effective labor behavior is mainly reduced to the organization of surveys and generalization of the results obtained. During the study of factors and methods of motivation, it was revealed that most teachers are involved in their professional activities and have an average level of motivation. Among the significant motivation factors, university professors attributed: incentive payments, satisfaction of cognitive needs, the ability to work independently, the ability to realize teaching abilities, the opportunity to engage in scientific activities, participate in conferences, grants. The most significant factors supporting effective motivation are: flexible work hours, interest in the disciplines taught, communication with young people and the desire to transfer their knowledge to others [3; 15].

To date, the priority competencies of higher school teachers are professional qualities and general erudition; digital literacy; professional thinking; language competencies; reflection, etc. An effective university needs a teacher who could not only conduct teaching activities, but also integrate the qualities of a researcher, manager, who could provide the required quality of the educational process. In recent years, a number of researchers have additionally identified motivational competence as a key competence of a teacher, which acts as an executive mechanism in a systematic approach to quality management of the educational process and is of particular interest [16-18]. The author of the article, conducting research on the motivation of teachers working in universities, came to the conclusion that the issue of financial and psychological well-being of a teacher is closely related to the results of their work and inevitably affects the quality of educational services provided.

Nowadays it is considered prestigious to have a job where one earns a lot without straining oneself. The profession of teacher does not appear as such in the current conditions, not only in Kazakhstan, but also in other CIS countries. A low level of remuneration affects the quality of teaching, since a “poor” teacher loses credibility in the eyes of a "rich” student, and is associated with a loser, is an example of the fact that great knowledge is not a guarantee of success. The lack of a clear incentive system for educational workers for work results has a negative impact on the commitment of staff to their institution, while the stabilization of the system of payment and material incentives is assessed by employees as a favorable event. As part of the strategic management of an educational institution, the issues of teacher motivation should become a priority [19; 20].

This research topic is related to the analysis of motivation of teachers of universities located in the Republic of Kazakhstan. The author of the article first analyzed the main indicators of universities for 2016-2020 according to the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan. In order to then conduct a survey among teachers for their assessment of the current motivation system in universities where they work.

According to the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, where data on higher and postgraduate education are published, it is clear that the number of state universities is decreasing from year to year, while the number of universities that are in private ownership, on the contrary, is increasing since 2018 [21]. According to the Bureau of National Statistics of the Agency for Strategic Planning and Reforms of the Republic of Kazakhstan, which published data on the number of higher education institutions as of the beginning of 2020-2021 is: 125 in total, of which: full-time – 124, evening classes – 28, correspondence courses – 92, distance learning – 51 (appeared for the first time during a pandemic) [21].

The analysis determining in which regions of Kazakhstan there are more state universities highlights: Almaty city (8), Aktobe (4) and Karaganda (4) regions, and the fewest state universities are located in: Almaty region (1), Atyrau (1), West Kazakhstan (1), Kyzylorda (1), Mangistau (1). There are no state universities in Turkestan, Shymkent, Almaty region. In other regions, the number of universities varies from 2 to 4 [21]. Most private universities are concentrated in: Almaty (33), Nur-Sultan (13), Shymkent (10), and the smallest number is in the Zhambyl region (1) and Mangystau (1). In other regions, the number of universities varies from 2 to 3, with the exception of the Karaganda region (7) and East Kazakhstan (4) [21]. The number of students at state universities has been increasing since 2016-2018, with a decrease starting in 2019. The number of students at private universities far exceeds the number of students at state universities and is increasing year by year. The number of students in foreign universities is not stable during the analyzed period. In 2017 and from 2019 to 2020, there was a decrease in the indicator, while in 2018 an increase in the indicator was observed [21].

The largest number of students as of 2020-2021 is in the following cities: Almaty – 87.546, Shymkent – 47.575, Nur-Sultan – 32.275, and the least number of students is in: Northern Kazakhstan – 4.097 and Mangistau – 3.782. In other regions the number of students varies from 5851 to 18103 people [21]. The number of students in universities
Improving motivation systems for scientific and pedagogical staff in Kazakhstani universities...

Based on gender is characterized by the fact that among university students, the largest number of students are female [21]. The age composition of students at universities is dominated by the number of students aged 18-20 years, and there are fewer students aged 60 years and older [21]. The graduation of specialists by state universities is characterized by a decrease in the indicator in 2017, 2019-2020, and in 2018 there was an increase in the indicator [21].

The graduation of specialists by private universities is characterized by a decrease in the indicator in 2017 compared to 2016 by 9.85%, from 2018-2020 an increase in the indicator was noted [21]. The graduation of specialists by foreign universities is characterized by a decrease in the indicator from 2016-2018, an increase in the indicator was noted from 2019-2020 [21]. The number of undergraduates in 2020-2021 was 34,619, which is lower than the values of 2018-2019 by 10.3% and 3%, respectively [21]. The number of residency students is 6,173, which is 20.5% more than in 2019 and 41% more than in 2018 [21]. The number of doctoral students for 2020-2021 was 2,891 people in public universities, and 4,023 people in private universities. The number of doctoral students in private universities is growing from year to year, and in public universities there was a significant decrease in the indicator in 2019 [21].

The number of teachers who work at state universities decreases from each year. The exception is 2017, when there was an increase of 1.3% compared to 2016. The number of teachers who work in private universities is also growing. The exception is 2017, when compared to 2016 there was a decrease of 1.63% [21]. The number of teachers who work in foreign universities is not stable throughout the analyzed period. In 2016-2018 and 2020, there was a decrease in the indicator, and in 2019 there was an increase in the indicator compared to 2018 by 18.5% [21].

The number of TS in universities from the full-time personnel who, as of 2020-2021, have: an academic master's degree – 13,067 people, an academic degree of a doctor of philosophy (PhD) – 2,942 people, an academic degree of a doctor in the profile – 137 people, an academic degree of a candidate of sciences – 11,514 people, an academic title of a professor – 2,280 people, an academic title of an associate professor – 5,345 people. In addition, the staff working on part-time basis (external part-timers) – 6,137 people [21]. The number of teaching staff by age in universities in the context of gender: women predominate up to 30 years, 30-39 years – similarly, women predominate, 40-58 years – the number of women is 2 times higher than men, 59 years and older, the number of women is also higher than men [21].

Minister of Education and Science Askhat Aimagambetov signed a decree according to which the minimum wage of teachers of universities subordinate to the Ministry of Education and Science of the Republic of Kazakhstan from September 2021 will be no less than 200 thousand tenge, senior lecturer – 230 thousand tenge, associate professor – 260 thousand tenge, professor – 350 thousand tenge (in state universities – 400 thousand tenge) [22].

It is worth noting that according to experts of the Ministry of Education and Science of the Republic of Kazakhstan, some universities when increasing salaries were guided by the size of the official salary established in the university, which is generally lower than the actual salary of teachers, including a variety of incentive payments and allowances, other universities have raised the salary by raising the level of teaching load, which reached 900 hours per one rate [22]. In addition, the Ministry of Education and Science of the Republic of Kazakhstan determined the maximum volume of one teaching load rate – no more than 680 hours per academic year. It is worth noting that this does not oblige universities that have set the teaching load below this indicator (450 or 500 hours per year), but there are such, to bring a load of teachers to this value. However, universities in which one rate is 700-900 hours or higher will have to reduce it to 680 hours, according to the order of the Ministry of Education and Science of the Republic of Kazakhstan [22].

In order to understand how university teachers in Kazakhstan today are motivated to work effectively, capable of bringing their high results of work, the author of this article conducted a survey among teachers of 20 universities regarding the current motivation system in their universities. The sample included 120 people who work in universities of various forms of ownership, whose average age was 42.5 years, men – 40%, women – 60%. The survey was conducted through the online application "Google Forms". The choice of the survey format was due to the impossibility of holding face-to-face meetings and conversations with respondents, as well as the need for geographical diversification of participants. The survey was conducted from August 1 to August 30, 2021.

Before analyzing and evaluating the motivation system of teachers in universities of Kazakhstan, the author of the article determined the general (emotional) attitude of teachers to their own professional activities. Namely, 20% answered that they really like it; 70% of respondents answered that they mostly like it; 10% of teachers replied that they do not like teaching activities due to some reasons. In particular, low wages, lack of opportunities to realize their potential, there was no opportunity to get a job in companies, enterprises, etc. There was not a single person who would answer that they strongly dislike teaching activities. According to these answers, it should be concluded that teachers demonstrate a favorable emotional attitude to the teaching profession.

One of the main factors of importance for teachers in Kazakh universities and determining the motivation of professional activity is considered to be the relationship in the primary workforce. The results of teachers' satisfaction with relationships with colleagues are as follows: very good – 15% of respondents; good – 51% of respondents, satisfactory – 25% of teachers who participated in the survey; bad – 9% of respondents; very bad – 0% of respondents. These responses suggest that teachers at Kazakhstani universities are satisfied with their relationships with colleagues.

Meaningful characteristics of relations with colleagues within work collective are characterized by the following data:

1. A larger number of teachers of the department are a cohesive team. Strongly agree – 12% of respondents; agree – 16% of respondents; agree, but partially – 43% of respondents; disagree – 22% of respondents; strongly disagree – 7% of respondents.
2. If a member of the department feels unwell, there is always someone who can help. Strongly agree – 16% of respondents; agree – 27% of respondents; agree, but partially – 45% of respondents; disagree – 7% of respondents; strongly disagree – 5% of respondents.

3. Some teachers would gladly prefer to work at another department/faculty. Strongly agree – 10% of respondents; agree – 16% of respondents; agree, but partially – 43% of respondents; disagree – 28% of respondents; Strongly disagree – 3% of respondents.

4. Some teachers would gladly prefer to work at another university. Strongly agree – 9% of respondents; agree – 14% of respondents; agree, but partially – 44% of respondents; disagree – 30% of respondents; strongly disagree – 3% of respondents.

5. There are teachers in the team who are disliked. Strongly agree – 7% of respondents; agree – 8% of respondents; agree, but partially – 40% of respondents; disagree – 32% of respondents; strongly disagree – 13% of respondents.

6. Most of my colleagues are pleasant and nice, always ready to help in a difficult situation. Strongly agree – 16% of respondents; agree – 20% of respondents; agree, but partially – 49% of respondents; disagree – 12% of respondents; strongly disagree – 3% of respondents.

One of the powerful motives for the work of a university teacher is the possibility of communication in an intellectual environment and awareness of the importance of the profession. Teachers’ assessment of meaningful characteristics of business interaction with colleagues:

1. In our department, there is a common vision of what a graduate should be. 65% of respondents answered yes, 35% of respondents answered no.

2. I am aware of my personal responsibility for the final level of graduate training. 42% of respondents answered yes, 58% of respondents answered no.

3. My colleagues and I are constantly discussing issues of education in general and problems of interdisciplinary relations. 68% of respondents answered yes, 32% of respondents answered no.

4. I am aware of the place of my academic discipline in the general system of training future specialists. 72% of respondents answered yes, 28% of respondents answered no.

The data obtained indicate that the majority of teachers are characterized by intensive professional communication at the interdisciplinary level, awareness and experience of responsibility for the final result of activities. Further, respondents were asked to answer a number of questions, which included the following questions:

1. Are you more of a scientist or a teacher? The answers received were following: a scientist – 45%, a teacher – 55%.

2. How would you divide your research and teaching activities as a percentage? The answers were: academic work – 25% (35% of respondents) and teaching – 75% (65% of respondents).

3. How much time (in percentages) would you ideally like to devote to research and teaching activities? The answers were: scientific work – 45% (50% of respondents) and teaching – 55% (50% of respondents).

4. If you had the choice to perform only one function (only a teacher or only a scientist), what would you choose? The answers were: only a teacher – 65%, only a scientist – 35%.

Thus, it can be concluded that the surveyed still more teachers than scientists, also, fewer people are engaged in scientific work than teaching, but those who said that they are most engaged in teaching would like to increase the time for scientific work, perhaps by reducing the teaching load, if the scientific work will be well paid, when choosing a function of only a teacher or a scientist, the majority said that today, until something changes in the system of remuneration and motivation, they choose only the functions of a teacher.

An important issue is the current state of the motivational structure of teachers’ work. The results of the survey on the importance of individual motives in the professional activity of a university teacher:

- high earnings: men – 75%, women – 85%;
- stable income: men - 65%, women – 85%;
- desire to move up the career ladder: men – 30%, women – 45%;
- an attempt to exclude criticism from management/colleagues: men – 50%, women – 65%;
- the desire to avoid possible additional loads on methodological work: men – 45%, women – 55%;
- the need to achieve social status: men – 60%, women – 70%;
- satisfaction with the process and the result of the work: men – 75%, women – 80%;
- the opportunity to fully realize their abilities: men – 45%, women – 55%;
- the presence of abilities that are required for the implementation of pedagogical activity: men – 45%, women – 65%;
- enjoyment of communicating with students: men – 60%, women – 65%;
- the opportunity to engage in scientific work: men – 55%, women – 60%;
- enjoyment of communicating in a creative team: men – 60%, women – 65%;
- intellectual labor: men – 40%, women – 45%;
- flexible work schedule: men – 70%, women – 75%;
- interest in the discipline taught: men – 55%, women – 60%.

The data obtained indicate that the core of the motives of professional activity of teachers included "Money earnings", "Satisfaction from the process and the result of work", "Flexible work schedule". The least stimulating motives are such as: "Striving for career advancement" and "Intellectual labor". In addition to the motives related directly to professional activity, the respondents were asked to give answers to the question: "Why did you choose this university to work as a teacher?". The answers were as follows:

- stability of the university and its public image: men – 45%, women – 55%;
- proximity of the university to home: men – 35%, women – 45%;
- Advice and recommendations from acquaintances: men – 20%, women – 40%;
- corporate culture and favorable psychological climate created by the university management: men – 40%, women – 55%;
− salaries are higher than in other universities: men – 40%, women – 50%;
− career opportunities: men – 40%, women – 55%;
− the opportunity to engage in scientific activity and promote their scientific research: men – 55%, women – 60%;
− the opportunity to undertake internships in foreign partner universities: men – 55%, women – 60%.

Also important is the subjective evaluation by teachers of the factors that stimulate their professional growth and impede it. The study participants were asked to evaluate the influence of one or another factor on a 5-point scale, where “0” (has no impact), “5” (has the maximum impact). The results are presented as an average value for all respondents. Factors that have a stimulating effect on teaching and development (in average values)

1. Competent organization of methodical work at the department – 3.6 points.
2. Conducting training courses, advanced training, retraining – 4.3 points.
3. Example and influence of colleagues – 3.1 points.
4. Example and influence of mentors – 3.7 points.
5. Competent organization of work at the university, at the department – 2.5 points.
6. Management attention to this problem – 3.1 points.
7. Trust – 3.2 points.
8. The novelty of the activity, working conditions and the opportunity to conduct experiments – 2.6 points.
9. The ability to carry out classes related to self-education – 3.8 points.
10. Increasing interest in their own work, due to all sorts of tools used in the process – 4.2 points.
11. The increase in responsibility – 2.1 points.
12. The possibility of gaining recognition among colleagues – 3.9 points.

Thus, the calculated average score is 3.34 points, which is an indicator of the average level in the study of stimulating factors in relation to teaching and development. Factors that arise as a barrier, according to the interviewed teachers, on the way of their professional growth:

1. The personal inertia of each teacher is 4.2 points.
2. Lack of satisfaction from the results and failures – 2.1 points.
3. The lack of support and assistance in this matter from management is 3.2 points.
4. Malevolence of others, negative perception of changes and aspirations for self-development and self-realization – 1.9 points.
5. Inadequate feedback from team members and management, i.e. lack of objective information about oneself – 3.1 points.
6. Health status – 1.9 points.
7. Time deficit – 3.6 points.
8. Limited resources, difficult life circumstances – 3.1 points.
9. Internal contradiction with the ongoing administrative reforms of higher professional education – 3.9 points.
10. Poor understanding of the meaning and significance of the changes that are taking place in higher professional education – 4.1 points.

11. Lack of systematic university and departmental work, which focuses on improving the professional growth of teachers – 4.4 points.
12. Lack of material interest in their own professional self-improvement – 4.1 points.

Thus, the calculated average score is 3.3 points, which is an indicator of the average level in the study of factors that arise as an obstacle, according to the interviewed teachers, on the path of their professional growth.

An important motive of labor activity is the satisfaction of material needs (satisfaction with salaries). When asked, "Are you satisfied with the salary you receive at the university?", the results were: yes – 17% of respondents, no – 83% of respondents. This suggests that the vast majority of teachers are not satisfied with the existing salary level. As a result, there is a question of part-time teaching as a way of meeting material needs. To the question, "Do you combine your professional teaching activity with any other activity?", the answers were: yes – 82% of respondents, no – 18% of respondents.

It is obvious that most of the teachers are engaged in part-time work. However, it is also obvious that part-time work is not always conditioned only by material needs. The motives of part-time work may be the need for self-realization, and the motives for expanding and enriching professional competence. The data on the study of the motives of part-time work are as follows:

− work on the part-time basis is performed in a permanent way: yes – 87% of respondents, no - 13% of respondents;
− the implementation of work on a part-time basis is associated with the implementation of activities as a teacher: yes – 90% of respondents, no – 10% of respondents;
− the implementation of work on a part-time basis is associated with the need for additional earnings: yes – 94% of respondents, no – 6% of respondents;
− the implementation of the work on a part-time basis allows for the maximum self-realization: yes - 85% of respondents, no – 15% of respondents.

For the largest number of teachers who have part-time jobs, motives for additional earnings and motives for opportunities for greater self-fulfillment are combined.

The issue of load optimization is also important for the motivation of work activity. Most researchers tend to explain some stagnation in professional growth by the increase in workload and lack of time. The results of planning free time with a possible reduction in the teaching load are as follows:

− the opportunity to find additional earnings – 60% of respondents;
− the opportunity to write scientific articles, monographs – 30% of respondents;
− implementation of preparation for training sessions in their disciplines – 30% of respondents;
− the opportunity to write textbooks and manuals for their disciplines – 55% of respondents;
− opportunity to under advgoanced vocational training – 45% of respondents;
− the opportunity to read additional scientific literature on the taught discipline – 50% of respondents;
The opportunity of closer professional communication with colleagues – 60% of respondents; other – 90% of respondents.

The results indicate that most teachers assume to use their free time for professional self-improvement, and by choosing the answer "Other", they meant leisure activities (traveling, recreation in sanatoriums, active recreation, fitness classes). This, in turn, is an indicator that almost all teachers need more time to recover and maintain physical and emotional well-being. After that, the author of the article gave the results of a point assessment of the interviewees regarding the factors that have a stimulating effect on teaching and development (in average values), as well as factors that can hinder, in the opinion of the interviewed teachers, their professional growth. Further, the author of the article proposed, within the framework of this Internet survey, to pass an assessment of the "Motivational Profile", which makes it possible to study 12 factors of work motivation among university teachers, providing an opportunity to conduct a point assessment of motives according to the degree of importance (Figure 2) and then, based on the results obtained, to assign ranks to each motive depending on gender (Table 1). The assessment of motives was carried out on a 10-point scale, where 10 is the most significant motive, 1 is the motive that has the least importance in motivating teachers.

![Figure 2. Scoring of motives according to the degree of importance](image)

According to Figure 2, it can be concluded that the importance of each motive varies depending on the gender of university teachers, and therefore the ranks presented in Table 1 will differ, but may also coincide for individual motives. The average score of motives calculated equals 6.5 points in men and 7.2 points in women. Thus, according to the score data, it is clear that women are more motivated to work than men.

Table 1. Assessment of motives of university teachers by rank

<table>
<thead>
<tr>
<th>Motives</th>
<th>Rank – Men</th>
<th>Rank – Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Demand</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Comfortable environment</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Creativity</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Diversity</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Recognition</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Accomplishments</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Self-improvement</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Relationships</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Feedback</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Social contacts</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>Authority</td>
<td>12</td>
<td>12</td>
</tr>
</tbody>
</table>

According to the data of Table 1, it is evident that in the first place for both men and women are material motives, in the second place for men – comfortable working conditions, and for women – demand, in the third place for men – demand, for women – comfortable conditions, in the fourth place for men – achievements, and for women – creativity, in the fifth place for men – recognition, and for women – diversity, in the sixth place for men – diversity, and for women – recognition, the seventh place for men is occupied by creativity, while for women – achievements, the eighth rank of men was given to the motive – self-improvement, for women self-improvements also in the eighth position of importance, in the ninth position for men is "feedback" and for women – relationships, in the tenth position for men are relationships, and for women – feedback, in the eleventh position, for both men and women are social contacts and in the 12th place, for both men and women, is such motive as "Power".

Motivational activity is determined by a variety of elements, ranging from individual qualities of a particular person, formed under the influence of organizational and cultural environments, ending with the transformation of needs and interests to the purpose of activity. Despite the fact that modern management practice reveals a significant need for effective motivation in management, it is worth noting that the complexity of the real implementation of motivating actions in practice should not be underestimated. The effectiveness of motivation can be achieved through the use of selected methods of motivation.
(economic, social, moral). Among them, one can note financial incentives, as well as employee benefits, vouchers to sanitary resorts, career and professional growth, recognition of the status of the best employee for a certain period, praise, encouragement – all these are motivational methods. They can be targeted as a specific specialist, as well as for the team as a whole.

The author suggests the following recommendations to improve the effectiveness of motivation of teachers working at universities in Kazakhstan:

- introduction of "Lean" and, in particular, "Kaizen" methodologies into the university management system. In personnel management, the Kaizen system is an additional form of staff motivation, which has the ability to take into account the achievement of certain results by the organization as a whole or by its specific department, as well as to consider the individual contribution of the employee in the final results. The Kaizen system is based on 5 key elements: teamwork, personal discipline, morale, quality circles, continuous self-improvement. Each element plays an important role in achieving success. Using "Kaizen" in the process of motivating the activities of TS belonging to the professional type, in addition to obtaining an economic effect from the introduction of initiatives, it becomes possible to increase the qualification of personnel, increase the creative activity of employees, improve the moral and psychological climate in the team;

- to revise the work with effective contracts, in the part that requires additional positions for which the university is ready to provide financial incentives: for working with each student on projects, articles that do not relate to the discipline and are not included in the main load of the teacher, to make payments (the university determines the amount of such payments independently); if previously the university did not cover the cost of publishing the articles of teachers, to introduce payment either according to the system, where 50% is paid by the teacher, and another 50% is paid by the university if the article is published in international publications that are cited in Scopus or WOS, or 100% paid by the university if the article is published in international publications that are cited in Scopus or VAK, and after the publication of articles, to provide for the payment of bonuses (the amount of bonuses for each publication in VAK journals, international conferences, journals that are cited in Scopus or WOS, the university determines independently, depending on its financial situation);

- to paid allowance to teachers who have worked at the university for more than 5, 10, 15, 20 years, the amount of which the university management determines independently, depending on the financial capabilities of the university;

- to provide teachers who have worked at the university for more than 5, 10, 15, 20 years with 20-50% benefits on payment for preparatory courses to prepare children for university admission;

- the opportunity to cover the cost of article publications in 100% amount for teachers who have a high level of publication activity (a scale should be provided separately for each type of publication: article in the collection of the international conference, the journals of the VAK, Scopus, WOS);

- to pay additional bonuses to teachers who have honorary titles and awards, the amount of which the university determines independently, depending on its financial condition;

- to provide single mothers and mothers with many children with additional financial assistance;

- to make one-time payments of funds to the anniversary dates of employees, the amount of which the university determines independently, depending on its financial condition;

- to provide financial assistance in organizing summer holidays for children in summer camps;

- to provide support when paying for funeral services;

- to provide a dormitory or corporate housing on preferential terms of payment to non-resident teachers;

- providing discounts on meals in the canteen;

- unified medical examination and vaccination of university staff;

- payment of medical policies;

- provide all classrooms with modern multimedia equipment, laboratories with necessary equipment and materials for experiments, tests, etc;

- to pay for advanced training courses for teachers, etc.

For modern Kazakhstani universities, the lack of an effective motivation system aimed at evaluating the creative contribution of staff and combined with a modern university management system based on the principles of responsibility and authority distribution among the maximum possible number of employees is a serious problem, the solution of which is considered an important task requiring further study.

The proposed recommendations can help solve the problems that relate to the field of personnel policy of the university, underlying the requirements for the modern organization of higher education. In this regard, it is possible to implement the Personnel Development Program, the main directions of which should be:

- retention and development of personnel through material and non-material motivation, implementation of the grant support system, development of priority areas of scientific schools;

- formation of a developed system of academic exchanges with leading Kazakhstani and international educational and scientific organizations, advanced training courses and internships of employees in educational and research centers of Russia and abroad;

- creation of a flexible system for attracting promising employees to work at universities in Kazakhstan;

- development and implementation of a system for evaluating the performance of personnel, criteria and indicators for independent certification of SPW;

- creation of a competitive system of remuneration, motivation and staff training, including the formation of effective mechanisms of remuneration, motivation, financial support for young teachers and researchers;

- creation of a system of incentives for teachers, focused on the promotion of author's methods and developments, the introduction of scientific and educational complexes, innovative technologies, obtaining patents, enhancing publication activity and research activities, participation in professional skill competitions;
minimizing the workload of academic staff in order to increase time for research and methodological work.

Summing up, it can be concluded that today the teacher's contract should provide compensatory payments not only, for example, for work in areas with special climatic conditions, etc., but also for an extraordinary increase in the amount of work not provided for by an individual plan. It is not the h-index, not the number of articles, sometimes with questionable scientific value, but the mastery and constant updating of teaching methods, the ability to conduct educational activities in a digital environment that are a priority in evaluation and stimulation for the SPW of universities. To increase the motivation of teachers, it is necessary to offer them to increase the number of round tables held by each teacher, seminars with experts on the issues of the discipline taught, since additional payment should be provided for each round table, seminar (the amount is determined by each university independently, depending on its financial condition).

Also, the performance indicators of the TS should include success in designing online courses and other electronic educational resources, for which additional remuneration should also be provided. Thus, each university should work individually on the system of motivation and stimulation, taking into account the specifics of its faculties, departments and the university as a whole. Before developing a new motivation and incentive system, university rector's are recommended to conduct a survey of all their teachers on what they do not like in the current motivation system, and that they want to change, which items of material and non-material motivation they would like to introduce. Having collected the opinions/ideas of all teachers, regardless of gender, age, scientific degree, only in this case it is possible to develop an effective motivation system that will work and bring its positive results, not only regarding the activities of teaching staff, but also the activities of the university as a whole.

Conclusions
Personnel motivation today is one of the most important elements of the concept of human resource management organization of any sphere of activity, including higher education, as it is a key determinant of the labor behavior of the employee. How successfully the university management solves the problem of motivating its employees directly affects the desire of the latter to meet the goals of the organization and to participate in the implementation of its plans, which is the key to the successful functioning of the university as a whole.

The study of socio-psychological factors affecting the development of motivation for the professional activity of university teachers is currently the most relevant direction of socio-psychological research. Knowledge and understanding of the motivational sphere of any specialist make it possible to develop their abilities both at the stage of choosing a profession and in the process of improving themselves as professionals. Over the past few decades, this topic has not ceased to excite researchers both in the framework of psychological, pedagogical, and economic approaches. The analysis of modern research makes it possible to say that the issues of professional motivation of university teachers are at the peak of current research.

Today, it is necessary to create a system of encouragement and motivation of teachers who are actively involved in the design and use of digital resources and practices. Such a system should ensure both the introduction of appropriate indicators in the competitive selection procedures and a system of support for teachers in the initial stages of mastering and using digital tools. In addition, it is necessary to form sufficiently concrete and convincing ideas not about the complete replacement of traditional approaches and courses, but about the introduction of such elements of digital technologies that can improve the quality and effectiveness of existing formats, facilitate the work of teachers (especially routine). Also, incentive systems (grants) should be created to support intra-university and inter-university communities of teachers implementing innovative educational and digital practices. As the situation normalizes, the educational process will return to its old routine, but with an understanding of the problems that became evident in the emergency conditions.

Such problems, or, more precisely, tasks that require urgent solution, include focusing attention on the informational training of teachers, intensifying activities that will be aimed at improving the digital educational environment, implementing measures to ensure the involvement of students in educational activities as active, interested participants. The proposed recommendations can be used as a basis for the development of a new motivation system in universities, both in the territory of the Republic of Kazakhstan and other CIS countries.

Acknowledgements
The study was carried out within the framework of grant funding from the Science Committee of the Ministry of Science and Higher Education of the Republic of Kazakhstan (No. AP13268867).

Conflict of Interest
None.

References
Improving motivation systems for scientific and pedagogical staff in Kazakhstani universities...


Удосконалення системи мотивації науково-педагогічних працівників у казахстанських університетах: Висновки та рекомендації

Дінара Закірова*
Університет Туран
050013 вул. Сатпаєва, 16А, м. Алмати, Республіка Казахстан

Шара Шакуаль
Університет Туран
050013 вул. Сатпаєва, 16А, м. Алмати, Республіка Казахстан

Мадіна Абдуласева
Університет Туран
050013 вул. Сатпаєва, 16А, м. Алмати, Республіка Казахстан

Асель Сісценова
Університет Туран
050013 вул. Сатпаєва, 16А, м. Алмати, Республіка Казахстан

Раушан Макашева
Університет Туран
050013 вул. Сатпаєва, 16А, м. Алмати, Республіка Казахстан

Анотація

Актуальність. Ефективність освіти значною мірою залежить від якості та мотивації викладачів, що робить дослідження систем мотивації у вищій освіті надзвичайно важливим.

Мета. Метою цього дослідження є комплексний аналіз існуючих систем мотивації науково-педагогічного персоналу в казахстанських університетах. Воно спрямоване на оцінку поточного рівня задоволеності викладачів і формування цільових рекомендацій щодо посилення мотиваційних стратегій в академічному секторі.

Методологія. У дослідженні використано багатогранний підхід, що включає синтез, порівняльний аналіз, економіко-статистичні методи та інтерпретацію даних, отриманих від Бюро національної статистики Казахстану. Крім того, дані отримані в результаті інтернет-опитування, проведеного за допомогою Google Forms з метою з'ясування різних точок зору університетських викладачів.

Результати. Аналіз виявляє нюанси динаміки мотиваційних чинників серед викладачів університетів Казахстану, підкреслюючи різний рівень задоволеності серед різних демографічних груп та академічних дисциплін. Основні висновки підкреслюють важливість розширення можливостей кар'єрного зростання та впровадження надійних механізмів визнання для заохочення досконалості викладання. Узгодження інституційних цілей з індивідуальними прагненнями виявляється критично важливим для розвитку вмотивованої та залученої академічної робочої сили.

Висновки. Для ефективного підвищення мотивації серед викладачів університетів Казахстану рекомендуються індивідуальні стратегії, що включають стимули, засновані на результатах роботи, цілеспрямовані ініціативи з професійного розвитку та сприятливе робоче середовище, що сприяє інноваціям у викладанні.

Ключові слова: система мотивації; цифрові освітні практики; професійний розвиток; робоче середовище; трудова поведінка.