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USING THE BUSINESS KPI METHOD AS A MEANS OF
STUDENTS MOTIVATION

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Abstract

Business comes into education, and makes new demands on the quality of knowledge of modern students. Starting from the moment when education became a market service, educational organizations required new, appropriate to the market conditions, methods and ways of teaching students that would make educational services more qualitative and the activity of university teachers effective and productive. Using of business methods in education will allow a higher educational institution to become competitive in the market of educational services. In this regard, educational organizations are forced to turn to the experience of modern business companies that successfully apply these methods in their activities. Unfortunately, a situation often arises when the skills and competencies that a student has received during his studies at a higher education institution do not meet the requirements that an employer places on potential employees. This imbalance leads to the fact that many university graduates remain unclaimed in the labor market. Higher professional educational institutions need to take into account this criterion when organizing the educational process. The KPI system came into the practice of Russian companies several years ago and nowadays is recognized as one of the most effective systems for motivating staff in business. For the higher education system key issue is stimulating and motivating of students to study activities, since the final result depends on the motivation. In this regard, a study was conducted in order to study the possibility of adapting the KPI business method for the educational process in higher education institutions.

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Keywords: Business methods in education, key performance indicators, student motivation, training in higher education.



1. Introduction

Modern business comes to education and makes its demands on recent graduates. The economic well-being of Russia largely depends on the quality of training of young specialists; therefore, at present, more and more attention is paid to the compliance of graduates' qualifications and competencies with the requirements of employers. In addition to competences, there is another problem that shows the imperfection of the modern system of higher professional education, namely, the use of evaluation and motivation methods in teaching, which are far from real professional life. In other words, the system of motivation that exists in Russian universities does not correlate with the system of motivation that is used in modern Russian business (Bonyushko, 2010).

KPI (Key Performance Indicators) – are the performance indicators (of the organization, employee) that help to achieve the goals. These goals can be both strategic and tactical. Using the KPI method makes it possible to assess the current state (of the organization or employee) and help in the implementation of the task. In business, two concepts are inextricably linked, such as KPI and motivation of staff, because with the help of key performance indicators you can develop an effective system of incentives and motivation of employees.

This paper does not address the use of the KPI business method in the management of staff and business processes of the entire institution. Zinkovsky K. Deputy Director of the Institute for Educational Development of the National Research University Higher School of Economics believes that the KPI business method should be used with caution in this case, since external stakeholders, first of all state and local authorities, the owners expect, in this case, the fulfillment of their requirements. This has a strong influence on the own tasks of higher education institutions, academic freedoms and creativity.

2. Problem Statement

For the higher education system key issue is stimulating and motivating of students to study activities, since the final result depends on the motivation. Modern students no longer just want to come to lectures in order to hear and record the information received, they want to increase their level of involvement in the learning process and personal motivation to study. In addition, obtaining professional competencies, students want to develop personal qualities that they will need to work.

Motivation is an “engine” that pulls a person in one direction or another. Each of us may have a definite reaction to the stimulus. A stimulus can be any, above all its presence must cause a conscious desire to act as necessary (Smith, 2008).

Motivation for learning activities is a special kind of motivation, which represents a system of specific psychological qualities of a student, depending on the educational environment and features of the educational process. Motivation for learning is an indicator and criterion for the success of a future specialist as a professional (Shpilberg, 2015). It regulates his learning activity and behavior.

According to the results of research conducted by Russian scientists, the following reasons for the low motivation of Russian students to study were identified:

- 1) low scholarship or other financial incentives;
- 2) outdated teaching methods;

- 3) the lack of prospects for decent employment;
- 4) uninteresting and inefficient learning process;
- 5) orientation of universities on the financial result;
- 6) the choice of university does not correspond to the internal needs and abilities of the student;
- 7) the impossibility of applying the knowledge gained in practical activities (Patutina, 2017).

However, one of the key questions of low motivation is that students mostly want to get not theoretical knowledge, but practical skills for a particular job. Modern students want to get not just a higher education, but a set of tools with which they will be successful in their professional activities.

On the one hand, there is an urgent need for proper motivation of students, and on the other hand, it is necessary to take into account all the requirements of modern business, in which motivation issues are studied, unfortunately, in more detail than in modern education. In this regard, there is a potential opportunity to adapt an effective business method for the educational process in modern Russian universities (Psacharopoulos & Patrinos, 2018).

At present, there is a number of questions that cast doubt on the effectiveness of modern Russian education. Some experts associate this problem with a large number of educational reforms that have occurred in our country in recent years, as well as with bureaucracy and corruption.

According to the results of the study which was attended by 523 students from universities of St. Petersburg in 2017, graduates of various universities, more than half of the respondents, consider the quality of education in their university is not effective (60%).

It is interesting to note that, according to the students participating in the study, about 50% of the effectiveness of training depends on the student, his inner motivation: diligence, perseverance, the right choice of a future profession, additional personal qualities, the ability to devote all your time to study, rather than work. Based on the fact that the university is not able to influence the personal characteristics of the student, they were not taken into account in the further results of the study. The remaining 50% of efficiency depends on a number of factors that the participants named during the study, the data are presented in table 01.

Table 01. The main criteria for evaluating of the higher education effectiveness, according to the opinion of participants of the study

Motivation	Evaluation
Availability of interactive forms of training	80%
Interaction with students during classes	85%
Competence in the subject taught	81%
Informal approach	60%
Personal interest of the teacher in the learning process	67%

According to the surveyed students, the two most important criteria for the effectiveness of education are: the motivation and interaction of the teacher with the students during the educational process. The social world of students is formed as a result of interaction with the teacher and with each other. To create a sustainable and comfortable interaction, students and teachers have to put a lot of effort. As far as the teacher is open for communication with students, attempts to convey information to each

student, lack of indifference to the subject taught, so effective is the result of his activity (Afanasyeva, 2017).

The following criteria are subject matter competence and continuous updating of information. Unfortunately, many teachers approach the issue formally, not paying attention to the fact that the information they offer has long been outdated and has lost its relevance (Collom, 2005).

Modern education at the university should be interactive, this is the conclusion of everyone who faced with the educational process and the increasing demands of modern students and their parents on the quality of education at the university.

About 70% of the participants in the discussion noted non-formal education as one of the effective teaching methods. Non-formal learning is a relatively new type of learning that often goes beyond the ordinary course of education. Participation in exhibitions, seminars, contests, promotions, unusual projects, independent learning through observations and experiments can be attributed to non-formal education.

Also, in the course of the study, the study participants were asked to evaluate the current level of education quality. According to the participants, the average assessment of the quality of education is 3.5 quality points. The rather low score is explained by the following criteria:

- The first criterion is associated with a lack of motivation on the part of the teacher, who, in the opinion of students, should inspire students to acquire knowledge in their subject.
- The second criterion, there is a low percentage of introduction into the educational process of interactive forms of education.

Thus, summing up the information received, it confirms the need to develop an effective program for students' motivation, because as a result of the research being conducted, it is the one that has the decisive impact of the effectiveness of the educational process.

3. Research Questions

How popular are business methods in modern higher vocational education?

How can the right motivation influence on the quality of education at the university?

What indicators can be used when adapting the KPI business method to the learning process at a university?

What are the advantages of using the KPI business method in Russian education?

4. Purpose of the Study

The purpose of the study is to identify the potential application of the KPI business method in higher professional education, develop tools of motivation on its basis and methods for assessing of the effectiveness of learning motivation based on known theoretical assumptions.

5. Research Methods

- 1) Economic and statistical research methods.
- 2) Structural and logical research methods.
- 3) Diagnostic Experiment.
- 4) Quantitative and qualitative marketing research: survey and focus groups.

6. Findings

In order to achieve this goal, a diagnostic experiment was conducted in the presented work, which showed how the proposed KPI system motivates students in the learning process. The use of motivation in training allows improving their professional training quickly and more qualitatively.

“Business KPI method in education” is a developed system of key performance indicators of the student work in the learning process, which reflects both the result of each student’s activities individually and the effectiveness of the educational process as a whole.

The project, developed according to the results of the research, is a universal, clearly defined system of student motivation, which stimulates students to achieve quality results, and prepares them for work in modern companies. Advantages of applying the KPI business method in education:

- 1) Improving the quality of the educational process: achieved through an integrated approach that takes into account the indicators presented in the developed KPI system.
- 2) The possibility of wide application of the method: the proposed KPI indicators are basic for many disciplines.
- 3) Flexibility: the ability to adapt the developed KPI system to your discipline - removing or adding the necessary measures of efficiency.
- 4) Universality in application: it is possible to adapt the KPI system to any points assessment system at the university.
- 5) In addition to professional competencies, training in the KPI business method contributes to the development of soft skills. These skills are necessary for each specialist and allow achieving excellent results in any profession, regardless of the field of activity.

The main task of adapting the KPI business method to the learning process was to increase the quality level of the learning process, as well as motivate students to gain knowledge. An additional task was the introduction of business technologies in the educational process, which allows students to develop professional competencies in accordance with business standards.

In education, as in the KPI system, two types of indicators are considered: qualitative and quantitative. Financial motivation, in the form of scholarships or other financial incentives can be attributed to quantitative indicators. Qualitative indicators are attendance, classroom and independent work, scientific and research work of students, participation in various conferences, etc. Usually in education namely quality indicators are considered to be key indicators of the effectiveness of the educational process.

When developing key performance indicators in education, the following conditions should be met:

- 1) The clarity of the definition of the indicator.
- 2) The possibility of achieving the objectives by students.
- 3) Developing students' interest in obtaining a higher-quality education, which is the goal of a higher educational institution.

The KPI system in training is tied to the result; in training, the result is understood as achieving the goal, obtaining a positive examination mark, which motivates the student to work well throughout the semester. In this case, a high level of knowledge is achieved, and includes the following key performance indicators, presented in Table 02. The number of points may vary depending on the discipline and other parameters. In addition to the above indicators, there should be a relationship with the senior management of the educational institution and support from him, and the development of a specific rating scale should be created and discussed with all participants in the educational process. When building the KPI system in a university, it is necessary that the indicators used are clear to everyone – both students and teachers.

To assess the quality of the KPI system, a quantitative indicator is used – the difference between the percentage of people who successfully passed the final exam before and after implementation.

Table 02. Key Performance Indicators

Key performance indicators	Points
Attendance	1 point / 1 lesson
Effective work in class	max 5 points
Homework assignments	max 5 points
Intermediate control of the knowledge gained	max 5 points
Participation in scientific conferences, writing scientific articles	max 15 points
Participation in professional competitions and projects	max 15 points

The application of the KPI system in practice is encountered with many difficulties on the part of teachers, namely, negligent attitude towards duties; abuse of power; non-compliance with the established requirements, standards and norms of the educational institution. Sometimes, when key performance indicators are developed and agreed with the leadership of a higher education institution, they are not brought to the attention of students. Therefore, there is no proper motivation among students.

Most of the universities of the Russian Federation introduced a points system for students' knowledge assessment. If the work program is given 100% of the points, then the following marks are given:

- 91-100% points – excellent;
- 74 -90% points – good;
- 61-73% points – satisfactory;
- 0-60% points – unsatisfactory.

7. Conclusion

In higher educational establishments where you plan to use the KPI business method, you need to follow the following methodology:

1) At the first lesson, students will certainly get acquainted with key performance indicators, these indicators are easily evaluated, students understand their capabilities, goals and ways to achieve them, these indicators are presented in Table 2;

2) Intermediate control - at the end of each lesson, students are shown the total amount of points for the past period in the excel table so that they can monitor the indicators and understand how they are going towards the goal;

3) Eventually, at the last lesson, students see the final result of their work: those students who have scored the required number of points during the semester are given the exam in an automatic way.

It should be mentioned one more incentive of motivation, this is the size of the scholarship, now, unfortunately, it is very small, even the students have passed the session well and well, they have to work and not engage, for example, in scientific activities to the full. But, unfortunately, an educational institution cannot influence on the amount of scholarships, with rare exceptions. Basically, it is the exclusive prerogative of the state (Galazinskiy, 2017).

According to the results of applying the KPI business method to motivate students, the following results were obtained (using the example of the Marketing discipline):

1) The most objective method of assessing of the knowledge and achievements of students. After becoming familiar with the KPI business method, students clearly understand the parameters that make up the final grade, that it is the result of their work. Everything is public and as transparent as possible.

2) Increase the level of attendance of students. Since the KPI scorecard includes points for attending classes, this is an additional incentive to attend lectures and practical classes. After the introduction of the KPI system, attendance increased by 34%.

3) Motivation for homework and independent work. On the one hand, additional reinforcement of the skills obtained in the classroom for those students who attended the lesson, and on the other hand, an additional incentive to study the topic for students who missed classes. The final tests showed that mastering the topic through homework increased by 28%.

4) Motivation for research work, as the KPI scorecard includes points for participating in scientific competitions and conferences. According to the results of one semester, for scientific articles written by students the quantitative indicator increased by 38%.

5) Motivation for participation in professional competitions, projects and conferences.

Thus, the results of applying the KPI business method in education speak of its effectiveness and widespread use (with prior adaptation).

Additional positive points from the implementation of the KPI business method:

1) Convenient format of study - students understand the goals of their studies and are aware of the prospects for success.

2) KPI indicators help the teacher to analyze the work of students, identify problem areas, assess the quality of the educational process.

There is a feedback between the teacher and students: comments and complaints arise on the basis of clearly defined work criteria, thus the quality of the educational process improves.

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