Use of Teachers’ Ratings for Motivation Management in Higher Education Institutions

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Abstract:
The social and economic transformations actively carried out in the last 20 years in Russia contributed to the formation of competitive relations in almost all spheres of society, including the field of education. Modern high school forms a system of competition based on the ratings of higher education institutions according to specified indicators, one of which is personal ratings of teachers. Ratings are increasingly common in the motivation system for specialists in the scientific and pedagogical field. This trend is perceived ambiguously in the academic community. The authors of the paper conducted a sociological research aimed to study the views of teachers working in higher education institutions on the issue of the use of ratings in order to increase the motivation of scientific and pedagogical staff. The research was conducted by the team of Russian State Social University jointly with the staff of the research service of HeadHunter LTD. The conducted research showed that with certain reservations, most teachers think of ratings as a tool of moral stimulation of their work. Moreover, they are convinced that they are an objective necessity, which allows not only to assess a specialist's compliance with the qualification requirements but also to improve the self-esteem of teachers, as well as to visualize the contribution of the specialist to the effectiveness of the higher education institution. Based on the results of the research, the authors developed recommendations for the use of teachers' ratings for their motivation.

Keywords: motivation, teacher evaluation, ratings, stimulation.

INTRODUCTION
The world community, having entered the XXI century, sharply actualized the activities of the educational system, in particular – higher vocational education, fully subordinating its functioning to the goals and meanings of the coming information technology era. There is a common understanding of the importance of education, its direct connection with the social-economic and social-cultural development of the world community [1].

Modern higher education is at the center of social and economic transformations. Its leading role in these processes determines the necessity to find new approaches to ensure the competitiveness of teaching staff [2]. The research conducted by HeadHunter shows that in the ten-year perspective, the importance of attracting creative talented specialists will only increase (Employers and educational institutions: Goals and methods of interaction in Russia, 2018, https://hhcdn.ru/file/16558580.pdf). At the same time, according to modern researches, not more than a third of professors teaching at higher education institutions are involved in innovation processes [3]. In addition, the academic competition on the Russian example highlights the problem of exclusion of students from the focus of higher education attention [4].

The system of the competition of higher education institutions in the international educational environment is based on the ratings of higher education institutions according to specified indicators. They are closely related to personal ratings of teachers, which ultimately affect the rating of a higher education institution [5-7].

Rating, as a tool for assessing the achievements and motivation of specialists, cannot be called a modern innovation since even during the Soviet socialist competitions ratings were often formed. At the same time, the formation of ratings using modern information technologies and gamification techniques can be attributed to innovation. The rapid development of information and communication technologies at the turn of the century has led to major changes in vocational education and the emergence of new innovations [8, 9].

According to the HeadHunter research service the ratings contribute to the competition among employees and motivate them to grow, but they also sometimes make people nervous and cause disagreements in the team instead of contributing to the integration of working groups (HeadHunter Almanac, 2017, https://hh.ru/article/21200), which should be considered during their implementation.

The research of theoretical and practical approaches to teachers’ rating formation and attitudes toward them is certainly an urgent task. To date, the methodology of this issue, which would allow uniting the efforts of heads of academic teams, graduates and students of higher education institutions to identify and motivate the best teachers, especially among talented young people, has not been worked out yet [10].

Currently, the ratings of employees, including teachers, attract more and more attention of many Russian and foreign researchers [11-14] and a wide range of practitioners. Thus, according to HeadHunter, the development of company leaders is one of the main tasks for which personnel assessment is used. Moreover, in 2016, in organizations, which include under 500 persons, 46% of the respondent companies were focused on this task; in larger organizations, their number is 52% (Trends on the market of personnel evaluation in 2016 https://hhcdn.ru/file/16400572.pdf). An important task is the formation of the personnel reserve of organizations (39% and 59%, respectively). Performance of these tasks without the ratings of the best is not possible.

A number of Russian researchers reveal the issues of the motivation of teachers and staff to effective activities, which increase the rating of both the participant of training and the higher education institution as a whole in the context of reforming the educational organization [5-7]. Extensive experience in this matter is accumulated abroad, including the university science. The issues of formation of teachers' ratings are researched both on the basis of objective indicators and students’ evaluation [15, 16]. It should be noted that in 2012-2015, a lot of attention was paid to the use of these tools in Russian higher education institutions, but now there is a decline in their use. The authors of this paper aim to explore the reasons for this decline and the possibility and feasibility of expanding the use of ratings of higher education institutions teachers.

MATERIALS AND METHODS
To identify the nature of views on the use of ratings of higher education teachers in order to increase the motivation of the teaching staff, a methodology of sociological research was developed, based on the general scientific methods, research and experimental activities. It involves the following sociological methods: participant observation, survey (interviewing,
questionnaires), statistical methods, comparison, content, visual and systematic analysis. During the research, a mass questionnaire survey of teaching staff representative sample was carried out, focus groups in the main socio-professional groups of teachers were formed, an expert survey by the means of face-to-face semi-formalized interviews was conducted.

**Participants**

The paper is based on the analysis of the data of the sociological research conducted in 2017-2018 on the basis of Russian State Social University. One of the objectives of the research was to find out the possibility of using ratings of higher education institutions teachers in order to increase the motivation of the teaching staff.

According to the strategy of the empirical object formation, the research was of a selective nature; according to the scale of the extrapolation of results, it was regional. Teachers of state higher education institutions of the Russian Federation became the carriers of information (respondents). The questionnaire survey used a quota sample based on seven characteristics (gender, age, position, academic degree, academic title, teaching experience and work experience in a particular higher education institution), which amounted to 572 people.

The age structure of the respondents is given in Table 1.

<table>
<thead>
<tr>
<th>Age</th>
<th>Number of respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 35</td>
<td>22.4</td>
</tr>
<tr>
<td>35-50</td>
<td>45.5</td>
</tr>
<tr>
<td>Over 50</td>
<td>32.1</td>
</tr>
</tbody>
</table>

The gender composition of the respondents showed a certain predominance of women (Table 2).

<table>
<thead>
<tr>
<th>Sex</th>
<th>Number of respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>75.5</td>
</tr>
<tr>
<td>Male</td>
<td>24.5</td>
</tr>
</tbody>
</table>

The majority of the respondents who participated in the survey held the position of associate professor (Table 3).

<table>
<thead>
<tr>
<th>Position</th>
<th>Number of respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant</td>
<td>5.26</td>
</tr>
<tr>
<td>Teacher</td>
<td>7.02</td>
</tr>
<tr>
<td>Senior teacher</td>
<td>14.91</td>
</tr>
<tr>
<td>Associate professor</td>
<td>65.79</td>
</tr>
<tr>
<td>Professor</td>
<td>14.91</td>
</tr>
<tr>
<td>Head of the department</td>
<td>14.04</td>
</tr>
<tr>
<td>Dean of the faculty</td>
<td>3.51</td>
</tr>
</tbody>
</table>

In terms of academic degree, candidates of sciences dominated (Table 4).

<table>
<thead>
<tr>
<th>Degree</th>
<th>Number of respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No degree</td>
<td>22.4</td>
</tr>
<tr>
<td>Candidate of sciences</td>
<td>59.4</td>
</tr>
<tr>
<td>Doctor of sciences</td>
<td>18.2</td>
</tr>
</tbody>
</table>

The majority of the respondents had an academic title of associate professor (Table 5).

<table>
<thead>
<tr>
<th>Academic degree</th>
<th>Number of respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No title</td>
<td>40.5</td>
</tr>
<tr>
<td>Associate professor</td>
<td>47.6</td>
</tr>
<tr>
<td>Professor</td>
<td>11.9</td>
</tr>
</tbody>
</table>

By teaching experience in higher education institutions and work experience in a particular higher education institution, veterans dominated (Table 6, 7).

<table>
<thead>
<tr>
<th>Teaching experience</th>
<th>Number of respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 5 years</td>
<td>11.9</td>
</tr>
<tr>
<td>5-10 years</td>
<td>18.2</td>
</tr>
<tr>
<td>Over 10 years</td>
<td>69.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Work experience in a particular higher education institution</th>
<th>Number of respondents (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 3 years</td>
<td>18.9</td>
</tr>
<tr>
<td>3-7 years</td>
<td>25.9</td>
</tr>
<tr>
<td>Over 7 years</td>
<td>55.2</td>
</tr>
</tbody>
</table>

In addition, the authors formed four focus groups. The empirical base of the expert survey included the focus group studies: heads of teaching teams of higher education institutions of Moscow, representatives of age cohorts. A total of 38 experts were interviewed.

**Procedure**

As a method of collecting primary sociological information, the study used a mass survey of higher education institutions teachers using the technique of online questionnaires based on a specially designed questionnaire. The form used the questions compiled by the authors.

The study used the spontaneous method of forming a sample of respondents with a posteriori disproportionate quota. Taking into account the lack of representativeness of spontaneous online samples, as well as implementing the strategy of comparative rather than descriptive research, the samples from the samples were formed as a result, which include approximately the same (statistically comparable) groups of respondents. The implementation of this algorithm provided a sufficient number of respondents in each formed group, which allowed conducting the quantitative analysis of sociological information at a statistically significant level according to many indicators of group stratification at the same time. As a result, a sample of 572 people was subjected to the statistical analysis.

At the stage of the focus groups, the average duration of sessions was 1.5 hours, the average number of participants – 10 people. Using the semi-structured guide for the interview, the interviewer examined the focus group participants’ views on the problematic issues of the use of gamification to improve motivation of teaching staff.

**Data analysis**

The general procedure of processing of the received verbal information was carried out according to the standard mathematical program of statistical data processing “SPSS/PC”. The analysis and presentation of the data consist in the construction of statistical distributions, groupings, comparisons, conjugations of the studied features, the construction of rank scales of priorities and statistical extrapolation of data on indicators of subjective opinions and assessments of respondents.

During the analysis of the data obtained in the focus groups, the traditional qualitative content analysis of the interviews was carried out using the coding categories obtained from the texts. Data analysis began after the first interview: transcribed interviews were reviewed along with additional information from notes about the participants.
RESULTS
Ratings of higher education institutions teachers as tools of moral stimulation of work

According to the study, the vast majority of higher education institutions teachers consider ratings as one of the factors of moral stimulation of their work (Figure 1). This seems to be due not only to the need of teachers, especially the young ones, for recognition of their merits, but also to the fact that most of teaching staff came to the profession and stayed there by vocation, so it is important for them to see their achievements and development guidelines, which are given to them by ratings.

Accordingly, most teachers would like to see their own achievements and the achievements of their colleagues in the professional environment in the form of ratings published on the corporate portal of the higher education institution, as well as the top rankings of teachers on a kind of honors board (Figure 2). Among the “Other” answers to the question about the publicity of ratings of teachers in higher education institutions were the following answers: “Yes, in case of a significant revision of the performance indicators”, “Our higher education institution annually forms a rating of achievements of the teachers”, “We have a teachers’ honors board, which is regularly updated”, although such answers were singular. That is, in some higher education institutions this issue is given the due attention, but in some cases, there is a subjective approach to the preparation of the ratings.

In the study conducted, in determining the appropriateness of the use of ratings of teachers in higher education institutions, the youngest and most mature cohorts of respondents surprisingly agreed on the high importance of their application in the interests of the motivation of teaching staff (Figure 3). Most likely, this is due to the fact that young people belong to the generation Y, experiencing the need for frequent, even formal rewards [17], and veterans still remember the positive experience of socialist competitions.

When choosing appropriate ratings of teachers, respondents gave preference to ratings by types of teachers' work (educational, methodical, scientific, educational) (Figure 4). In addition, there were many supporters of the ratings of individual activities of teachers, providing the solution of the main tasks, the implementation of important projects, as well as the evaluation of teachers by students of the higher education institution. Among the answers "other" there was the opinion about the appropriateness of the rating of evaluation of the teaching staff by colleagues.

The most important condition for the effectiveness of a rating, as the respondents noted, is the principle of simplicity. Numerous evaluation indicators, a complex system of counting and verification of points, which sometimes are applied, generate stress and rejection of the techniques of rating. The importance of paying attention to this issue for heads of academic teams was also emphasized. At the same time, the direct impact of teachers' ratings, especially those compiled according to student surveys, on material motivation was not considered appropriate.

Approaches to the frequency and volume of the announcement of the results of ratings

Most respondents concluded that ratings should be published at regular intervals: at the end of the academic year (40%) or at the end of each term (17%). Almost a third (30%) of the respondents believe that ratings should be constantly opened (40%) or at the end of each term (17%). Almost a third (30%) of the respondents believe that ratings should be constantly opened (40%) or at the end of each term (17%). Almost a third (30%) of the respondents believe that ratings should be constantly opened (40%) or at the end of each term (17%). Almost a third (30%) of the respondents believe that ratings should be constantly opened (40%) or at the end of each term (17%). Almost a third (30%) of the respondents believe that ratings should be constantly opened (40%) or at the end of each term (17%). Almost a third (30%) of the respondents believe that ratings should be constantly opened (40%) or at the end of each term (17%). Almost a third (30%) of the respondents believe that ratings should be constantly opened (40%) or at the end of each term (17%). Almost a third (30%) of the respondents believe that ratings should be constantly opened (40%) or at the end of each term (17%). Almost a third (30%) of the respondents believe that ratings should be constantly opened (40%) or at the end of each term (17%). Almost a third (30%) of the respondents believe that ratings should be constantly opened (40%) or at the end of each term (17%).

Among the approaches to the volume of the announcement of the results of teachers' ratings, the opinions “Ratings should be completely open” and “Only the TOP best teachers should be open for public viewing” gained a comparable number of supporters (Figure 6). Among the responses “Other”, there were the following opinions: “Information should be available only to teachers”, “The volume of the announcement of results of ratings should proceed from the level of the occupied position”, but such judgments were of individual nature.

In general, the authors can note the high readiness of teachers to open the results of the evaluation of their work in the form of ratings. The feasibility of using the ratings in the interests of receiving feedback online was noted mostly by young teachers. However, the fact that more experienced teachers often recommended publishing ratings at the end of the academic year does not seem to indicate their unwillingness to have regular feedback, but rather the complexity of technologies for compiling and refining ratings in universities.

Figure 1. Distribution of answers to the question “Are the ratings of higher education institutions teachers a factor of moral stimulation of work?” (% of the number of the respondents)

Figure 2. Distribution of respondents' answers to questions about the publicity of ratings of teachers in higher education institutions (% of the number of the respondents)

Figure 3. The share of affirmative answers to the questions on the use of ratings of teachers in higher education institutions (% of the number of the respondents by age cohorts)
Ratings of evaluation of teachers by students (graduates) of a higher education institution

When choosing the methods of evaluation of teachers by students (graduates) of a higher education institution, the most acceptable ones are marks in the main areas of pedagogical skills and posting reviews (Figure 7). Most likely, this choice is due to the fact that this is how students evaluate their teachers on the sites https://professorsrating.org/ and http://studzona.com/teacher. However, the latest assessments on these sites were delivered in 2015-2016 and the ratings of teachers presented there are hopelessly outdated.

Many respondents consider it possible to evaluate teachers by using signs of sympathy/antipathy (likes/dislikes), apparently given the simplicity of this method. Though there were also those who excluded any ways of assessment of teachers by students.
Most respondents believe that all students should have the same opportunities in assessing teachers, almost a third of them was in favor of not allowing students with disciplinary sanctions to take part in the assessment (Figure 8). Only a sixth of teachers believe that the assessment of successful students performing is of particular importance, and the assessment of first-year students is less important than other students’. Only 6% of the respondents spoke about the suspension from the assessment of students who have debts on subjects, which indicates that there is no fear of revenge on the part of teachers of poorly performing students.

The vast majority of teachers interviewed agree that students can evaluate teachers who teach them (Figure 9). However, many respondents allow students to evaluate the administration of their faculty and curators of their study groups. In general, most of the interviewed teachers are not afraid that they will be evaluated by students, even underachieving in their subjects. And this, in the authors’ opinion, is a tribute to them. Reduction of attention to the ratings of teachers according to the assessments of students and graduates on the websites https://professorsrating.org/, http://studzona.com/teacher, etc., as well the failure in many higher education institutions of attempts to develop the systems of evaluation of teachers by students are seen in the complexity of these systems, the lack of interest on the part of students, because their needs were not studied, and on the part of academic teams.

**DISCUSSION**

Ratings are increasingly common in the system of personnel motivation. Thus, in corporate social intranets the game application “Kudos Badges Leaderboard” is widely used, which is a leaderboard, through which users can see which of the colleagues makes the greatest contribution to the common cause. The participants increase their ranks in the system by being active and obtaining recommendations in the form of “likes” from colleagues. In “Connections”, there are leaderboards of different types: global and some leaderboards for individual sections and categories and overall activity [18].

At the same time, according to the HeadHunter research service in Russia, there is a decrease in attention to the development of company leaders (Figure 10), apparently due to the high complexity of the technologies used. The examples of some large Western corporations show that the abolition of the rigid rating of workers can unexpectedly have a positive impact on the level of labor efficiency. HR departments of Russian companies are not ready for such radical experiments as a complete rejection of ratings.

In higher education institutions as well, with all the advantages of the rating system, it has its own compensatory disadvantage, namely the ambiguous impact on the quality of work of teaching staff. The factors that ensure the formation of a new generation of competitive teachers of higher education in developed countries are closely interrelated with the personal and professional attitudes of teachers in Russian conditions. Strategic objective to increase the representation of Russian scientists into the world scientific space, while strengthening the requirements of the administration and instability of the workplace creates the preconditions for the emergence of imitation development and fragmentary manifestations of pseudo-activity teachers [19].

However, the importance of teachers’ ratings cannot be underestimated. Their preparation is one of the forms of implementation of informal social control. High positions in the ratings raise the teacher in the eyes of others to the level of an expert [20]. Existing projects, methods and technologies aimed at determining the rating of a teacher of higher education, as a rule, include an assessment of his/her personal and professional qualities, both on the part of the higher education institution administration and on the part of the students.

Student teachers’ evaluation systems are one of the most common tools for monitoring and stimulating the quality of teaching in Western higher education institutions [21]. In Russian universities, there were attempts to widely use this tool in 2012-2015, which are now almost extinct. Such a situation can be changed only if it is possible to restore the interest of students in the evaluation of teachers and the preparation of ratings on this basis [22].

Of course, students’ opinion about a teacher is subjective, however, public opinion is an objective social process, which acts as a tool of social control. The fact that it is a subjective form of reflection of reality does not reduce its value [23].

In general, as the world experience shows, with a competent approach, the ratings allow assessing how an employee meets the qualification requirements that apply to his/her position, as well as tracking his/her contribution to the achievement of the goals facing the organization; creating conditions for increasing the activity of staff in the main areas of professional activity; determining the general place of a particular specialist among other employees; identifying leaders in various activities; providing guidance on the level of professional training of the employee and directions of its improvement; simplifying the procedure for the nomination of candidates for higher positions.

**CONCLUSION**

Thus, according to the study, most teachers consider ratings as a tool of moral stimulation of their work and are convinced that it is an objective necessity. They believe that the ratings of teachers are an effective way to increase the involvement of specialist working in the scientific and teaching field in solving the problems facing universities. However, the positive effect is achieved only if the ratings of teachers are not created for the sake of reports, if they are not an end in themselves, if they are simple and understandable to all, cause interest among the heads of scientific and pedagogical teams. With that, the feasibility of using the ratings of teachers, especially compiled by surveys of students, for non-material motivation was noted.

Based on the results of the conducted research, the authors developed recommendations for the use of teachers’ ratings for their motivation. In particular, special attention is paid to the following aspects:

- Most teachers are in favor of the publicity of ratings of teachers in higher education institutions.
- When choosing from the types of ratings, preference is given to ratings by types of teachers’ activities, ratings of individual activities that provide the solution to the main tasks, the implementation of the most important projects, as well as the evaluation of teachers by students of higher education institutions.
In modern conditions, it is advisable to publish ratings at the end of the school year, however, there is a growing demand for the openness of ratings and their correction online. Only the list of TOP best teachers should be open to the public, and for the leaders of teaching and scientific staff ratings should be fully open. The majority of teachers agree with the need to be evaluated by their students, with almost half of them considering it acceptable to assess teachers using signs of sympathy/antipathy (likes/dislikes). Teachers have almost no fear of revenge on the part of poorly performing students in assessing their activities, moreover, most of them believe that all students should have the same opportunities for assessing teachers. Teachers agree that students can evaluate teachers, teaching different subjects, many of them allow students to evaluate the management of their faculty and curators of their study groups. The authors express their gratitude to the administration of the Russian State Social University and HeadHunter for the opportunity to conduct the sociological research, the academic teams of higher education institutions for participating in the survey, as well as for the information provided about their views on the problem of the use of teacher ratings in order to increase the motivation of scientific and pedagogical teams.

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