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## University Graduates' Soft Skills: the Employers' Opinion

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### Abstract

The relevance of the issues addressed in the article is determined by the importance of organizing the dialogue between education and business to ensure the high quality of training specialists. Soft skills are considered from the standpoint of the unity of requirements for training, evaluation and development of human resources. The main focus is on analyzing the attitude of employers towards soft skills, approved by the Ministry of Education and Science of the Russian Federation for the preparation of bachelors and masters: the significance of soft skills for employees of the enterprise (organization); the level of the formation of soft skills among university graduates who apply or work at the enterprise; functions (tasks), in which the relevant competences are important. This article presents the results of a survey of employers on the soft skills of university graduates, in which 36 people took part – heads of organizations and representatives of personnel services from different spheres (health, culture, education, radio electronics, petro chemistry, housing and communal services, tourism, construction, etc.), different forms of ownership and the enterprise (organization) size. The survey was conducted in the form of an individual interview. The key positions of the interview were to identify the employers' opinion on the importance of soft skills for the employees of the enterprise (organization); the level of the formation of soft skills among university graduates who apply or work at the enterprise; functions (tasks), in which the relevant competences are important.

**Keywords:** higher education, soft skills, labour market, social mandate.

### 1. Introduction

Increasing of the importance of the formation of universal competences (soft skills) in the training of specialists who have higher education is determined by their high relevance in the

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modern labor market. The competent approach in personnel training, selection and evaluation of personnel, in contrast to other approaches, focuses on identifying certain characteristics (qualities) of the person that provide the ability to do something, successfully cope with individual tasks and activities in general. Based on the analysis of a number of approaches that consider competence from different angles of view (Raven, 1977, Currie, 1999, Stasz, Brewer, 2011), in this article by competence we mean a new formation of the subject of activity, formed in the process of vocational training, which is a systemic manifestation of knowledge and abilities, and personal qualities, which allow to successfully solve the functional problems that make up the essence of professional activity (Karpov, 2011). Competences (skills) are components (units) of competence. They reflect the ability to solve specific functional tasks. The allocation of skills is carried out on the basis of the analysis of activities, the identification of the functional tasks to be solved and the skills corresponding to them.

## **2. Materials and Methods**

Over the last period of time, a lot of work has been done to justify the importance of the competence approach and to determine the list of soft skills (Ananyeva, 2016; Ansimova, Kuznetsova, 2016; Davletshina, 2017; Luksha et al., 2016). The Russian Ministry of education has approved a list of eight groups of skills that have their own specific content for bachelors and masters. Currently, the scientific laboratory of Yaroslavl State Pedagogical University named after K. D. Ushinsky "Development of evaluation materials to measure the formation of soft skills of students during mastering educational programs for bachelors, masters and specialists" is working on the development of tools to evaluate the conditions of formation and formation of soft skills.

The attitude of employers to the selected skills for the organization of interaction between business and education in order to improve the quality of education is becoming very relevant nowadays.

This article presents the results of the survey of employers regarding the soft skills of university graduates. In total, 185 employers took part in the survey, among them employers of the public sector (67 people or 36.2 %) and non-public (118 people or 63.8 %). The general totality of public sector employers included institutions of the social sphere, health care, education, youth policy, and municipal administration. The general totality of employers of non-public sector included employers of commercial structures of the region (leading companies and small and medium-sized businesses). Managing directors and personnel managers were interviewed. The survey was conducted in the form of an individual interview.

The key points for discussion were related to the following:

- the importance of soft skills for employees of the enterprise (organization);
- the level of formation of soft skills of university graduates apply or work at the enterprise;
- functions (tasks), in which the relevant skills are important.

The results of the interview were recorded in a special protocol with the consent and in the presence of the interviewee.

## **3. Findings**

All representatives of employers showed high interest in the interview process, made a number of valuable suggestions and comments. The analysis of the results allows us to see the selected soft skills through the eyes of employers and make a number of comments.

Almost all of the proposed for evaluation soft skills received a high enough evaluation of their importance for the successful performance of professional activities (see Table 1, Figures 1 and 2).

**Table 1.** Assessment of the level of significance for the activities and level of formation of the soft skills among university graduates by employers

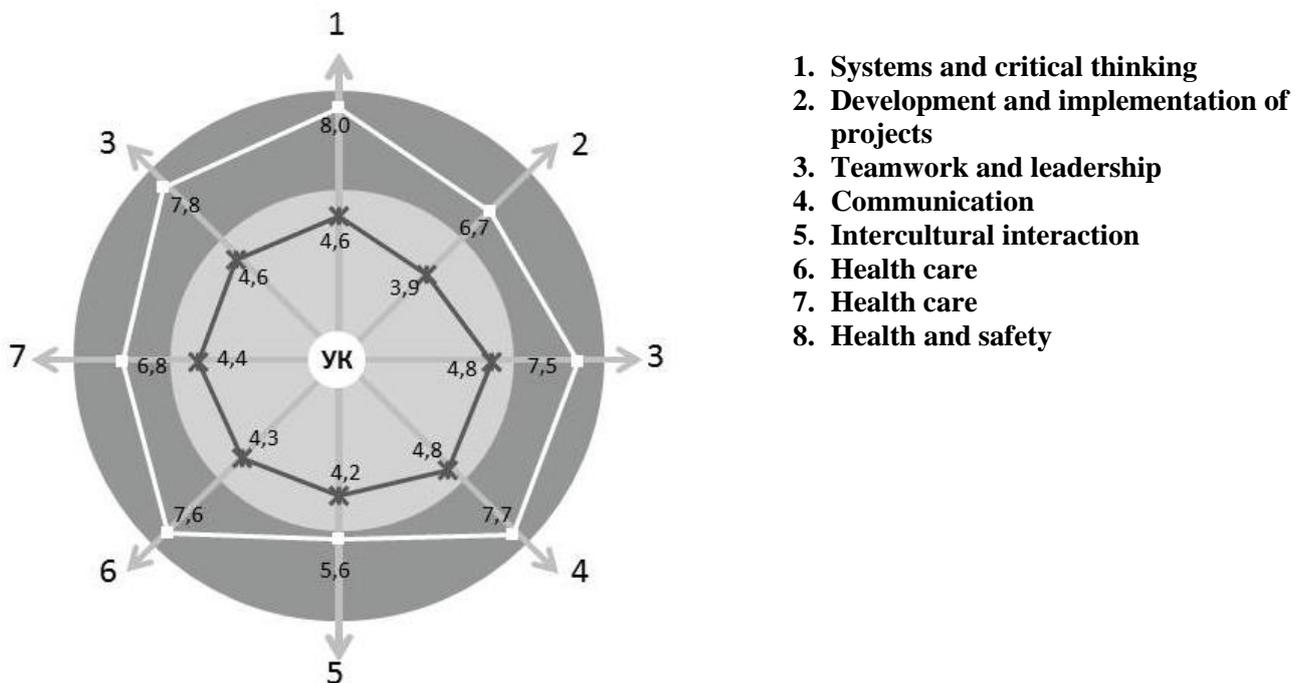
№	The soft skill	Evaluation of significance for the success of activities (10-point system)	Evaluation of the formation among university graduates (10-point system)
<b>Soft skill 1. Systems and critical thinking</b>			
1.1.	Ability to search, to do critical analysis of information and apply the systematic approach to solving problems	7.8	4.5
1.2.	Ability to carry out critical analysis of problem situations on the basis of the systematic approach, to develop an action strategy	8.2	4.6
In total for Soft skill 1 «Systems and critical thinking»		8	4.6
<b>Soft skill 2. Development and implementation of projects</b>			
2.1.	Ability to determine the range of tasks to achieve the goal and to choose the best ways to solve them, based on the existing legal norms and available resources and restrictions	7	4
2.2.	Ability to manage the project at all stages of its life cycle	6.4	3.8
In total for Soft skill 2 «Development and implementation of projects»		6.7	3.9
<b>Soft skill 3. Teamwork and leadership</b>			
3.1.	Ability to carry out social interaction and realize own role in the team	9	6
3.2.	Ability to organize and manage teamwork, developing the team strategy to achieve the goal	6	3.6
In total for Soft skill 3 «Teamwork and leadership»		7.5	4.8
<b>Soft skill 4. Communication</b>			
4.1.	Ability to carry out business communication in oral and written forms in the state language of the Russian Federation and foreign language(s)	8.6	4.8
4.2.	Ability to apply modern communication technologies, including foreign language(s), for academic and professional interaction	6.8	4.8
In total for Soft skill 4 «Communication»		7.7	4.8
<b>Soft skill 5. Intercultural interaction</b>			
5.1.	Ability to perceive the intercultural diversity of society in socio-historical, ethical and philosophical contexts	5.6	4.2
5.2.	Ability to analyze and take into account the diversity of cultures in the process of intercultural interaction	5.6	4.2
In total for Soft skill 5 «Intercultural interaction»		5.6	4.2
<b>Soft skill 6. Self-organization and self-education</b>			
6.1.	Ability to manage time, build and implement a self-development path based on principles of education throughout life	8.6	4.6
6.2.	Ability to identify and implement priorities of own activities and ways to improve them on the basis of self-assessment	6.6	4
In total for Soft skill 6 «Self-organization and self-education»		7.6	4.3
<b>Soft skill 7. Health care</b>			
7.1.	Ability to maintain a proper level of physical fitness to ensure full social and professional activities	6.8	4.4

Soft skill 8. Health and safety			
8.1.	Ability to create and maintain safe living conditions, even in emergency situations	7.8	4.6

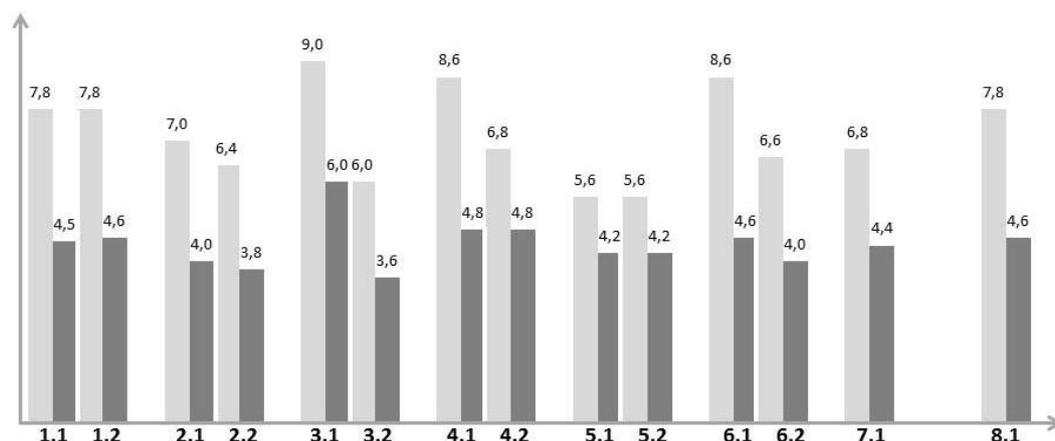
For all indicators (soft skills), the distribution of expert evaluations significantly differs from the uniform one at the significance level of 0.01 (i.e. it is very significant). The maximum evaluation of the degree of significance for the experts was 9. Thus, all of the proposed for the evaluation soft skills (on the basis of average values) can be assessed as extremely significant (average value – 7.2, and the smallest average expert value – 5.6). Soft skills which have average values above 7 can be considered decisive for the success of the employee. The leading position in the evaluation of significance is taken by Soft skill 1 “Systems and critical thinking”, which has the average value 8.0 (ten–point system), Soft skill 8 “Health and Safety” – 7.8 points, Soft skill 4 “Communication” – 7.7 points, Soft skill 6 “Self-organization and self-education” – 7.6 points, Soft skill 3 “Teamwork and leadership” – 7.5 points.

If we consider the evaluation of significance in terms of skills for the bachelor and master degrees, then there is a certain predominance of the importance of the soft skills for bachelor's success of activities, according to employers. Judging by the comments made during the interview, these skills are more common and more practical.

The most significant soft skills are: “Ability to carry out social interaction and realize own role in the team” (Soft skills 3 for bachelors) – 9 points, “Ability to manage time, build and implement a self-development path based on principles of education throughout life” (Soft skills 6 for bachelors) – 8.6 points, “Ability to carry out business communication in oral and written forms” (Soft skills 4 for bachelors) – 8.6 points, “Ability to carry out critical analysis of problem situations on the basis of the systematic approach, to develop an action strategy” (Soft skills 1 for masters) – 8.2 points.



**Fig. 1.** Evaluation of the level of significance for the activity and the level of formation of the Soft skills among graduates by employers



**Fig. 2.** Evaluation of the level of significance for the success of activities and the level of the formation of Soft skills among university graduates by employers in the context of requirements for bachelors and masters

The light line in the diagram is the evaluation of the significance of the Soft skills for the success by employers. A dark line is the evaluation of the level of the formation of Soft skills among graduates of higher education institutions by employers.

The light color on the chart indicates the evaluation of the significance of Soft skills for the success by employers. The dark tone indicates evaluation of the level of formation of soft skills among university graduates by employers.

The analysis of the level of evaluations of the formation of soft skills among university graduates shows that they are lower than evaluations of the level of significance for the success of the activity. Higher in comparison with other soft skills, employers evaluated the level of the following soft skills: “Ability to carry out social interaction and realize own role in the team” (Soft skills 3 for bachelors) – 6 points, “Ability to carry out business communication in oral and written forms” (Soft skills 4 for bachelors) – 4.8 points, “Ability to apply modern communication technologies for academic and professional interaction” (Soft skills 4 for masters) – 4.8 points), “Ability to manage time, build and implement a self-development path based on principles of education throughout life” (Soft skills 6 for bachelors) – 4.6 points, “Ability to carry out critical analysis of problem situations on the basis of the systematic approach, to develop an action strategy” (Soft skills 1 for masters) – 4.6 points, “Ability to create and maintain safe living conditions, even in emergency situations” (Soft skills 8) – 4.6 points.

**Table 2.** Ranks

Group		N	Average rank	The sum of the ranks
SS1	assessment of the importance	185	271,64	50252,50
	evaluation of graduates	185	99,36	18382,50
SS2	assessment of the importance	185	260,77	48242,00
	evaluation of graduates	185	110,23	20393,00
SS3	assessment of the importance	185	258,36	47796,50
	evaluation of graduates	185	112,64	20838,50

SS4	assessment of the importance	185	258,94	47904,00
	evaluation of graduates	185	112,06	20731,00
SS5	assessment of the importance	185	228,80	42328,50
	evaluation of graduates	185	142,20	26306,50
SS6	assessment of the importance	185	268,18	49612,50
	evaluation of graduates	185	102,82	19022,50
SS7	assessment of the importance	185	253,76	46945,00
	evaluation of graduates	185	117,24	21690,00
SS8	assessment of the importance	185	267,71	49526,50
	evaluation of graduates	185	103,29	19108,50

Table 3 shows the differences between the assessment of the level of importance of soft skills for activities and their presence in graduates. These differences are significant.

**Table 3.** The differences between the rating of importance for the successful implementation of activities and assessment of formation of competences of graduates

Statistical criterion <sup>a</sup>								
	SS1	SS2	SS3	SS4	SS5	SS6	SS7	SS8
U Mann-Whitney test	1177,500**	3188,000**	3633,500**	3526,000**	9101,500*	1817,500**	4485,000**	1903,500*
W Wilcoxon test	18382,500**	20393,000**	20838,500*	20731,000**	26306,500**	19022,500**	21690,000*	19108,500**
Z	-15,665	-13,704	-13,253	-13,370	-7,942	-15,045	-12,434	-14,954
Asymptotic significance (2-sided)	,000	,000	,000	,000	,000	,000	,000	,000
a. Grouping variable: Group								
** - p < .01								

#### 4. Discussion

The idea of searching for soft skills has deep roots, it can be clearly traced both in Russia (Bershadskaya, Serova, 2017; Karavaeva, 2017; Rebrin, 2013) and in a number of other countries (Erling, Richardson, 2010, Li, 2014; Wang, 2015; Zhao, 2015). Metaphorically, it can be compared with the search for a platform, the basis, predictors, affecting the success of activities in various

industries and spheres. Universality assumes that these skills provide the solution of typical tasks in different spheres of activity, on the one hand, and the possibility of successful implementation of professional skills, on the other.

In 1996, in the framework of the Council of Europe's program in Bern, the question was raised about the role of "key competences" that a trainee must possess in order to successfully live and continue his/her education. In particular, success in life, in professional work, family affairs and other social spheres requires the graduate of the school to have such key competences as autonomous action (independence and individual initiative), the use of tools (physical and socio-cultural means, including computer, natural language and etc.), functioning in socially heterogeneous groups (tolerance, willingness to interact with people who differ). In addition, political and social competences (conflict resolution by non-violent means and participation in the maintenance of democratic institutions), critical attitude to information in mass media and advertising, the ability to learn throughout life, etc. are highlighted.

The idea of soft skills is also based on the American tradition of differentiating professional skills into soft-skills and hard-skills. For a long time it was believed that hard skills should dominate in this dyad, the whole system of higher professional education was understood by their formation. But at the beginning of this century, American scientists proved that 75-85 % of professional success depends on soft skills and only 25-15 % on hard skills (Nelson-Jones, 2002). In other words, soft skills are a set of such personal characteristics that would facilitate effective interaction and cooperation between people involved in the business process.

It is the awareness of the importance of "soft", and then professional competences, that has turned the whole system of western higher education over the past 20 years. As for Russian universities, most of them are still focused primarily on the formation of future professional (hard) competences, despite the fact that the leading role in individual and corporate professional achievements in the modern postindustrial society is provided by "superstructural" (soft) skills.

The allocation of soft skills creates an important basis for the interaction of business and education: the organization of training and professional development of personnel, including evaluation of training programs and technologies (retraining, advanced training), evaluation of the quality of specialists training, the formation of requirements and procedures of selection and certification of personnel, self-evaluation and development of self-development programs. It is important to emphasize here that soft skills set the unity of the requirements for the training, evaluation and development of human resources.

The analysis of various sources devoted to attempts to identify and describe soft skills shows a wide variety of positions and points of view. A generalized view on the lists of competences allows us to say that soft skills somehow determine the ability to manage one's own professional activity and development, take responsibility, solve communicative tasks related to interaction, etc. They usually include social competences, intellectual competences, competences determining the organization and self-organization of activities.

A few years ago professional competences dominated in the general ranking of employers; the need for personal qualities was noted only by individual trade and financial organizations, which usually directly work with clients (Endovitsky, Titov, 2011). Among soft skills, employers prioritized those that are related to the direct content of employees' activities (Zeer, 2006). Malysheva and Nevraev (Malysheva, Nevraeva, 2006) found that for employers when hiring for job it is principal a university graduate to have special knowledge and professional skills, among personal qualities of a potential employee employers often called: susceptibility, dynamism, willingness to learn, readiness to start small.

As our research has shown, today employers consider soft skills to be significant for business. At the same time, they note the inadequacy of the formation of soft skills among modern university graduates for effective professional work. These results are similar to the results of a survey of employers conducted by M.A. Fedorova in 2016 (Fedorova, Tsygulyova, 2016), which showed that only 41.8 % of employers are satisfied with the level of development of research competences of university graduates employed at a certain enterprise. A similar trend is noted in the study of the Higher School of Economics. The modern system of higher education can not evaluate the personal qualities of students, soft skills, such as general communication skills, the ability to cooperate and work in a team, leadership, emotional stability, and others. Formal knowledge and competences obtained in the education system work much more effectively if they are supplemented by certain

personal qualities of students, which the education system can not measure. At the same time, formal skills and theoretical knowledge obtained during university studies may be less important for employers than personal qualities ("soft-skills"). It is no accident that many employers rely on preliminary testing, assessment centers, conduct numerous interviews with the candidate before hiring a graduate to work (Rudakov, 2016).

This study has a number of limitations. First, the materials presented in the article reflect the general attitude of employers towards the soft skills. We did not consider a number of typical comments by employers' representatives about the complexity of some formulations of the soft skills, about their ambiguity (for example, communication in Russian and foreign languages has different demand and formation), overestimation of the requirements for all graduates (not all should be leaders and be able to manage projects). This requires a more deep research. Also, a significant topic for discussion should be the finding the employers' vision of the ways of forming soft skills. Second, it is impossible to draw causal conclusions, as this study is cross-sectional. Third, since the data were obtained through interviews, this study is limited to how participants understood the subjects in the scales and whether they were honest in answering the questions.

## 5. Conclusion

Summing up we can say that soft skills are highly appreciated today by employers as significant for the success of their activities, but there is a dissatisfaction with the results of their formation among university graduates. And this is the most important basis for building a dialogue between education and business in the direction of ensuring the quality of training.

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