Evaluation of the Competencies of Graduates of Higher Educational Institutions, Engaged in the Training of Personnel for Tourism and Hospitality

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ABSTRACT
The article examines the issues of assessing the competencies of graduates of higher educational institutions, including those that prepare personnel for tourism and hospitality. Within the framework of this research, general scientific methods of cognition were used, including methods of scientific and theoretical research (analysis, synthesis, aggregation) and empirical methods (observation, comparison), system approach method, desk and sociological research methods. The basic tendencies of the development of domestic and inbound tourism in Russia are substantiated, including in the field of personnel training and evaluation of their qualifications. Based on an expert survey of hotel managers and travel agencies in Moscow, the most common shortcomings in the training system were identified, and the competence of graduates who were trained in Russian universities in the areas of preparation “Hospitality” and “Tourism” (bachelor’s degree) was identified as the most important for employers. The role of information technologies in the issues of the convergence of the tourism industry and the personnel training system has been substantiated, and the main directions of activity on application of computer knowledge and skills of students in the educational process are described. The materials of the article are of practical value for educational organizations engaged in the training of personnel for tourism and hotel business, and for the enterprises in this field.

Keywords: competencies, training, hospitality industry, tourism, testing

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INTRODUCTION

Tourism and hotel industry are dynamically developing, occupying the third place in the rating of the world export industries, accounting for 7% of the world exports in general and almost a third of world exports of services. The number of international arrivals annually increases by 4%. Nowadays, Russia is among the ten most visited countries in the world, as a result of which the contribution of tourism to GDP in 2016 amounted to 3.4% of GDP, and in plans for 2025 the increase to 10% in Russia’s GDP (Official website of the Ministry of Economic Development of the Russian Federation).

Priority directions for the development of tourism in the Russian Federation are as follows: the creation of infrastructure, improving the quality of tourist service and effective promotion of tourism in the domestic and foreign markets, improving the system of professional training in accordance with the requirements of industry’s professional standards. The tourist and hotel industry is experiencing an acute need for the qualified personnel.

The dynamic development of tourism and hotel companies in the capital of Russian as a whole requires a fundamentally new hotel worker who has the required professional competencies for each position, which is ready to continue studying in the framework of advanced training, which can easily adapt to hotel activities in any division of the hotel entity.

The hotel business currently imposes high demands on the content of training programs, teaching technologies, the organization of the educational process and the production practice in the process of preparing bachelors in the Hospitality business. The requirements to recruitment and selection of personnel for hotel enterprises become more strict, due to the constant development of modern technologies and management methods, marketing concepts and international standards of service in hotel activity.

Employers become not only customers, along with consumers of educational services (university graduates), they begin to dominate through the employment and competitiveness of graduates in the labor market in the hotel industry.

An analysis of the scientific literature on the training of personnel and evaluation of the competencies of graduates of higher educational institutions, including those that train personnel for tourism and hospitality, has shown that in many publications, such as: Sorin [1], Ushakov [2], Gornitzka [3], Elken et al. [4], Telegina & Schwengel [5], Osipov [6], and others, it is recommended to design graduate competencies based on the opinions of employers, including taking into account the regional characteristics of the labor market [7] to improve educational standards, curricula and educational programs, to use more modern e-learning tools.

In addition, the following publications of specialists in the field of applying computer testing for assessing the knowledge and skills of students were studied: Lyashenko & Blokhin [8], Maslyanitsyn & Fadeev [9], Chigrin [10], Chakhalyan & Larina [11].

To study the issues of assessing the competencies of graduates of higher educational institutions engaged in training personnel for tourism and hospitality, the authors of the
article used general scientific methods of cognition, including methods of scientific and theoretical research (analysis, synthesis, aggregation) and empirical methods (observation, comparison), system approach method, and sociological methods of research.

RESULTS

Main trends in the development of domestic and inbound tourism in Russia

The development of domestic and inbound tourism contributes to the growth of hotel enterprises (Figure 1).

![Figure 1](image-url)

Figure 1. The number of hotels and similar accommodation facilities in Russia for the period from 2010 to 2016 (actual data) and from 2017 to 2020 (Rosturizm’s forecast) (Official website of the Ministry of Economic Development of the Russian Federation) [12]

As can be seen from the data in Fig. 1, for 10 years (from 2010 to 2020 (forecast)), the number of hotels and similar accommodation facilities in Russia will double. At present, in Russia the index of provision of hotel places is about 4.5 places per 1 thousand inhabitants, while in Europe there are 13-35 places. In 2016, Russia was visited by more than 22 million tourists, which is 10% more than in 2015. The number of tourists-citizens of Russia in 2016 grew to 55 million. According to the study of the agency "Market Guide" the total flow of tourists to Moscow will increase to 18.4 million arrivals to the end of 2017 and 19.5 million arrivals are expected in 2018. All this contributes to the growth of incomes of the enterprises.
of the tourism and hospitality industry, and ultimately to the increase of tax revenues to the regional budgets [13].

In this regard, the authors of the article substantiated the following main trends in the development of domestic and inbound tourism in Russia:

- the predominance of tours to Moscow and Saint Petersburg, due to the peculiarities of Russian air traffic (the bulk of the flights is via Moscow);
- an increase in the hotel stock mainly due to small hotels in the regions;
- the growing need of the tourism and hospitality industry for new qualified personnel;
- implementation of a voluntary system for assessing qualifications of employees in the tourism and hospitality industry.

It is absolutely clear that the improvement of the system of training personnel for the tourism and hospitality industry should be carried out in a comprehensive manner, on the basis of taking into account the requirements of employers, on the one hand, and the opportunities for improving educational activities in the context of its comprehensive computerization, on the other.

The requirements of employers to graduates of higher educational institutions, engaged in the training of personnel for tourism and hospitality

To identify the quality of graduates’ training of leading universities in the "Tourism" and "Hospitality" with the participation of one of the co-authors of the article E.Y. Nikolskaya et al. [14] an expert survey of more than 70 hotel managers and travel agencies in the capital was conducted, which revealed that 79% of employers are satisfied with the quality of graduate training, 21% indicated the following shortcomings: graduates have very weak practical and language training, cannot use modern information technologies and methods in their practical work [15].

To identify the compliance of educational standards with the requirements of professional standards, the authors of the article additionally conducted a questionnaire of the heads of hotel and tourist enterprises of the capital, in which it was suggested to assess the level of competencies contained in the federal state educational standards in the direction "Tourism" and "Hospitality", and also to supplement the list of general cultural and professional competences contained in them, which graduates need.

During the analysis of the questionnaires of the managers of the branch enterprises, the following requirements of the employers to the competence of the graduate - the bachelor’s in hotel business, the most important for working in the hotel complexes of the capital, were revealed (Table 1).
Table 1. The most significant competencies for employers graduates, trained in the direction of preparation "Hospitality" (bachelor)

<table>
<thead>
<tr>
<th>Description of competences</th>
<th>Degree of importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>the ability to find organizational and managerial decisions in non-standard situations,</td>
<td>80%</td>
</tr>
<tr>
<td>the willingness to bear responsibility for them, lead people and obey</td>
<td></td>
</tr>
<tr>
<td>readiness to analyze the results of activity of the functional divisions of hotels and</td>
<td>75%</td>
</tr>
<tr>
<td>accommodation facilities, the level of customer service, draw appropriate conclusions</td>
<td></td>
</tr>
<tr>
<td>the ability to control the correctness of technological processes (the technology of</td>
<td>70%</td>
</tr>
<tr>
<td>booking, registering and issuing a guest)</td>
<td></td>
</tr>
<tr>
<td>ability to innovate and work in global computer networks, providing information security</td>
<td>65%</td>
</tr>
<tr>
<td>ability to research activities in the formation and promotion of hotel products in</td>
<td>65%</td>
</tr>
<tr>
<td>accordance with the requirements of different groups of consumers</td>
<td></td>
</tr>
<tr>
<td>ability to communicate in Russian and foreign languages for solving problems of</td>
<td>55%</td>
</tr>
<tr>
<td>interpersonal and intercultural interaction</td>
<td></td>
</tr>
<tr>
<td>readiness to apply legal and technological documentation regulating hotel activity</td>
<td>52%</td>
</tr>
<tr>
<td>knowledge of organizational and regulatory documents governing hotel activities</td>
<td>50%</td>
</tr>
</tbody>
</table>

In addition to the requirements for competencies, many employers indicated as mandatory conditions for hiring a graduate of a university, the experience in the hotel business, 68% of the employers interviewed said so. Among the important personal qualities of graduates, employers identified the following: aspiration to development of adjacent professions and readiness to work in different divisions within one enterprise – 70% of answers, learning ability – 45% of answers, motivation to professional development – 65% of replies of employers.

For students studying in the direction of "Tourism" (bachelor) employers, the competencies of graduates were ranked as follows (Table 2).

Analysis of employers' opinions on the importance of graduates' competencies in the areas of preparation "Hospitality" and "Tourism" showed that they all want to see, in addition to theoretical knowledge, practical skills in organizing and implementing practical activities in the tourism and hospitality industry.

It was the creation of modern methods and programs for assessing the formation of professional competencies to which the following direction of research of the authors of this article was devoted.
Table 2. The most significant competencies for employers of graduates, trained in the field of training "Tourism" (bachelor)

<table>
<thead>
<tr>
<th>Description of competences</th>
<th>Degree of importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>ability to organize the process of servicing consumers and (or) tourists</td>
<td>82%</td>
</tr>
<tr>
<td>the ability to calculate and analyze the costs of the activities of the tourist industry enterprise, tourist product in accordance with the requirements of the consumer and (or) the tourist, justify the management decision</td>
<td>76%</td>
</tr>
<tr>
<td>ability to communicate with consumers of a tourist product, providing a service process that takes into account the requirements of consumers and (or) tourists</td>
<td>72%</td>
</tr>
<tr>
<td>ability to use methods of monitoring the tourism services market</td>
<td>68%</td>
</tr>
<tr>
<td>the ability to use the basics of economic knowledge in assessing the effectiveness of performance in various fields</td>
<td>66%</td>
</tr>
<tr>
<td>ability to use normative documents on quality, standardization and certification in the tourism industry</td>
<td>65%</td>
</tr>
<tr>
<td>the ability to solve standard tasks of professional activity with the use of information and communication technologies and taking into account the basic requirements of information security, the organization of tourist activities</td>
<td>63%</td>
</tr>
<tr>
<td>knowledge and observance of general legal grounds, taking into account international and Russian law</td>
<td>56%</td>
</tr>
<tr>
<td>analyze and process information on tourism activities</td>
<td>54%</td>
</tr>
<tr>
<td>ability to maintain a proper level of preparedness for professional activities</td>
<td>52%</td>
</tr>
</tbody>
</table>

The use of information technology to assess the level of competence of universities’ graduates

Nowadays, universities play a major role in bringing together the tourism industry, training for the industry and the production of knowledge [16]. The development of the hospitality and tourism industry leads to an increase in the need for qualified personnel, as well as tools for evaluating the employer's competence of the future employees [17]. To improve the quality of education, it is necessary to improve teaching methods, individualize curricula and carry out systematic monitoring of the results of the learning process, the latter being the most important [10].

As a means of assessing the qualifications of employees of the hospitality industry and graduates of universities, it is necessary to consider modern software products for creating tests, providing the testing process itself and automating the collection and analysis of results [18]. There are a lot of similar software products on the Russian market, however, the projects of Airen (IREN - http://www.irenproject.ru/) and MyTestX
should be considered as the most acceptable ones. Let us dwell on the latter in more detail.

The software product MyTestX in the Pro version (MyTestXPro) is supplied under the shareware license. The cost for universities varies from 100 to 300 rubles for one key (license) required for each computer on which this software product will be installed. MyTestXPro is constantly updated, which allows you to have a stable version that works correctly in a modern network environment and has the maximum degree of security.

MyTestXPro consists of three modules that allow to completely provide the testing process: the module of the test editor, the testing module and the server part called the "test log", which allows distributing the tests among the testers and analyzing the test results [11].

The test editor allows entering tests in the shell, with ten types of test tasks supported. The simplest one is the right answer from a variety of options, then a set of correct answers, the order of origin, questions about the correspondence, the truth of the statements, the manual input of the answer variant in the form of a number or as text, the choice of a certain part in the picture, the permutation, and finally the filling of empty ones Places. The type of the test question can be changed at any time. Tests are created in the form in which they will be shown to the test person. However, if you can not format the question with the standard tools available, you can run the built-in text editor, which allows you to make drawings, tables and other objects both in the test question and in possible answers.

Convenient features of this application are: the ability to convert tests from existing, for example, text files or files of specific formats; the ability to check the created testing set for errors with indication of such and the places of their occurrence; the ability to convert an electronic test into a traditional paper form when computer testing is not possible; finally, the possibility of creating offline tests, i.e. such that the implementation does not require working on the network, which allows you to give out test tasks for self-testing knowledge of the test.

The test editor also acts as a tool for setting up the testing itself. It allows you to specify which tasks from which groups will be included in the test and in what quantity (percentage); the amount of time allotted for testing as a whole; determination of the scale of evaluation of test results. The scale allows getting the result in the mode from "passed" / "did not pass" to a 100-point score, taking into account the complexity of the questions. The traditional "unsatisfactory-excellent" scale in the Russian Federation is presented in the assessment templates available in the product, and the transition boundaries are customizable.

Many test parameters are distributed both for the whole test and for individual questions: there is the possibility of limiting the execution time, setting the number of points for the correct answer, setting several formulations of the question, and so on. When you add / remove questions from the test, the points for answers are automatically redistributed. There is an opportunity to charge points in proportion to the number of correct options in multiple choice questions. There is also the possibility of passing the test in the training mode; in this case, a tested person who has problems with the respond can be shown a hint. In this case, when creating tests, you can determine a certain penalty for using the hint (from
zero to the maximum, the corresponding cost of the correct answer), which will be subtracted from the final test result.

The module of the MyTestXPro product is made in a simplified style so that nothing distracts the tested person. The interface corresponds to the module of the test editor and will have its own features depending on the parameters and test modes. In any case, the test window contains information about the percentage of completed tasks and the remaining time. In other modes, additional opportunities may appear, for example, the ability to skip a question or select a question in free mode, rejecting a response in a penalty mode. If there is a picture or sound file in the question, they will be displayed respectively as a full picture and a thumbnail, and also as a media player.

The features of choosing the right variant (s) in different testing programs depends on the type of the question, for example, with sequence questions it is possible to drag the responses with the mouse; when selecting a response, it is highlighted, which reduces the likelihood of a technical error when entering a response. In any case, until the "Next" button is pressed, it is possible to change the answer variant. After the testing is completed, the results are displayed on the screen (and it is possible to provide both a short report and a complete question-containing answer to all of them, indicating the correct answers) and can be sent to another computer for processing.

Logging testing allows you to maintain the testing process itself, as well as process its results. In general, there are two tables: the overall testing and the results of each test subject. Also in this module there is information about the current state of testing (who is tested, when testing is started, its progress), service information and the procedure for distributing test tasks.

DISCUSSION

Earlier, the authors of the article repeatedly examined the problems of training personnel in higher education institutions and within the framework of corporate training [19, 20, 21] and their influence on the regional economy [22]. At the same time, the question of how to assess the degree of readiness of university graduates to work in real business earlier was not considered.

One of the authors, a specialist in the field of computer technologies used in hotels, earlier also pointed to the need to utilize the software products in the hospitality industry [23].

Therefore, this article reflects the results of a study of the possibilities of applying software products for assessing the competencies of graduates of higher educational institutions engaged in training personnel for tourism and hospitality, based on the requirements of employers.

The use of this approach, which unites the interests of universities and employers, will allow developing integrated solutions that meet the needs of the modern labor market.
CONCLUSION

Thus, according to the results of the conducted research, it can be concluded that employers every year make ever higher demands on graduates of specialized universities that train personnel for the tourism and hospitality industry. One of the most effective measures for the training of relevant personnel is the use of various computer technologies to assess the level of formation of general cultural and professional competencies of personnel applying for vacancies in the tourism and hospitality industry.

As the results of the study conducted by the authors of the article showed, in order to increase the efficiency of testing knowledge with the help of any software product, the following recommendations should be adhered to: [8, 9]: use the latest versions of the software (this allows increasing the security testing and evaluation); give as many alternative formulations of the answers as possible (a simple increase in the number of tests does not give the desired result, because once hacked a test file allows you to easily find tasks and correct answers); to limit or even prohibit the use of independent test modules that are executed remotely, and the prohibition of multi-tasking when you run the tests (so that the tested person could not in parallel with testing search for the correct answer) finally, one of the most effective ways is a permanent upgrade tests with answers requiring any mathematical calculations.

Thus, the recommendations proposed in this article on improving the assessment of the level of competence of graduates of higher educational institutions engaged in training of personnel in the tourism and hospitality industry will help:

- modernization of the training system for the hospitality industry in accordance with approved professional standards;
- meeting the needs of employers in professional highly qualified specialists;
- improving the quality of graduate training in accordance with professional standards and training profiles;
- formation of an educational institution for graduates motivation to receive education throughout life;
- increase the competitiveness of the national system of training in the hospitality industry.

These recommendations can be used not only in Russia, but also in other countries for which the development of tourism and hospitality is one of the priority areas of the national economy.

ACKNOWLEDGMENTS

The article was prepared in the framework of the Grant of The Russian Economic University named after G.V. Plekhanov "Development and approbation of a mechanism for assessing the qualifications of employees of the hospitality industry and graduates of universities based on the application of professional standards".
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