

# DEVELOPMENT AND FORMATION OF STUDENT COMPETENCIES FOR THE HOTEL AND RESTAURANT SPHERE WITH DISTANCE LEARNING

*Anna Radchenko<sup>1</sup>, Tahir Amiraslanov<sup>2</sup>, Galina Dyukareva<sup>3</sup>, Leonida Bilenko<sup>4</sup>, Anna Islamova<sup>5</sup>*

<sup>1</sup>Department of Food Technologies in Restaurant Industry, Kharkiv State University of Food Technology and Trade, Kharkiv, Ukraine  
gasanova.anna.edyardovna@gmail.com

ORCID: <https://orcid.org/0000-0003-0869-6607>

<sup>2</sup>National Culinary Center of Azerbaijan, Baku, Azerbaijan

ORCID: <https://orcid.org/0000-0002-8136-9496>

<sup>3</sup>Department of Food Technology, Hotel and Restaurant Business, Kharkiv College of Trade and Economics, Kyiv National University of Trade and Economics, Kharkiv, Ukraine

dgalina531@gmail.com

ORCID: <https://orcid.org/0000-0002-0950-6601>

<sup>4</sup>Kharkiv College of Trade and Economics, Kyiv National University of Trade and Economics, Kharkiv, Ukraine, 61054

kharkov@htek.com.ua

ORCID: <https://orcid.org/0000-0003-4048-0654>

<sup>5</sup>Lviv University of Business and Law, Lviv, Ukraine

kharkov@htek.com.ua

ORCID: <http://orcid.org/0000-0002-6385-1801>

## ARTICLE INFO

### Article history:

Received date 25.03.2021

Accepted date 22.04.2021

Published date 30.04.2021

### Section:

Education

### DOI

10.21303/2313-8416.2021.001803

### KEY WORDS

competence  
competence formation model  
distance education  
quarantine conditions  
hotel and restaurant industry  
competitiveness

## ABSTRACT

A developed model of the formation of the competencies of future specialists in the field of the hotel and restaurant industry is proposed, which takes into account the peculiarities of teaching students in quarantine conditions of distance education.

The research carried out makes it possible to systematize scientific views on the desired competencies of scientists, researchers and specialists in the field of the hotel and restaurant industry.

**The object of research** is the competence of students for the hotel and restaurant sector, as well as the peculiarities of their formation in conditions of quarantine during distance learning.

**Investigated problem** consists in the development and analysis of the features of the formation of the competencies of future specialists in the hotel and restaurant industry in the course of distance learning. Higher education is obliged to prepare not just a specialist endowed with knowledge and skills. It should be aimed at the formation of a competitive specialist and a successful personality.

In Ukraine, the hotel and restaurant industry does not have a system of competencies common for employers, specialists, higher educational institutions and colleges. Therefore, the presented study is aimed at creating such a basis in the form of a developed model for the formation of the competencies of future specialists in the hotel and restaurant industry, which takes into account the peculiarities of teaching students in quarantine conditions of distance education.

**Main scientific results:** the necessary components of the model for the formation of the competencies of a modern specialist for the hotel and restaurant industry were identified. The essence of the competence-based approach to professional training of a specialist in the context of modernization of education, taking into account distance education during quarantine, is revealed. The modern scientific view of the requirements for specialists in the hotel and restaurant sector is analyzed. The results obtained are adapted to the needs prevailing in the hotel and restaurant industry.

**The area of practical use of the research results:** the comparative analysis allows to systematize scientific views on the desired competencies of scientists, researchers and specialists in the hotel and restaurant industry. This, in turn, will make it possible to better inform students about the qualities that are in demand and make the necessary changes to the curriculum in the future.

**An innovative technological product:** a model for the formation of specialist competencies for the hotel and restaurant industry has been developed, which takes into account the peculiarities of teaching students in quarantine conditions of distance education.

**Scope of application of an innovative technological product:** the use of a competence-based approach in higher education using the proposed model for the formation of competencies of a future specialist for the hotel and restaurant industry.

## 1. Introduction

After joining the Bologna program, Ukraine has organized a system of higher education on a competency-based basis. As a result, the terms “competence” and “competence-based approach” are of great relevance in education.

The term “competence” refers primarily to the terms of reference of an organization, institution or person. Within the limits of its competence, a person may be competent or incompetent in some matters, that is, have competence in a certain field of activity. When it comes to the process of learning and personal development, then one of the results of education will be the acquisition of a set of competencies by a person, which is extremely necessary for activities in various spheres of public life.

The competence-based approach provides for the ability of a specialist to implement its knowledge, skills, qualities and other competencies (components of its potential) [1].

The main task of implementing the competence-based approach is to create a socially mobile specialist who can easily move around both in the horizontal and in the vertical social system. It must easily adapt to work in rapidly changing life situations. Be competitive. To be able to move away from the prevailing stereotypes and offer new technologies for solving professional problems, including in the hotel and restaurant industry [2].

In the current situation, associated with a high risk of infection with coronavirus, the only possible response of universities and colleges to an external challenge was a temporary full transition to distance learning. Emergency transfers of training to a distance learning format in a pandemic have significant differences from a properly planned online training based on massive open online courses [3].

The problem of the formation of professional competencies of students of hotel and restaurant business in the context of distance learning has become especially urgent. They are viewed as a more complex social and personal structure based on values aimed at obtaining knowledge and experience acquired by a person in the learning process and outside it.

All this dictates new approaches in the training of competent specialists in the hotel and restaurant industry who will be ready for creative work, professional self-development and improvement. In addition, the problem of the effectiveness of professional training of future hospitality specialists is due to the need to overcome the contradictions that arise between the requirements of society for the professional training of future specialists in the service sector and their qualifications in accordance with the requirements of the educational and qualification level. Therefore, the study and generalization of experience in the formation of professional competencies of future specialists in the hotel and restaurant business using distance learning technologies is an urgent topic [4].

### 1. 1. The object of research

The object of research is the competence of students for the hotel and restaurant sector, as well as the peculiarities of their formation in conditions of quarantine during distance learning.

### 1. 2. Problem description

Now the domestic market of hotel and restaurant services is going through difficult times, which is due to a number of reasons, among which is the insufficient provision of qualified specialists.

Before the pandemic, the hotel and restaurant business was considered one of the most dynamic industries in the world economy. The global economic crisis and quarantine have led to global losses in the development of the hotel and restaurant industry. After the end of the quarantine, the hospitality sector will require immediate restoration, and this will be impossible without solving the problem of its staffing [5, 6].

Modern trends in the sphere of public services require possession of a broad technical outlook, the ability to respond promptly to any changes in the professional environment, and the independent determination of the most rational methods of professional activity. It is also assumed that they have deep knowledge, skills and personal qualities. Future specialists must, first of all, possess a set of necessary competencies [7].

It should be noted that the concept of “competence” differs from the concept of “qualifications”. Qualifications are described only as purely professional knowledge and skills. Unlike qualifications, competencies, in addition to professional knowledge and skills, include such qualities as initiative, cooperation, the ability to work in a team, communication skills, the ability to learn, evaluate, think logically [8].

Competence manifests itself in specific situations, certain circumstances and is the integration of knowledge, skills, experience in the social and professional sphere. The acquisition of these competencies did not raise doubts in the classical traditional forms of modern higher education. However, in the face of the threat of the spread of coronavirus infection, everything has changed dramatically. Most universities and colleges, on the recommendation of the Ministry of Education and Science of Ukraine, have decided to switch to distance learning. Therefore, all face-to-face classes, including lectures, practical and even laboratory ones, were transferred to the online environment [9].

In this regard, certain problems arose for students studying in the context of distance education. All participants in the educational process in training specialists in the hotel and restaurant business faced difficulties in organizing work in a remote mode: Various kinds of problems arose, including those related to the inability to acquire one of the main professional competencies in traditional conditions. This is the professional competence of the hotel and restaurant industry – the ability to use professionally profiled knowledge and practical skills in organizing food production, storage, transportation and sale [10].

Culinary students are expected to not only become familiar with the technologies they will later encounter in the workplace under conditions of quarantine during distance learning, but also acquire practical skills in cooking [11].

To do this, they need to provide access to these technologies within the framework of the distance learning process [12].

### **1. 3. Suggested solution to the problem**

To solve the described problem, first of all, it is necessary to familiarize yourself with the already existing theoretical and practical developments in this area.

It is necessary to conduct a literary review of research and views on the competence of a modern specialist in general, as well as a specialist in the field of hotel and restaurant business in particular. A literature review allows to define a wide range of terms used, describe the desired competencies that a graduate should have. At the same time, taking into account the experience, the acquisition of professional competencies of students of universities and colleges for the hotel and restaurant industry in the conditions of quarantine during distance learning, accumulated in the world.

For the study, the initial information was collected and processed. The sources of this information are regulatory documents of the hotel and restaurant sector, books, articles in magazines on the relevant topic.

During the study of literary sources, the terminological base was analyzed and generalized, since the same semantic concepts can be reflected in different words. On the other hand, there is a need to concretize the essence of various terms related to education. This specification has received particular relevance since the end of 2019. It means that they have studied and comprehended the essence/differences of many terms/concepts, the relevance of which has sharply increased. This especially applies to the terms: distance education, distance education, distance education, blended education, online learning, etc.).

Different sources have used different phrases to describe the same competencies, so they have been grouped and nominal terms have been selected for simplicity. Based on this, a model has been developed for the formation of the competencies of future specialists in the field of the hotel and restaurant industry, which takes into account the peculiarities of teaching students in quarantine conditions of distance education.

The purpose of developing a model is to consider the features of the formation of students' competencies for the hotel and restaurant sector in conditions of quarantine during distance learning.

## **2. Materials and Methods**

To achieve these goals, a study was carried out of existing theoretical knowledge and practical experience in the formation of the competencies of future specialists in the hotel and restaurant industry in the context of various forms of education.

The aim of this work was achieved by analyzing theoretical knowledge and vast practical experience in the use of the competence-based approach in higher education.

The theoretical work consisted in studying the sources of scientific information in accordance with the chosen object of research – the competencies of students for the hotel and restaurant sector, as well as the peculiarities of their formation in conditions of quarantine during distance learning.

The practical work consisted in the development of a model for the formation of the competencies of future specialists in the field of the hotel and restaurant industry, which takes into account the peculiarities of teaching students in the quarantine conditions of distance education.

In the course of the work, such widely used general scientific logical methods, theoretical analysis and synthesis, abstraction and concretization, induction and deduction were used.

In accordance with the set goals of the study, a general set was formed, consisting of a large number of competencies. Based on this general set of competencies, the groups were identified to which they were distributed. At the same time, it was checked to what extent the developed definitions of any individual competencies are closely related to others.

The individual competencies of a specialist were combined into groups based on such characteristics as type (knowledge, abilities, skills, personal qualities, etc.), specificity (general, subject of a given specialization).

The research was carried out by studying, generalizing and improving the competence-based approach in higher education through the competence model of specialists in the hotel and restaurant industry, in higher educational institutions of Ukraine, namely Kharkiv State University of Food Technology and Trade and Economic College of Kyiv National Trade and Economic University.

### 3. Results

The developed model for the formation of the competencies of future specialists in the hotel and restaurant industry includes the following areas:

1. Determination of the need for changes in teaching students in the quarantine conditions of distance education.
2. Collection of information and analysis of the situation that has arisen.
3. Pre-selection or development of an innovation.
4. Making a decision on the implementation of a new educational system.
5. Formation of a new content of education.
6. Development and implementation of new teaching technologies.
7. Creation of new types of training events.

The model for the formation of the competencies of a future specialist in the hotel and restaurant sector is a set of clearly defined qualities of the learning object that is consistently developing over time, formed under the influence of various factors. Among these factors, the student's motivation, desire and ability to invest more personal efforts and to work more responsibly on itself are of particular importance.

In addition, the model for the formation of the competencies of a future specialist includes a structured set of mandatory, defined and assessed competencies in all their possible manifestations (knowledge, abilities, skills, personal qualities, etc.).

In the competence formation model, as in the system of specialist competencies for the hotel and restaurant industry, the following groups of competencies are defined:

1. Integral competence.

The ability to solve complex specialized tasks and practical problems in the learning process, in the economic and / or experimental and innovative activities of the subjects of the hotel and restaurant business, involves the use of certain theories and methods of the relevant science to develop new holistic knowledge and is characterized by the complexity and uncertainty of conditions.

2. General competences (GC).

GC 1. Ability to form a worldview for the development of human existence, spiritual culture, society.

GC 2. Ability for oral and written business communication in a foreign language for communication in the professional and socio-cultural spheres, proficiency in the professional terminology of a foreign language.

GC 3. Ability to use information and communication technologies, find, process and analyze information from various sources.

GC 4. Ability to work in a team, to establish contact with people of different age, character and status, as well as to develop their own individuality.

GC 5. Committed to health, well-being, safety and the preservation of the environment.

GC 6. Ability to apply knowledge in practice, identify, pose and solve problems.

GC 7. Ability to work autonomously, evaluate and maintain the quality of work.

GC 8. Ability to conduct research at an appropriate level, design and manage projects.

3. Professional competencies (PC) of the specialty.

PC 1. Ability to master basic concepts, foundations of the theory and practice of vocational training, the ability to apply them.

PC 2. Ability to organize the service and production process of enterprises of the hotel and restaurant business.

PC 3. Ability to provide the necessary quality of hotel, restaurant services and customer service needs.

PC 4. Ability to manage an enterprise, make decisions in the economic activities of the subjects of the hotel and restaurant business in accordance with the requirements of the current legislation and the business environment.

PC 5. Ability to introduce rational schemes for planning and organizing workplaces in a hotel or restaurant, structure tasks in accordance with the number and qualifications of performers, determine the sequence of work, calculate the deadline for their completion.

PC 6. Ability to use professionally profiled knowledge and practical skills in organizing food production, storage, transportation and sale.

PC 7. Ability to draw up the necessary regulatory documentation for semi-finished products and finished culinary, bar products of restaurant enterprises.

PC 8. Ability to generate reports, maintain accounting and reference documentation within their competence.

PC 9. Ability to promote products and services of enterprises of the hotel and restaurant business in accordance with the requirements of consumers, based on the latest achievements of science and technology.

PC 10. Ability to carry out the selection of technological equipment and equipment, the ability to solve the issues of rational use of spatial and material resources.

PC 11. Ability to form an information environment and an information base for organizing and analyzing the service and production process of enterprises in the hotel and restaurant business, forming an information basis for making managerial decisions in the field of professional activity.

PC 12. Ability to organize the observance of the rules and norms of labor protection, fire protection, industrial sanitation and personal hygiene by employees of the enterprises of the hotel and restaurant business; organize training for employees on safety measures and operating rules for trade and technological equipment and technological equipment, inventory, dishes, furniture, etc.

PC 13. Ability to work with automated management systems for hospitality establishments.

PC 14. Ability to organize the process of providing basic and additional services in the institutions of the hotel and restaurant industry to solve complex problems in the field of professional activity, adapt them to the conditions of a changing environment, having mastered the working professions of a cook, waiter, bartender.

#### **4. Discussion of results**

Since the main goal of higher education is to train a competent specialist, the main characteristics include its competitiveness in the labor market, high qualifications, responsibility, focus in related areas of activity [1].

Therefore, the developed model of the competencies of future specialists in the hotel and restaurant industry takes into account not only the peculiarities of teaching students in quarantine conditions of distance education. It develops the ability to work effectively in its specialty, readiness for continuous professional growth, social and professional mobility in modern conditions.

The difference between future specialists, based on the developed competency model, is that they not only possess knowledge, and skills of a certain level, but also the ability and willingness to implement them in rapidly changing life situations.

This is facilitated by the introduction of a new educational system in the process of teaching students in quarantine conditions of distance education. And the development of non-traditional teaching technologies, the formation of a new educational content, the creation of original types of educational events, will contribute to the acquisition of professional competencies, which is also confirmed by research on this topic. For example, scientists Liwei Xu, Ming-Yu Chang Jian conducted research to study

the effectiveness of the use of multimedia web technologies in teaching culinary skills with a mixed method. Participants in the hospitality program in Taiwan were selected and assigned to treatment and control groups, respectively, using multimedia networked educational technologies and traditional educational methods. The results indicate that the experimental group showed the best results. The effect confirmed the applicability of multimedia web technologies in teaching culinary skills [6].

It is known that the traditional educational process is already a complex dynamic education. The author, Robert C. Cawley, argues that the number of technologies is constantly increasing, so it is more important than ever that the teacher selects the right laboratory/kitchen equipment and software for use in a particular cooking program. Making an informed decision ensures the maximum usefulness of the technology [2].

Under conditions of quarantine, with a remote format, this process becomes even more complicated, since the motives, goals, objectives, content, forms, methods, results change.

Among the expected learning outcomes of students, it is important to provide competencies in the form of knowledge, skills and abilities to work with modern hardware and software. Especially, using the technology of remote devices in laboratory cycles of various disciplines and organizing the educational process based on modern Internet technologies. The correctness of this approach is confirmed by the researchers Surgenor D., Hollywood L., Furey S., Lavelle F., McGowan L., Spence M., Raats M., McCloat A., Mooney E., Caraher M. [7].

The final result of the comparative analysis of modern scientific views on the competence of a future specialist in the hotel and restaurant industry, in our opinion, will be important for employers, teachers, students and graduates, since it creates the basis for understanding the types and essence of the required competencies. What the authors of Cankül, D., Kızıltaş, M., Temizkan, R. [9] are sure.

In this regard, it is necessary to create electronic textbooks, electronic reference books, computer models, computer testing systems, electronic laboratory workshops. It is the created electronic laboratory practice that will make it possible to simulate the processes occurring in the studied real objects, or to simulate an experiment that is not feasible in the real conditions of educational disciplines.

It should be noted that the main conditions are taking into account the individual characteristics of the student, its level of competence and motivation, in accordance with the educational needs and learning goals. An effective solution to these problems can be the organization of a remote-virtual laboratory.

A virtual laboratory is understood as a set of hardware and software hardware, computer graphics, multimedia technologies designed to implement a remote physical experiment and achieve effective interactive interaction between the student and the learning environment. This allows conducting laboratory and practical classes related to experimental research, which ensures maximum student access to educational information.

In addition, in order to acquire the necessary competencies, let's recommend creating virtual laboratories in various disciplines, which will increase the motivation of cognitive activity and the creative nature of student learning. It is the laboratory of remote access that allows to the greatest extent to develop the necessary intuition of the researcher, since students studying in these disciplines must have just the skills of remotely working with devices.

In connection with the new approach, the developed competency model looks like the most adequate model for a specialist. It takes into account the needs of the market for specialists in the hotel and restaurant industry. At the same time, the model contains not only the peculiarities of teaching students in quarantine conditions of distance education. It also includes the requirements of enterprises for such employees, as well as the needs of the specialist itself as a harmonious, comprehensively developed personality.

These methods are considered active learning methods because the focus is on the student acquiring knowledge through activity and experience.

During the work on the article, the awareness of the importance of the considered competencies, from the point of view of various types of employers, was not thoroughly studied. Therefore, this will be our research in the future.

It should be noted that many of the competencies reviewed have been generically defined by other researchers in the field. However, some of the other reviewed competencies require further study and examination in order to gain a deeper and more correct understanding of them.

## 5. Conclusions

Higher education is obliged to prepare not just a specialist endowed with knowledge and skills. It should be aimed at the formation of a competitive specialist and a successful personality.

The projected increasing demand for competitive specialists with professional competencies in the field of hospitality after the completion of quarantine will require an immediate solution to its staffing.

The formation of professional competencies of students in the hotel and restaurant business in the context of distance learning is considered as a complex social and personal structure based on values aimed at obtaining knowledge, experience, acquired in the learning process, and not in it.

The developed model of the competences of future specialists in the hotel and restaurant industry takes into account the peculiarities of teaching students in the quarantine conditions of distance education. Such a model can play an important role in preparing them for the successful realization of their creative potential in a market economy.

The rapid pace of development of innovations and technologies in the hotel and restaurant industry increases the qualification requirements for specialists in this field, through the acquisition of the necessary key professional competencies.

Let's recommend, when training specialists for the hospitality sector, to develop all types of competencies, which are presented in the following groups: integral competence, and then, according to the hierarchy, general competences, professional competencies included in the developed competency model.

Further research in this direction should be focused on the competencies that the employer wants to see in the graduate of the hotel and restaurant business.

---

## References

- [1] Hartel, R. W. (2008). Core Competencies in Food Science: Background Information on the Development of the IFT Education Standards. *Journal of Food Science Education*, 1 (1), 3–5. doi: <http://doi.org/10.1111/j.1541-4329.2002.tb00003.x>
- [2] Cawley, R. C. (2011). The interface of technology in culinary arts education. Las Vegas, 34. doi: <http://doi.org/10.34917/2452187>
- [3] Brown, J. N., Mao, Z. “Eddie”, Chesser, J. W. (2013). A Comparison of Learning Outcomes in Culinary Education: Recorded Video vs. Live Demonstration. *Journal of Hospitality & Tourism Education*, 25 (3), 103–109. doi: <http://doi.org/10.1080/10963758.2013.826940>
- [4] McDowall, S., Lin, L. (2013). A comparison of students' attitudes toward two teaching methods: Traditional versus distance learning. *Journal of Hospitality & Tourism Education* 19 (1), 20–26. doi: <http://doi.org/10.1080/10963758.2007.10696879>
- [5] Mandabach, K. H., Harrington, R., VanLeeuwen, D., Revelas, D. (2002). Culinary Education and Computer Technology: A Longitudinal Study. *Journal of Hospitality & Tourism Education*, 14 (2), 9–15. doi: <http://doi.org/10.1080/10963758.2002.10696729>
- [6] Hsu, L., Chang Chien, M.-Y., Chang Chien, M.-Y. (2015). The Effectiveness of Applying Multimedia Web-Based Technologies in Culinary Skills Training. *International Research in Education*, 3 (2), 131. doi: <http://doi.org/10.5296/ire.v3i2.8055>
- [7] Surgenor, D., Hollywood, L., Furey, S., Lavelle, F., McGowan, L., Spence, M. et. al. (2017). The impact of video technology on learning: A cooking skills experiment. *Appetite*, 114, 306–312. doi: <http://doi.org/10.1016/j.appet.2017.03.037>
- [8] Papachristos, N., Ntalakas, G., Vrellis, I., Mikropoulos, T.; Mikropoulos, T. (Ed.) (2018). A virtual environment for training in culinary education: Immersion and user experience. *Research on e-Learning and ICT in Education*. Cham: Springer, 367–380. doi: [http://doi.org/10.1007/978-3-319-95059-4\\_22](http://doi.org/10.1007/978-3-319-95059-4_22)
- [9] Temizkan, R., Cankül, D., Kızıltaş, M. Ç. (2018). Food and Beverage Education and Scholars in Turkey. *Journal of Gastronomy Hospitality and Travel (JOGHAT)*, 1 (2), 18–25. doi: <http://doi.org/10.33083/joghat.2018.6>
- [10] Cankül, D. (2019). Assessing the quality of gastronomy education: Turkey case. *Electronic Journal of Social Sciences*, 18 (70), 998–1013. doi: <http://doi.org/10.17755/esosder.491083>
- [11] Techanamurthy, U., Alias, N., DeWitt, D. (2018). Problem-Solving Strategies Among Culinary Arts Students in Community Colleges. *Journal of Technical Education and Training*, 10 (1), 56–70. doi: <http://doi.org/10.30880/jtet.2018.10.01.005>
- [12] Rocío, K., Beltran, K., Lucía, M., Escobar, L. (2020). Proposal of a tool to develop tasting and sensory skills through e-learning platforms for culinary arts & gastronomy students. doi: <http://doi.org/10.13140/RG.2.2.26175.33441>