Formation of a Range of Necessary Competencies and Skills of a Future Journalist in the Conditions of Digitalization of Additional Education

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ABSTRACT
This article focuses on the problem of forming general professional competencies and skills of journalists in the conditions of digitalization of RUDN University's additional education. The purpose of this article is to present the possibilities of digitalization of additional education to form general professional competencies at the Department of Mass Communications of RUDN Faculty of Philology. Objectives of the article are to present a brief overview of research on the subject of digitalization of higher education; to identify the main directions of digitalization of additional education programs based on RUDN experience, and to analyze the potential of digitalization of additional education in the context of building general professional competencies and skills based on the monitoring scheme. The research methodology includes methods of the general scientific group, as well as a number of special methods, which allow realizing the purpose and objectives set in the work. Through research, the method of sociological modeling was used within the framework of the criteria proposed by the authors of the article; the general probability sample can make up 300 people: 1st, 2nd and 3rd-year students of journalism at RUDN and in the programs of additional education. The research allowed the authors to conclude that the digitalization of additional education programs will solve some problems of forming general professional competencies (in particular, in relation to the acquisition of skills to work with user content). The authors of the article also come to the conclusion that the digitalization of RUDN additional education programs at the Department of Mass Communications will allow students to more fully master the general professional competencies required by FSES “+++” for the Bachelor's degree.

Keywords: additional education, digitalization of higher education, professional competences and skills, journalism education, digital era, digitalization of academic programs

1. INTRODUCTION
Additional education programs, based on digitalization, allow not only to realize the requirements for the training of specialists but also to form a sustainable positive motivation for learning, as well as promote in-depth study of individual disciplines in the relevant majors. In the process of digitalization of additional education, the required competencies and skills of future specialists are formed on the basis of FSES “+++” for the Bachelor's degree. The research of digital opportunities for additional education in universities is particularly relevant for majors directly related to digital technologies and their application in professional activities. Such majors, according to many researchers, include journalism, which requires free mastery of the digital capabilities of modern media resources. From this point of view, experience of RUDN university in building the necessary competencies and skills of journalists in the digitalization of additional education is very relevant and requires separate coverage within the framework of empirical research.

1.1. Related work
Today, both in domestic and foreign historiography there is a large number of researches on the relationship between technological changes and modern trends in higher education. By summing the main directions of these researches, we can talk about the following main trends in the theory of digitalization of higher education:
1. Modern higher education cannot exist outside the processes of the digitalization of educational services. Technological changes cause a new, comprehensive process of differentiation in the higher education system [6].
2. Intensive competition on the global higher education market requires universities to adopt a comprehensive strategy for the digitalization of additional education services [12].

3. With the help of digital learning tools, the development of competencies and skills of future specialists is more effective [2].

4. Digital learning and educational resources promote international student mobility [5].

5. The digitalization process is creating new places for academic teaching and learning [8].

6. Innovation in digital learning is not just technical, but also academic, learning, organizational and structural innovation [11].

7. Cooperation is the key to success in digital education [12].

8. The use of digital media helps to develop new professional competences [1].

9. Comprehensive data analysis opens up new ways of understanding teaching and learning processes [13].

10. Technological changes not only create new virtual learning environments but also change existing physical learning environments [10].

1.2. Experience of digitalization of additional education in RUDN university

The main parameters of digitalization of RUDN additional education programs (course of journalism) include the following activities:

- improvement and renewal of learning processes through digitized forms of learning and exchange of digital learning resources;
- measures to enhance digital competence based on the needs of academic communities and institutions, aimed at sharing educational materials;
- creation of common platforms for storing and sharing examples of university best practices in additional education;
- optimization of academic administrative processes and solutions for student support and academic planning.

The main objective of the digitalization of RUDN additional education programs at the Faculty of Philology in the course of journalism is to create a next-generation educational platform in the format of an open ecosystem for additional educational services.

In fact, the digital transformation of educational services in RUDN is aimed at creating new educational products and transforming existing products into digital ones. This means converting offline lectures into videos, creating digital texts, and online discussions. In addition, the process of digitalization of RUDN additional education includes the provision of digital tools for communication between students and teachers.

As a result of the digitalization of RUDN additional education programs, the students of the Faculty of Philology at the Department of Mass Communications will have the opportunity to:

- get acquainted with the activation of new digital tools and various forms of education and evaluation, including the use of digital technologies;
- gain experience in data analysis and work with technologies integrated into inter-subject areas of knowledge to promote digital additional education;
- get access to a modern individual learning environment that facilitates individual study programs and joint learning and provides flexibility in study schedule;
- master digital and educational competence in the culture of cooperation and exchange of educational materials;
- learn to use a wide range of applications, digital tools, and services that support the learning process.

All of these opportunities should eventually help students to develop skills not only in working with teaching materials, but also with user-generated content, and to gain knowledge of how to engage the audience in content production (news reports, discussions, blogosphere, etc.). The effectiveness of the experience of implementing digitalization in additional education programs for future journalists has been analyzed through an empirical study, the methodology and results of which are presented below.

2. METHODOLOGY OF THE STUDY

The research methodology includes a group of general scientific methods (analysis, synthesis, deduction, induction) as well as a group of special methods: content analysis of research literature and correlation analysis methods.

In order to better understand the possibilities of digitalization in the field of additional education and the formation of competencies and skills of students of the Department of Mass Communications, we have developed...
a model for monitoring the correlation between the mastery of general professional competencies and digitalization of additional education. The proposed monitoring model will make it possible to conduct empirical research using the method of sociological survey (questionnaires) among students of 1, 2, and 3 years of the Philological Faculty, studying course of journalism (Bachelor's degree). A general probabilistic sample of research for the proposed monitoring model can be 300 people, of which 100 people - 1st-year students; 100 people - 2nd-year students; 100 people - 3rd-year students. The methodological basis of the monitoring is a questionnaire that includes 14 questions - 2 questions for each criterion of mastering general professional competence (skills development). The responses of 1st, 2nd and 3rd year students, according to the proposed monitoring model, can be scored on a 10-point scale, according to the levels of professional competence and skills (initial from 1 to 2 points, average from 3 to 4 points, high from 5 to 10 points). The collected data can be processed in Neural Designer, which is a software tool for advanced analysis and includes tools for descriptive and diagnostic analysis.

The questionnaire compiled for monitoring is based on the following professional competencies and skills of students of the Philological Department studying in the course of journalism:
1. **GPC-1.** Able to create media texts and/or media products in demand by society and industry, and/or communication products in accordance with the norms of Russian and foreign languages and the specifics of other sign systems
2. **GPC-2.** Able to take into account the trends in the development of public and state institutions for their versatile coverage in the media texts and/or media products and/or communication products being created
3. **GPC-3.** Able to use the variety of achievements of national and world culture in the process of creating media texts and (or) media products and (or) communication products
4. **GPC-4.** Able to respond to the demands and needs of society and the audience for professional activities
5. **GPC-5.** Able to take into account in professional activity the trends of development of media and communication systems of the region, country, and the world, based on political and economic mechanisms of their functioning, legal and ethical norms of regulation
6. **GPC-6.** Able to use modern technical means and information and communication technologies in professional activities
7. **GPC-7.** Able to take into account the effects and consequences of their professional activities, following the principles of social responsibility

Scores were calculated on the basis of indicators of mastering general professional competencies - skills, according to FSES “+++” for the bachelor degree:
1. **GPC-1.1.** Identifies distinctive features of media texts and/or media products and/or communication products from different media segments and platforms
2. **GPC-1.2.** Carries out preparation of journalistic texts and/or products of different genres and formats in accordance with the norms of Russian and foreign languages, peculiarities of other sign systems
3. **GPC-2.1.** Focuses on the system of public and state institutions, their functioning mechanisms and development trends
4. **GPC-2.2.** Observes the principle of objectivity in journalistic texts and/or products created when covering the activities of public and state institutions
5. **GPC-3.1.** Demonstrates horizons in the domestic and world cultural process
6. **GPC-3.2.** Applies the means of artistic expression in the journalistic texts and/or products created
7. **GPC-4.1.** Corresponds sociological data to the demands and needs of the society and individual audit groups
8. **GPC-4.2.** Takes into account the main characteristics of the target audience when creating journalistic texts and/or products
9. **GPC-5.1.** Takes into account a combination of political, economic, legal and ethical factors that govern the development of different media and communication systems at the global, national and regional levels
10. **GPC-5.2.** Carries out its professional journalistic activities taking into account the mechanisms of functioning of a specific media and communication system
11. **GPC-6.1.** Selects the necessary technical equipment and software to carry out the professional activity
12. **GPC-6.2.** Operates modern stationary and mobile digital devices at all stages of creating journalistic text and/or product
13. **GPC-7.1.** Guided by workshop principles of social responsibility, anticipates typical effects and consequences of professional activity
14. GPC-7.2. Carries out the search for correct creative techniques in collecting, processing and disseminating information in accordance with generally accepted standards and rules of the profession of journalist.

The graphic material of the article uses the system of abbreviations (designations of general professional competencies), according to FSES.

3. RESEARCH RESULTS

The monitoring model presented below includes three stages: identification of primary, secondary and high level of mastery of general professional competencies in the course of journalism through digitalization of additional education programs. Monitoring of the first stage (initial level of mastering general professional competencies) includes the following parameters (Figure 1). Correlation calculation was performed on the basis of Pearson's correlation calculation methodology.

![Figure 1](image1.png)

**Figure 1** Monitoring parameters of the initial level of correlation of general professional competencies and skills based on digital programs of additional education

The data shown in Figure 1 suggest that the digitalization of RUDN additional education programs has a high correlation index (>1). Such a high correlation between the technical provision of digitalization of additional education suggests that the initial level of mastery of competencies can be achieved by 1st year students. At the same time, the highest correlation coefficient has been achieved between the digitalization and the GPC on the indicators of GPC 6.1 and 6.2, which is related to the general level of knowledge in the field of digital technology and use of mobile devices. Relatively low correlation coefficient has been achieved for the indicators GPC 2.1, 5.2, 7.1 and 7.2., because these competencies do not directly depend on digital devices (Figure 2).

![Figure 2](image2.png)

**Figure 2** Monitoring parameters for average level of correlation of general professional competencies and skills based on digital programs of additional education
Monitoring of correlation between digitalization and GPC criteria (Pearson coefficient ($P > 1$) in the course of RUDN 2nd year additional education programs may reach the average level of general professional competencies if the conditions for digitalization of academic programs (equipment, media-communication systems, technological support of online resources and teaching materials, etc.) are met. The lowest level of correlation is observed for GPC 1.1 and 4.1, which are indirectly related to the digitalization of the educational process and depend on the general intellectual level of students, as well as their personal experience of practical work. The highest level of correlation has been reached for the indicators GPC 2.1, 3.1 and 3.2, as well as 6.1 and 6.2, which is associated with the specifics of the journalism major, where practical experience of working with digital devices of different types is required (Figure 3).

![Figure 3 Monitoring parameters for a high level of correlation between general professional competencies and skills based on digital additional education programs](image)

The data shown in Figure 3 suggest that the highest level of correlation has been achieved for all GPCs except GPC 1.2 and 3.1, which are not directly related to the digital learning environment. Such indicators suggest that through the digitalization of additional education programs, a high level of mastering general professional competencies in RUDN university's journalism major can be achieved. The model of monitoring three levels of correlation using the Pearson method can be verified using the Student's $t$-criterion, however, we consider the specified coefficient to be sufficient for revealing the connection of two values. Thus, the collected data suggest a gradual increase in the positive correlation between the formation of professional competencies and skills and additional education programs in RUDN within the process of digitalization of educational services.

4. DISCUSSION OF RESULTS

The view that one of the main tasks of higher education is to prepare young people for future challenges is widespread in foreign scientific literature [6, p. 5]. In this context, the digitalization of higher education can not only change individual lives but can also make the social fabric of society more sustainable and adaptive [8, p. 35]. However, at present, this future for Russian universities is extremely uncertain and comes with risks [9, p.26]. This radical uncertainty makes it difficult to determine future knowledge, skills, and required competencies [10, p. 24]. In addition, questions about the possible role that higher education should play in future societies are also raised in academia [11, p.146]. Some authors argue that higher education should be an active factor in shaping the future of society [12, p.104]. However, in order to realize the full potential of higher education, it is necessary to go beyond the main activities and disciplines, i.e., it is necessary to digitize additional educational services of a university. In spite of this, some authors' articles cover only some possible areas of change in relation to universities in the digital age [13, p.14] without mentioning the potential for digitalization of additional education programs. The potential of digital journalism education programs, in our view, is related not only to the educational process itself but also to ethics, honesty, and community involvement. This potential can also be considered as the first steps towards understanding what organizational changes are necessary for universities [14, p.88] in order to preserve their social importance and actively form their digital educational environment in the sphere of additional education.

The use of digitalization opportunities is particularly important for journalism students because, as N. Selwyn rightly pointed out, «higher education is a special context in which digital media are used». [11, p.145]. Thus, the use of digital media in higher education and related media literacy problems undoubtedly deserve separate consideration and are actively discussed in modern domestic [4, p.126] and foreign historiography [12, p. 87]. Some works provide an overview of digital media in the current context of higher education, as well as the challenges of media literacy for future journalists [2]. Nevertheless, in the general array of modern research on the potential of digitalization of higher education is dominated to a greater extent by a general theoretical approach: in the works of Biliaeva A., Salimova D. and
5. CONCLUSIONS

As a result of the conducted analysis of the scientific literature on the investigated theme several directions in research of a problem of digitalization of higher education have been revealed, however neither in domestic, nor in foreign historiography the question on potential of digitalization of additional education within the limits of university as means of formation of professional competences is not considered. Nevertheless, in the course of our research, we found out by the example of RUDN university's Faculty of Philology that digitalization of additional education programs in course of journalism for the Bachelor's degree allows increasing the level of mastering professional competences in the direction of digital media environment, in which their further professional activity will be built. The data obtained in the course of the empirical research can be used in the practical work on digitalization of RUDN university's additional education programs not only for the journalism major but also for other specialties within the framework of additional education. To verify the data obtained, we believe it is necessary to conduct a series of empirical studies to identify the effects of digitalization on the process of mastering the professional competencies of future journalists in the framework of RUDN university's additional education programs.

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