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The Specifics of the Organization of Infozones as a Means of Civil Formation of a Future Teacher-educator in a Modern University

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Abstract

Question of the features of the organization of the infozone as a new means of civic formation of teachers-educators in the digital environment of a modern university requires special attention. Therefore, it is necessary to analyze the ways of organizing infozones and develop an infozone model as a means of civil formation of teachers-educators; determine the nature of its content, structure and conditions for implementation. The understanding of the infozone as a digital solution that contributes to the organization of educational work of the university, the qualitative transfer of information to students, is the basis for considering the infozone as a means of civic formation of teachers-educators. Based on the results of a study conducted on the basis of the Arzamas branch of UNN, the article presents a model of the organization of an information zone based on a set of conditions for its implementation, content criteria, structure as a system of components, from the standpoint of system-structural, competence-based, reflexive-evaluative approaches, is able to involve students in the preparation of information about university events, contribute to motivation to achieve success in professional and socially-oriented activities. The structure of the infozone is proposed, consisting of a target block (prepared by the INFOSAN administrator); a block (filled in by a representative of the faculty); a block of important information (from the administration) and updated modules, and the content consists of news, organizational, cultural, educational and professionally-oriented components.

Keywords: digital environment, teacher-educator, infozone, multimedia information board, civic education, civic culture.

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Introduction

Currently, there are extensive changes in the field of creating, broadcasting and consuming information, developing virtual relationships and transforming the information environment, which undoubtedly contributes to the modification of modern education. All these innovations help not only to convey any information to all participants of the educational process operatively and efficiently as well as learn something interesting but also contribute to civil culture development concerning the modern young generation living in a new digital environment.

Speaking about the social and economic development of Russia, the president, Vladimir Putin in his annual Address to the Federal Assembly (01.03.2018) noted that in this regard the widespread introduction of digital technologies, without which it is almost impossible to form a worldview, clear position in life and human intelligence play by a huge role. According to the president, from an early age, it is necessary to instill a willingness to change, creative search as well as to teach teamwork, the skills of life in the digital age, being very important in the modern world, he stresses that the obligation to support talented teachers, aimed at constant professional growth (Putin, 2018).

One of the key objectives Of the "Strategy for social-and-economic development of the Nizhny Novgorod region by 2035" in the field of improving the efficiency of using the potential of the Higher education system in the region is connected with developing digital and technological capabilities of Higher education institutions, including Information Technology platforms (strategy project, 2018).

Russian universities solve the tasks of training highly qualified teachers with high civil and social activity, able to contribute their professional activities to the development of civil society in Russia.

Thus, today it is necessary to look for new means of civic education concerning future teachers in a new, digital educational environment. Therefore, the question of the features of the organization of the infozone as a means of future teachers' civic education (studying in the 44.03.05 Teacher education (with two majors) and 44.03.01 Teacher education in a modern University training fields) requires special attention.

Purpose and objectives of the study

In this regard, the study is aimed at analyzing ways of implementing infozones and developing a model infozone as an effective means of students' civic education since it's the familiarity with the history and traditions of the University, faculty, city, region, country, culture, famous people and their achievements, which, undoubtedly, will contribute to the development of moral values, patriotism, civic culture among students, pride in their University, their achievements (Lazarenko & Nedbaylo, 2016); determining the nature of its content, structure and conditions of effective organization for solving the problems of future teachers' civic education.

Literature review

The literature analysis makes it possible to distinguish two groups of works. The first one is represented by a sufficient number of fundamental studies on the relationship between the concepts of environment, educational environment and information environment – Ivleva, Kamenshchikova, Klimina, Kozyreva, Korchak, Lisitskaya, Lyubimova, Mazur, Manuilov (2008), Shatsky, Frumin, Khodyakova, Elkonina, Yasvin (2001), Zholovan (2015) and others. However, despite the fact that these studies provide an opportunity to identify a reasoned theoretical and methodologic base of infozones and their interpretation, they do not provide a reasonable correlation between the concepts of the environment and the infozone and its place. Although, authors think that, such an analysis should be carried out and the place of the infozone as an independent concept and component of the environment in its broad understanding is to be argued.

The second group of studies is characterized by a practice-oriented direction concerning of this question. In these works, there is also no purposeful definition and justification of the infozone as one of the concepts of pedagogical science that determines the specifics of the organization of teacher education, but they come close to it. A number of aspects can be distinguished in this group. Firstly, according to the understanding of the environment considered in them, the image of the infozone is formed as a means of effective management of an educational organization and monitoring the quality of its activities. Thus, the system of environmental organization is analyzed in the context of the development of the digital economy and communicative competence in the works of Razinkina, Trostinskaya and Safonova (Razinkina et al., 2018; Trostinskaya, Safonova & Pokrovskaya, 2017), Pokrovskaya, Ababkova and Fedorov (2019) and Golikov (Golikov et al., 2018). The relevance of the issue of the quality of education in the innovative environment of the university through its digital systematization is indicated by Razinkina, Pankova, Trostinskaya and Tanova (Razinkina et al., 2018), Pozdeyeva and Evseeva (Shipunova, Evseeva, Pozdeyeva, Evseev & Zhabenko, 2019).

Secondly, the formation of the idea of infozone is influenced by innovative and technological approaches, leading to its vision as an information technology that affects the development of the educational environment. Despite the fact that the issues of information technologies as conditions for improving the quality of teaching, improving competencies in the structure of student training from the point of view of intellectual education are presented by Bilieva, Lobatyuk and Rubtsova (Almazova, Bilieva, Lobatyuk & Rubtsova, 2019; Bilieva, Almazova, Lobatyuk & Rubtsova, 2020), Glukhov (Vasetskaya, Glukhov & Burdakov, 2018), Vasetskaya (Glukhov & Vasetskaya, 2017), the authors do not introduce the concept and characterize infozones as such, but they come close to them. However, Sarbashev (2015) and Kaznacheev (2015) already consider information zones directly in the context of technological equipment and digital solutions.

In our opinion, the studies by Almazova, Barinova and Ipatov (2018), Shipunova and Evseeva (Shipunova, Berezovskaya, Mureiko, Evseeva & Evseev, 2018), Pozdeyeva, Evseev and Zhabenko (Shipunova, Evseeva, Pozdeyeva, Evseev & Zhabenko, 2019), are closer to their consideration, substantiating the tools of the infosphere as part of the social and educational environment and a means of forming the information culture among students. Thus, they lead to the understanding of the infozone as a means of influencing the personality of the future teacher, the formation of his culture.

The works describing the diverse experience of using infozones (Zholovan, 2015) in educational organizations (infozones successfully work in more than 400 educational and cultural institutions and are approved by the Ministry of Education and Science of the Russian Federation) are of particular interest, as they provide the basis for designing an infozone implementation model as a means of forming a civic position of future teachers.

The analysis shows the presence of prerequisites for a more accurate definition of the infozone as one of the most important concepts of modern pedagogic science, which is in the field of consideration of the problems of the environment, the information environment, information technologies in education and management of educational processes, to identify such its characteristics as the effect of influence on forming future teacher's civic position. It also makes it possible to assert that there is no organizational and pedagogical justification of the infozone as a condition for the development of a future teacher's professional position and a stable worldview based on the ideas of citizenship and reveals that the issue of modeling and organizing the infozone as a means of civic education of the future teacher has not yet been completely resolved.

Methodology

From the point of view of Russian pedagogic science, the methodology of the research is based on the substantiation of the concept of infozones as a means and conditions for forming an active civic position of a future teacher and the identification of a number of approaches to educational process organization that are justified and accepted in science. In this regard, the basis for considering the infozone as a means of future teachers' civic education is the understanding of the infozone not just as technical equipment, but its vision as a new solution that came to pedagogy and the holistic educational process from the world of digital technologies, as part of the information environment obeying the law and the laws of the functioning and development of the educational environment, which will help to work with future teachers at the university conveying important information to students, teachers and university staff more effectively, quickly and clearly.

Consideration of the issue of organizing an information zone as a means of future teachers' civic education is impossible without a number of basic pedagogical approaches. In this regard, a general scientific system-structural approach is necessary, since it makes it possible to present the activity of creating an infozone as a chain of interrelated processes and phenomena located within the university system and all its subsystems (educational, managerial and others). The use of the infozone in the educational environment of the university will allow solving not only the tasks of informing, motivating and promoting, but also civic education and education, without large maintenance costs. Thus, the development of an information zone organization model should be a set of systemically designed components that are interconnected and act as a means of civic education among future teachers. This model is able to provide students with the opportunity to participate in the preparation of information about the events of the university, the teaching staff and personal achievements, which will contribute to the formation of motivation to achieve even greater success in educational, professional and socially oriented civic activities. In this case, the displayed media information will contribute to the motivation for further independent search for additional information on this aspect.

The competence-based approach, in its turn, determines the conditions for choosing the content and implementation of the information zone as a means of forming the worldview among future teachers, developing their civic position. Reflexive activity makes it possible to give an objective assessment of the organization of the information zone.

The following research methods, aimed at the objective disclosure of problems and the development of a solution hypothesis were identified:

1. conducting a survey consisting of a system of questions (25 questions) for identifying the aspects of the vision of the infozone, its structuring as a means of civic education of future teachers, rational organization of the infozone as a way to increase civic awareness among future teachers;

2. the method of expert assessment, which consists in conducting a survey evaluating the infozone model as a means of civic education of future teachers (25 questions), necessary for a thorough analysis of it as a basis for further implementation;
3. the method of modeling the infozone as a means of civic education among students preparing for professional and pedagogic activity;
4. generalization and systematization of the obtained data, including the use of means of mathematical research methods when working with survey data.

The research was based on the Arzamas branch of the Lobachevsky State University of Nizhny Novgorod. The choice of the research base was due to a number of factors: firstly, the branch implements educational programs in the fields of *Teacher Education* and *Psychological and Pedagogical Education*, aimed at training teachers of different specialties and fields of activity; secondly, the insufficient development of the information zone in this organization as a means of civic education.

The study involved the most active students in science and social activities (70 people) able to evaluate and/or characterize the infozone as its active users; a group of teachers (60 people, all with an academic degree) able to objectively evaluate the infozone as a means of civic education and education of future teachers, argue their position, justify possible approaches to the development and implementation of the infozone in a new format; the third group was made up of the administrative staff of the branch (director, deputy director for academic and scientific work, head of the Academic Services Department, deans of faculties – 9 people), whose opinion and assessment is aimed at avoiding shortcomings in its further implementation, at a wide coverage of the vision of the infozone as a means of future teachers' civic education and forming the further civic position of the entire younger generation as a whole.

The study was conducted in three stages: the primary understanding of the infozone as a means of civic education, as well as the analysis of literature, periodicals and other sources on the designated problem; the second stage included the development of an infozone model based on a survey and a theoretical understanding of the problem; the third stage is represented by an expert assessment of the proposed model.

Results

At the first stage, the primary understanding of the infozone as a means of civic education among future teachers was carried out, as well as an analysis of literature, periodicals and other sources on the designated question.

To study the possibility of organizing information zones in a modern university as a means of civic education, a survey was conducted on the basis of the Arzamas branch, which was attended by students, teachers and representatives of the administration of the educational organization (director, deputy director for academic and scientific work, head of the Academic Services Department, deans of faculties). It consisted of 25 questions, both open and closed, aimed at identifying the understanding of the infozone, the opinion about the location of the infozone within the university, the justification of this location; to establish the types of information that are necessary both for the organization of the work of the university and for the implementation of the tasks of civic education of students (that is, whether, in what form, the amount of information from employers is needed, information about citywide events and conferences, about events and conferences held with children, about regional, all-Russian and international events that can influence the formation of a positive civic position of future teachers); to determine the structure of the location of information; conditions for creating a team responsible for the selection and placement of information in the infozone.

139 people participated in the survey. The analysis of their opinion showed that the majority of respondents (95%) believe that information zones should be located in the following territories:

- 1) near the entrance, i.e. located in a public place with maximum viewing (news and achievements of the university, videos with images and others);
- 2) near the office of the University Admissions Committee (advertising and career guidance information for applicants, creating the image of the university is especially relevant during open days and during the application period);
- 3) near the deans' offices (urgent messages, demonstration of information and legal documents about the directions and profiles of training, the results of competitions, educational events, etc.; assuming the broadcast of a single content or differentiated for each faculty);
- 4) at the Faculty of Supplementary Education (information about the services of the faculty for obtaining additional education by students, vacancy announcements for potential employers, invitations to open days and interviews, information about obtaining a second higher education, advanced training courses).

Respondents (teachers – 98%, administration – 100%) note that in Higher educational institutions, information zones make it possible to inform not only students, but also teachers about the life of the educational institution, scientific events and broadcasting important announcements. Infozones can be used to display schedules.

It is believed that the use of several infozones that transmit general information or information about the faculties and departments responsible for the infozone is most relevant for universities. The capabilities of modern information zones allow you to combine both types of information within a single information zone. Special attention was paid by students (85%, 60 people) and teachers (98%, 58 people) to the need to broadcast events of various levels in the field of education and culture development (from urban to international), to demonstrate information on current competitions in the field of media competence of students and conferences, to broadcast competitions and final events based on their results. A number of students (35%, 25 people), the majority of teachers (96%, 57 people), the branch management noted that the infozone can be a source of information about events in the city, region, as well as about the results and achievements of fellow countrymen, various kinds of news, ads showing activities among children in various fields, prospects for their further growth, and also drew attention to the fact that the systematic demonstration of social advertising, telling about the activities of a teacher as a citizen of his country, the teachers' achievements in various fields and competitions, is of particular importance.

A detailed analysis of all responses and a study of the literature concerning the identified issues makes it possible to proceed to the second stage, which includes the development of an infozone model based on the survey and a theoretical understanding of the question.

The relevance of the infozone model as a means of civic education and education of future teachers was determined. It was determined by the requirements of professional standards. In accordance with the new Federal State Educational Standard of Higher Education for students of 44.03.05 and 44.03.01 *Teacher Education*, within the framework of the Bachelor degree program, graduates are prepared to solve the following types of professional activity issues: pedagogical, project-based, methodological, cultural and educational. Their implementation is impossible without the formation of a civic culture among students, which is understood as an integrative quality of personality, characterized by deep and solid knowledge in the field of civic education concerning students; valuable relations to the country, its people and its culture, to representatives of other nationalities and their culture, to the political and legal spheres of the state, society and human problems, a positive attitude to professional activities in the field of civic education, as well as to active, socially useful and professional activities, the ability to independently, with a share of creativity, organize work on civic education of schoolchildren, choosing the best forms and methods of its implementation. Civic education should prepare students to become responsible citizens who actively participate in the development of various spheres of the functioning of the state and master a wide range of universal cultural values, norms and decent behavior.

The possibilities of the technical means of organizing infozones for implementing the tasks of civic education among students were analyzed. The following conclusions are made: Infozone is a modern multimedia information board based on a television panel and the latest digital alarm technologies. As a rule, the infozone consists of an LCD TV panel, a protected digital signage class media player and software for filling the infozone with high-quality materials and creating a display schedule. The system allows you to combine text documents, images, videos, running lines, widgets, information from Internet portals (RSS, Twitter), as well as live broadcast of events on one screen in real time.

Thanks to the modern form of information presentation and the variety of displayed materials, the infozone attracts the attention of both students and teachers, therefore, competently selected content is especially important, helping to increase the involvement of students in their university life, promoting a healthy lifestyle and, most importantly, making it possible for future teachers to instill socially significant values and form a civic culture. Therefore, information zones in higher educational institutions preparing for professional and pedagogical activity should be used not only for informing, but also for solving a wide range of pedagogical tasks, including educational ones provided for by the Federal State Educational Standard of Higher Education.

The infozone as a means of civic education should take into account its main directions for students and future teachers. In general, they consist of the following elements:

- familiarizing students with the legislation of the Russian Federation on Higher education, the rights and obligations of students, the Charter of Higher education institutions and legal education on a wide range of issues;
- encouraging students' independence and self-activity, developing and improving the activities of student self-government bodies, public organizations as well as supporting and training leaders of student organizations and associations;
- forming a civil position, promoting civil activity among students; informing students about events held in the country, city and district, organizing their participation in such events;
- developing patriotism, familiarizing with cultural and historical values, processes of nature conservation as well as protecting historical monuments through various forms of practical activity;
- involving students in various types of creative activities, scientific research, art activities, competitions and festivals (Gayazov, 1996; Lazarenko & Nedbaylo, 2016; Salakhatdinova, 2012).

The structure of the infozone should consist of a number of components.

According to the university administration as a whole and on the basis of the survey data obtained, information blocks can be divided into four groups: the target block prepared by the administrator responsible for the operation of the infozone; the block that is filled in by a representative of the faculty; the block of important information responsible for university administration, as well as the prepared updated modules.

The analysis of the responses of students and teachers of Arzamas branch shows that the content of the university information zone should include the following components: news, organizational and regulatory, cultural and educational, and professionally oriented ones.

Instagram and Facebook makes it possible for the students to find out their schedules and schedules, read important and urgent announcements, as well as current news (online information from Internet portals about the news of the city, region, country, news in the field of education and culture, science and technology, news of selected groups in social networks (Instagram, Facebook), as well as announcements about upcoming events; information about employees (teachers), their fields of scientific interests, etc.

The organizational and legal component makes it possible to get acquainted with the legal documents of an educational organization, such as the Charter of the university, the license granting the right to carry out educational activities, the curriculum, programs of disciplines and practices, the rights and obligations.

The cultural-and-educational component involves awareness of the University, faculty, department, traditions as well as implemented practical and socially oriented, research projects, charity events, volunteer activities, the beginning, progress and results of competitions aimed at improving research and civil culture among students; reporting on important dates, people and events connected with the life of the University, city, region, country; familiarity with the student Council and government as well as other students and teachers' achievements, the rating activity and efficiency of student groups' functioning; it also gives access to photos and videos connected with the life and educational organization making it possible for the students to work with updated educational content (e.g. "This day in History", "Did you know?", "Russian Heroes");

The professionally-orienting component includes information about ongoing research and professional-oriented competitions; familiarizing with the life of authoritative personalities in professional field, demonstrating image presentations, etc.

Stage 3 included an expert assessment of the proposed model.

The experts were representatives of the administration of the educational organization (Director, Deputy Director for academic and scientific work, head of Academic Methodological Association and deans), a group of teachers (with academic degrees, 60 people) and a group of students who are most active in science and social activities (70 people). The model was discussed by separate groups during the “Week of Science”. Each group evaluated the theoretical validity of the model, the implementation conditions and the proposed structure. The first group (administration) focused on the possibility of implementation and the specifics of the infozone content. The second group conducted a detailed assessment concerning the reasonableness, validity and expediency of creating an infozone as a means of civic education. The third group focused more on the content side of the information zone, its saturation, updating, etc. According to the results of the survey, in the first group, 66% (8 people) were in favor of implementing the model, while the remaining 34% (5 people) were not against it, but expressed doubts and concerns; in the second group, 52% (31 people) gave a high assessment of the model and supported its feasibility, 36% positively evaluated the model, but expressed concerns about possible risks during implementation, 12% (7 people) did not give much importance to the infozone as a means of implementing civic education of future teachers. Among the participants of the third group, the infozone model was met positively by 85% of the respondents (59 people), who also suggested possible prospects for using infozones in Higher education, and possibly in professional activities at school; 9% of participants (8 people) expressed some doubts; 6% (5 people) did not show interest and initiative in implementing the infozone as a means of future teachers’ civic education.

Further, in each of the identified groups of respondents, a vote was held, during which the decision on the preparations for the implementation of the model and the establishment of a working group, which proposed the inclusion of the initiator of creation infozone as a means of civic education, a team of teachers (having degrees) in the amount of 20 people and Arzamas branch IT Centre staff as model implementation support guarantors

Discussion

The organization of information zones as a means of civic education in modern higher educational institutions that implement training programs for professional and pedagogical activities requires separate consideration in solving the following questions:

- 1) information (messages, schedules, announcements for students and teachers, information about competitions and others);

- 2) increasing the degree of involvement educational process participants in the life of the educational institution (informing about events, achievements of the educational institution, demonstrating student projects);
- 3) promoting socially significant civic values (thematic videos, quotes, images and others);
- 4) forming the image characteristics of the university (a sense of corporate identity; demonstrating the achievements of the educational organization, clear and attractive form);
- 5) career guidance work (advertising information about the university for applicants; information about vacancies in the profession that can be of interest to university graduates).

In our opinion, the advantages of using the infozone as a means of civic education deserve special attention, noted by the participants of the groups who positively perceived the idea of creating an infozone in the designated perspective:

- 1) almost any digital materials can be used as source material for creating content – graphics, videos, and digital photos;
- 2) for simplifying content creation, a large set of templates is provided (for example, class schedule templates), in addition, the player allows you to demonstrate regular PowerPoint presentations on a given schedule.
- 3) it is possible to edit content and manage its demonstration from any computer connected to the same local network, but only special employees can do this, so the system is reliably protected from unauthorized access;
- 4) a single up-to-date information space for an educational organization was created;
- 5) the processes of informing, promoting and motivating students in the field of civic education, socially significant values formation and career guidance are carried out efficiently;
- 6) a field for project research and competitive activities among students in the media education space was created;
- 7) a positive image of the educational organization formed.

Conclusion

Thus, the infozone is a unique resource in the modern educational space and creates a variety of content using digital materials. The modern way of presenting information allows infozone to remain constantly in the spotlight, and updated content supports students' interest in University life, which, in its turn, enhances the efficiency of their civic education implementation. Therefore, purposefully creating an open information and educational media environment, it is possible to influence the quality and effectiveness of education as well as forming high level of civic culture among students and such important qualities of the XXI century as information activity and media literacy.

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