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Internet design in a modern educational environment

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ABSTRACT

Purpose of the article: analysis of the process of Internet design in the modern educational environment. Methodology: The article presents the results of a survey of students of higher educational institutions "Assessment of the impact of Internet projects on professional self-development", about the dynamics of the participation of students from professional educational institutions in the design of the Internet for three years. Conclusions. According to the research, the number of participants in Internet projects is growing, and the popularity of such contests is increasing. Participation in the Internet project provides the student an opportunity for promising employments.

KEY WORDS: internet; higher education institution; professional training; professional competencies; hackathon; professionalism.

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Diseño de internet en el entorno educativo moderno

RESUMEN

Objetivo del artículo: análisis del proceso de diseño de Internet en el entorno educativo moderno. Metodología. El artículo presenta los resultados de una encuesta a estudiantes de instituciones de educación superior "Evaluación del impacto de proyectos de Internet en el autodesarrollo profesional", acerca de la dinámica de la participación de estudiantes de instituciones educativas profesionales en el diseño de Internet durante tres años. Conclusiones. Según la investigación, el número de participantes en proyectos de Internet está creciendo y la popularidad de tales proyectos está aumentando. La participación en el proyecto de Internet brinda al estudiante la oportunidad de un empleo prometedor.

PALABRAS CLAVE: internet; institución de educación superior; formación profesional; competencias profesionales; hackathon, profesionalismo.

Introduction

Today, there is a need to train specialists who are focused on the creative transformation of reality, who can quickly solve the tasks set (Dobudko et al., 2019). Design is one of the most effective tools in the formation of a competent, independent specialist.

Internet projects that can make a real contribution to the development of specific areas of life are becoming increasingly relevant. The organization of Internet design contributes to the solution of various professional tasks (Yarygin et al., 2019a).

Purpose of the article: analysis of the process of Internet design in the modern educational environment. The organizers have the opportunity not only to get a ready-made project for their company, but also to choose the best, in their opinion, students who will be able to develop the company in the future (Ponachugin & Lapygin, 2019). Students also get the opportunity of real employment in a company that occupies a leading position (Vaganova et al., 2020a).

The Internet is a platform that allows students to implement socially and professionally relevant ideas (Yarygin et al., 2019b). The Internet project is a tool for self-development and self-realization of the student, the approval of his active life position, since the Internet becomes for him not only an entertainment and information field, but also a source of professional knowledge.

Various events are organized for the development of Internet projects, where professionals from various fields meet (Rojas-Bahamón, Aguilar-Cruz & Arbeláez-Campillo, 2020). Among such events, where Internet projects are developed, hackathons are noted (Vaganova et al., 2020b). Among the most active participants, representatives of various companies choose those who will be able to work in their organization in the future.

Participants of technological competitions under the guidance of experienced specialists have the opportunity to bring a new product to the market. The hackathon is held in a short time, and the number of participants can reach several dozen. During this period, there are many innovative solutions for the development of companies.

Independent experts, such as marketers, business analysts, developers, and others, take part in hackathons.

The implementation of an Internet project in the context of a hackathon allows students to gently enter the professional sphere of activity, since one of the main tasks when announcing the results is to prevent the emergence of feelings of resentment among the participants.

Each of the teams, despite having only one or two winners, receives its recognition, since participation in the development of the project is an achievement that becomes the beginning of serious professional activity.

A prize fund is provided for the most relevant Internet projects. If the hackathon takes place in several stages, the prize fund for supporting further developments increases. The venue for the hackathon is chosen so that participants have round-the-clock access to it. The rooms are equipped with the appropriate equipment: tables, meeting rooms, sofas and ottomans.

As a rule, the creative process of discussing a question takes quite a long time. The task of the organizers is to provide the most comfortable conditions for the participants to achieve the best results.

Internet design in the modern educational environment is developing rapidly. Continuous monitoring is required to support this development.

Internet design allows you to improve the process of training students, expand the opportunities for the formation of professional competencies, the development of independence and creative position.

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1. Theoretical framework

An Internet project is understood as a set of hypertext documents that determine the direction of creating an information structure.

Working on an Internet project allows students to take the initiative, independently solve emerging issues, update their research position, and form problem-based and creative thinking in the process of completing tasks (Kiseleva et al., 2019). Scientists believe that project activities are a significant component of the education system (Kidina, 2020). Active planning, forecasting, analysis and synthesis are carried out in project activities.

The Internet project is limited to one specific topic. It is based on a problem, which, in turn, reflects several goals. In addition, the Internet project should have its target audience. The content of the project should be systematized.

An Internet project is not just an Internet resource that is updated with various information. It should have an information storage system (Demidov & Tretyakov, 2016a). The project should be structured in a simple and accessible way, and have the potential for high-quality development (Demidov & Tretyakov, 2016b).

An Internet resource that meets these requirements is an Internet project.

The subjects of Internet design are: project participants (students of higher and secondary vocational educational institutions) (Aniskin et al., 2020); organizers, including teachers of vocational educational institutions, trainers, forum hosts, and others; partners (interested in the development of a project, taking part in its development, (Arbeláez-Campillo et al, 2020). Partners can be customers, sponsors, consultants, various specialists in a particular field) (Pichugina & Bondarchuk, 2019); target audience (people targeted by the Internet project) (Efremenko et al., 2020).

Interaction of Internet design subjects is carried out based on the specific principles reflected in the table.

Compliance with these principles contributes to the creation of a high-quality viable project that can be implemented in the activities of a particular company (Shcerbakova & Shcerbakova, 2019).

In the course of the project, students form the ability to constantly improve themselves, a conscious need to update their professional knowledge (Shcerbakova & Shcerbakova, 2019).

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Table 1. Principles of interaction between subjects of the educational process (Obydenkova, 2016)

Principle	Characteristic
Regularity	Discussion of the Internet project is limited in time, while the norms of communication are observed
Involvement	Inclusion of all subjects in the process of developing an Internet project
Fixation	Saving intermediate design results in writing
Facilitation	Creation of conditions by the curators of the project in which students can show their creativity, independence and initiative
Subject-subjectivity	The authors of the Internet project and curators interact on an equal footing; curators encourage students to actively discuss issues
Problematic	The curator raises problematic questions that allow students to comprehend ways to solve a particular problem
Reflection	Creating conditions for students to identify their mistakes, which must be eliminated to achieve the best results

2. Methodology

Students of professional educational institutions took part in the study.

The methods of mathematical statistics were used to process the results of an empirical study.

The survey "Assessment of the impact of Internet projects on professional self-development" was conducted among students of professional educational institutions. Processing of the results allowed us to identify the professional qualities that, in the opinion of students, form Internet projects.

Statistical processing of the survey results was carried out with the translation of responses into an electronic format based on the encoding and organization of the source data in a spreadsheet. The results were revealed through the interpretation of descriptive statistics and graphs. After the survey, the documents were collected and counted, each was assigned a number. Data processing was carried out for several days.

The dynamics of participation of students of professional educational institutions in Internet design over three years was revealed.

3. Results and discussion

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Working on projects allows students to master various competencies. Students for the implementation of future professional activities form the skills of goal-setting, planning, implementation of professional reflection to eliminate errors and achieve appropriate results. During the design process, students develop organizational and communication skills. When working on a project, it is important to be able to negotiate and resolve conflicts to achieve common goals. Each project allows students to develop the ability to collaborate and work in a team.

The implementation of Internet projects was carried out both in person in the format of interactive lectures, seminars, trainings and consultations, and remotely, through chats, webinars, video conferences. Students have a special Internet space for project implementation, where they communicate and independently solve emerging issues. For example, creative workshops.

The curator can interact with students both in person and remotely. He advises both individual groups and several project groups at once. At each stage of Internet design, different actors are connected. This can be done by both partners and the target audience.

Internet design is carried out in several stages, as shown in the table (2).

Table 2. Stages of internet design (own authorship)

Stage	Content
Preparatory	Curators determine the goals of Internet projects, organize the space and forms of work, establish the forms of interaction between the subjects of Internet design, the time for completing each stage of the project
Introductory	There is a discussion of the project between the curators and authors of Internet projects, students ask questions of interest regarding its development, the curator motivates the participants, helps to choose a relevant topic
Active	Students form micro-groups to complete projects. Students are discussing the idea of an Internet project. Flipcharts are used to reflect basic notes. The social significance of the project is determined (what task it solves, its goal, main audience, significance for the audience, expected results); personal significance (for each participant and the entire team as a whole); students distribute among themselves responsible roles and tasks that need to be solved. Students formulate the name of the project; create its logo, formulate a brief description of the project, what exactly will the target audience receive when using the future product. At this stage, students take an active part in face-to-face and distance consultations with curators. Students post materials on the Internet. The obtained intermediate results are checked against the assigned tasks, and if they do not correspond, the process is corrected.
Efficient-reflective	The authors present their project, make a presentation of the results. A decision is made on the further feasibility of developing the project.

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The time allowed for completing the tasks of each stage is set by the project manager.

Internet projects implemented in the framework of hackathons are conducted both in real time during face-to-face meetings and online. For conducting an online event, they are used.

The number of participants in Internet design in the modern educational environment is growing. We have identified the dynamics of participation of students of higher educational institutions and secondary vocational educational institutions in Internet design over three years.

The study took into account data obtained in several professional educational institutions.

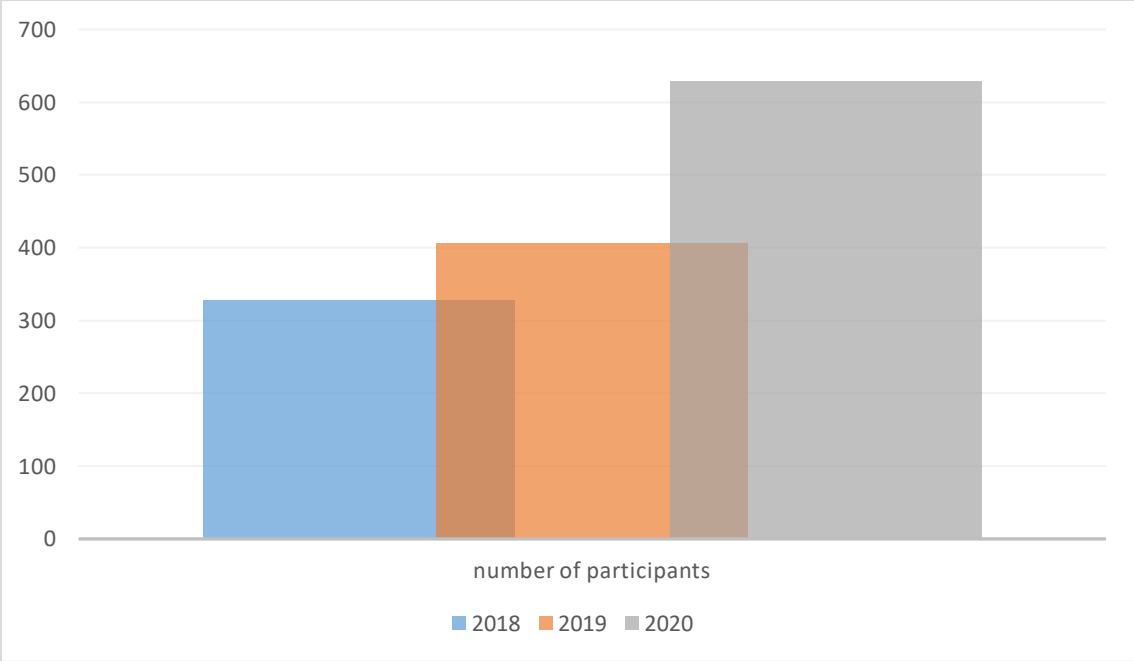

Fig. 1. Dynamics of participation of students of secondary vocational educational institutions in Internet design (2018-2020) (own authorship)

It is worth noting that with the development of the organization's activities, WorldSkills and the desire of Russian professional educational institutions to meet international standards have led to an increase in the quality of education by including students in various projects implemented within the framework of the demonstration exam, including Internet projects.

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Training for the student has become more practice-oriented. Project participants were able to engage in activities related to real professional activities and were able to assess the scope of future professional activities.

As you can see, the number of participants in the Internet design of secondary vocational educational institutions is growing.

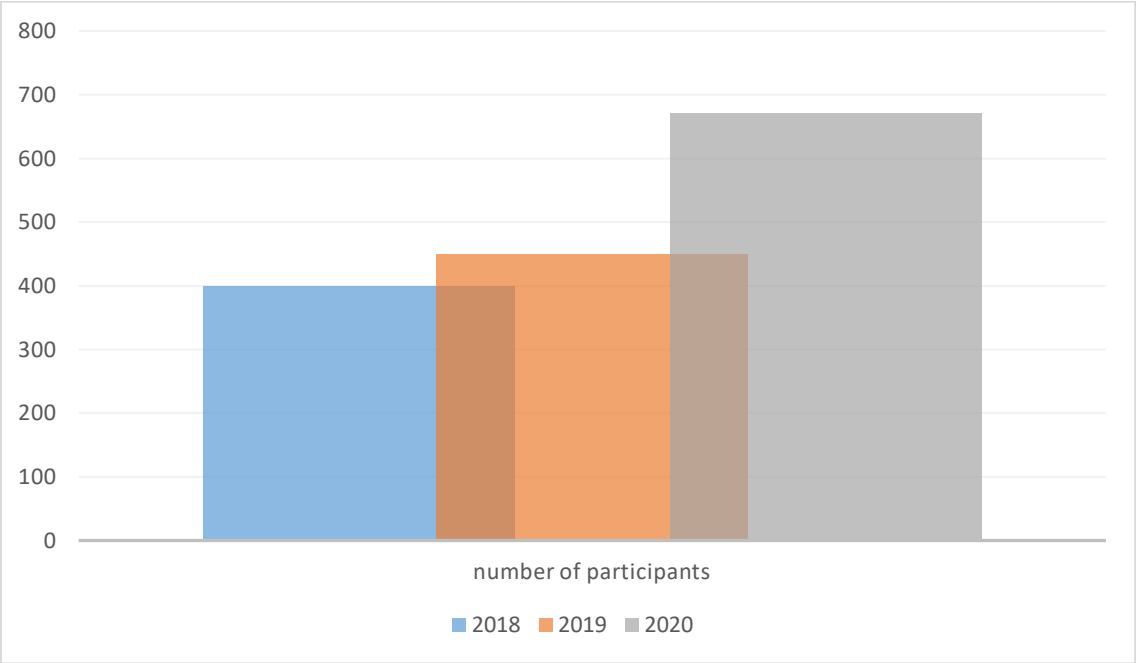

Fig. 2. Dynamics of participation of students of higher educational institutions in Internet design (2018-2020) (own authorship).

Initially, the number of participants in Internet design from higher schools was slightly higher than from secondary vocational educational institutions, since higher school students are more interested in improving their competitiveness and are more conscious of professional self-development.

By 2020, the interest of students in Internet design has increased dramatically, although the consultation process was carried out more remotely due to the epidemiological situation.

We surveyed the participants of the Internet design, the development of which opportunities, in their opinion, contribute to the participation in the Internet project. The results are shown in the figure.

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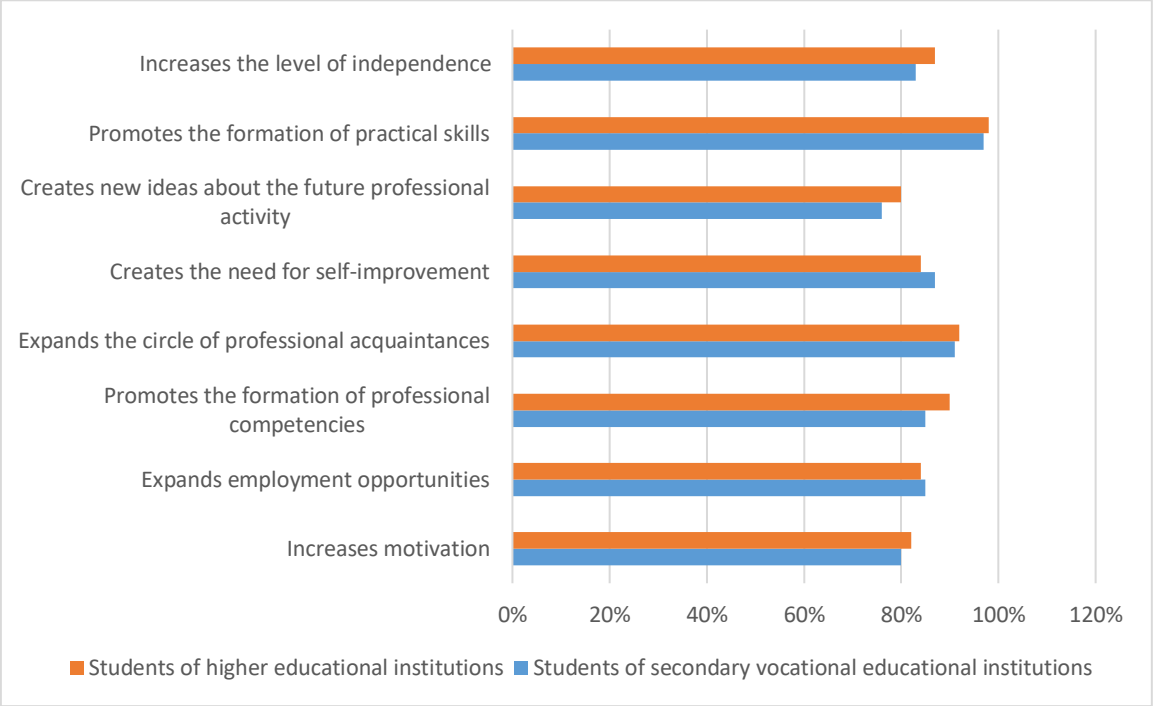

Fig. 3. Results of the survey " Assessment of the impact of Internet projects on professional self-development» (own authorship)

The survey was conducted among students of professional educational institutions. The results are presented in the categories "secondary vocational education institution" and "higher educational institution".

Students note the positive impact of Internet projects on professional self-development and self-improvement. They are ready to participate to expand and deepen their professional knowledge. Most of the participants note that the organizers and partners of the projects show an increased interest in their employment, which is an additional motivation for students.

The results of students of secondary vocational educational institutions and the results of students of higher educational institutions are as close as possible to each other. Students note the positive aspects of working with Internet projects.

Conclusions

The high dynamism of technological progress has led to the need to introduce innovative solutions in the educational environment. Internet design is one of the most effective tools in this process.

The role of Internet design in the modern educational environment is gradually increasing. The Internet is a platform for developing projects that can make a significant contribution to the life of society. Participation in an Internet project provides a student with the opportunity for promising employment, since the organizers of Internet project competitions can be representatives of various companies that need creative and independent specialists who can bring the organization to a new qualitative level.

Internet design is carried out in various formats, including hackathons. Hackathons bring together experts from various fields. Students communicate and learn from experience, developing the ability to communicate effectively and solve professional problems on time to achieve joint goals.

According to the study, the number of participants in Internet projects is increasing, and the popularity of such contests is increasing. Students show a great interest in project activities, noting that this allows them to develop professional competencies and increase their competitiveness in the labor market.

References

Arbeláez-Campillo, D., Tatsiy, V., Rojas-Bahamón, M., & Danilyan, O. (2020). Contributions of critical thinking as a form of participation and political deliberation. *Amazonia Investiga*, 9(27), 5-12. https://doi.org/10.34069/AI/2020.27.03.1

Aniskin, V. N., Korostelev, A. A., Lvovna, B. A., Kurochkin, A. V., & Sobakina, T. G. (2020). Teaching potential of integrated learning technologies Smart, Stem and Steam. Revista De La Universidad Del Zulia, 11(29), 328-336.

Dobudko T.V., Korostelev A.A., Gorbatov S.V., Kurochkin A.V., Akhmetov L.G. (2019). The organization of the university educational process in terms of digitalization of education. Humanities and Social Sciences Reviews. 7(4), Pp. 1148–1154.

Demidov, A.A. & Tretyakov A.L. (2016a). A network model of centers for ethical and legal education and civil-patriotic education and media education centers based on school libraries: the need to create, opportunities and real prospects. Media Education (Mediaobrazovanie). 3. Pp. 16-22.

Demidov, A.A., & Tretyakov, A.L. (2016b) Centers for ethical and legal information and media education based on the school library - an innovation in the implementation of the Federal State Educational Standard and infrastructure for the development of information and legal culture of children and youth. Media Education (Mediaobrazovanie). 2. Pp. 21-33.

Efremenko L.V., Golovachev V.S., Grigoryeva A.S., Tretyakov A.L., Chertakova E.M. (2020). Environmental education technologies. Eduweb: Revista de Tecnología de Información y Comunicación en Educación. Vol. 14, 2, Pp. 265–279.

Kidina l. M. (2020). Management of the pedagogical collective in the conditions of implementing distance learning. Baltic Humanitarian Journal. (Baltic Humanitarian Journal). Vol. 9 No 4 (33), Pp. 93-96.

Kiseleva, O., Lebedev, A., Pinkovetskaia, I., Rojas-Bahamón, M., & Arbeláez Campillo, D. (2019). Specialization and concentration of small and medium enterprises employees: Russian data. Amazonia Investiga, 8(20), 6-15. https://amazoniainvestiga.info/index.php/amazonia/article/view/59

Obydenkova V.K. (2016). Definition of the concept of "Internet project" in the context of professional training of university students. Internet magazine «World of Science» 4, 6.

Pichugina, G.A., & Bondarchuk, A.I. (2019). Structure of the training case in the organization of the educational process. Humanitarian Balkan Research. Vol. 2, no. 4, pp. 5-7.

Ponachugin, A.V., & Lapygin, Yu.N. (2019). Digital Educational Resources of the University: Design, Analysis and Expertise. Vestnik of Minin University, Vol. 7 (2), 5. (in Russ)

Rojas-Bahamón, M.J., Aguilar-Cruz, P.J., & Arbeláez-Campillo, D.F. (2020). Curricular integration as a strategy to strengthen the educational process in public institutions in COVID-19 times. Revista Inclusiones, 7(num Especial), pp. 233-241.

Shcerbakova E.V., & Shcerbakova T. N. (2019). Experience of Use of Remote Computer Technologies At The Organization Of Independent Work Of Students In The Conditions Of A Mark and rating system. Baltic Humanitarian Journal, Vol. 8, No 4 (29), Pp. 192-195.

Vaganova, O., Korostelev, A., Melnikov, D., Bulaeva, M., & Chelnokova, E. (2020a). Students activities organization technology in environmental communities. Amazonia Investiga, 9(29), 37-44. https://amazoniainvestiga.info/index.php/amazonia/article/view/1364

Vaganova, O. I. Korostelev, A. A., Chelnokova, E.A., Bugoslavskaya, A.V. (2020b). Technology for compiling supporting abstracts in the organization of students' independent work. Revista Amazonia Investiga. 9. 376-382. https://amazoniainvestiga.info/index.php/amazonia/article/view/1254

Yarygin O.N., Korostelev A.A., Akhmetov, L.G., Maseleno, A. (2019a). Modeling of competence as a tool of goal setting for education in modern society. International Journal of Recent Technology and Engineering, 7(6), Pp. 72–77.

Yarygin O.N., Korostelev A.A, Mukhutdinov R.H., Maseleno A. (2019b). Elections and russian citizens residing overseas: Prospects for internet voting. International Journal of Recent Technology and Engineering, 7(6), Pp. 52–57.