Socio-gaming technology in the development of students’ personality
Социо-игровые технологии в развитии личности студента

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Written by:
Olga I. Vaganova
https://orcid.org/0000-0001-8347-484X

Larisa V. Tsiganova
https://orcid.org/0000-0003-2784-9234

Elena A. Chelnokova
https://orcid.org/0000-0001-8673-6032

Anna V. Lapshova
https://orcid.org/0000-0001-7017-3589

Lyudmila I. Redkina
https://orcid.org/0000-0002-4201-8693

Abstract
In response to modern needs of the labor market in highly qualified specialists capable of independent and creative activities, higher education institutions are developing professional competence of students using various innovative technologies that contribute to enhancing students’ cognitive position. The implementation of modern educational technologies in the system of vocational education is a necessity dictated by the conditions of a competency-based educational paradigm. The peculiarity of educational technology as an effective means of forming professional competence is to ensure the guaranteed achievement of goals. In preparing a student for professional activity, technologies that allow a student to be immersed in conditions as close as possible to professional ones are of particular relevance. The advantage of socio-gaming technologies implementation consists both in revealing a student’s capabilities, his potential, including each of them in the educational process, and in shaping students’ ability to master the norms and rules of behavior in society. The purpose of the article is to review the experience of implementing socio-gaming technologies in the training of students of higher educational institutions. Communicative competence is one of the most significant

Аннотация
В ответ на современные потребности рынка труда в высококвалифицированных специалистах, способных к осуществлению самостоятельной и творческой деятельности, высшие учебные заведения осуществляют формирование профессиональной компетентности обучающихся с использованием различных инновационных технологий, способствующих активизации познавательной позиции студентов. Реализация в системе профессионального образования современных образовательных технологий – необходимость, продиктованная условиями компетентностной образовательной парадигмы. Особенность образовательной технологии как результативного средства формирования профессиональной компетентности заключается в обеспечении гарантированного достижения поставленных целей. В подготовке студента к профессиональной деятельности особую актуальность приобретают технологии, позволяющие погрузить обучающегося в условия, максимально приближенные к профессиональным. Преимущество реализации социо-игровых технологий состоит как в формировании способности обучающихся к освоению норм и правил.
elements of preparing students for both professional activities and life in society. The article presents a study to verify the level of formation of communicative competence. The level was established according to certain criteria related to inclusion in the learning process, building effective interaction with other students. Statistical analysis showed the effectiveness of the technology under consideration. An additional survey of students made it possible to establish that the game contributes to their active involvement in educational process and construction of effective communication with classmates.

**Key Words:** competence, educational technology, independence, socio-gaming technology, vocational training.

**Introduction**

In conditions of a competency-based educational paradigm, the main goal of higher education institutions is to prepare a competent specialist capable of independent creative professional activity. At the same time, one cannot fail to pay attention to the fact that one of the main directions of the development of vocational education is the individualization of training and the implementation of a personality-oriented approach that affect the student’s personality as the central figure of modern education, its needs and capabilities. The formation of a comprehensively developed personality in the process of developing professional competence is one of the most important tasks (Vaganova et al., 2019a). Immersing a student in conditions close to professional allows you to include the student in solving problems that may arise in a real workplace (Kobernyk et al., 2018), and thereby introduce him to the specifics of the profession (Rakhimbayeva, et al 2019). This process in modern conditions is implemented through the use of educational technologies, among which we single out social-gaming that best contribute to student's immersion in solving professional problems (Cirdan et al., 2019).

Socio-gaming technologies primarily contribute to the development of the student’s ability to master the norms and rules of behavior in society, help him get involved in an active social life. Games in the learning process also form the ability to carry out professional activities. During the game, students distribute roles and functions among themselves (Nikonova et al., 2019a). There are no participants who are not included in the learning process (Vaganova et al., 2019c). Each person is responsible for the overall success of the team (Ihnatenko, et al 2018). The basis of socio-gaming technologies is modeling of professional conditions that contribute to the mastery of tools for resolving professional problems (Nikonova, et al 2019b).

Socio-gaming technologies allow students to memorize a large amount of content within a shorter time frame (Garnevska et al., 2018). Active forms of learning, according to many
researchers, have a positive effect on the perception and storage of content (Ivanova, et al 2019). Games activate the cognitive process, form incentives for additional material on the issues being studied (Chirva et al., 2018). At the same time, games make it possible to apply the acquired knowledge immediately (Ilyashenko et al., 2019a). Learners learn new material in the process of playing activity (Ilyashenko et al. 2019b).

Higher education institutions provide training for foreign students (Kamenez et al., 2019), whose studies are of a specific nature, since most often language barriers prevent quality education (Markova et al., 2018). Studying and remembering content is difficult for them. Socio-gaming technology allows you to adapt to the learning process (Abramova et al., 2018). In the process, students develop communication and interaction skills (Koshechko et al., 2018). Gaming conditions contribute to the development of their confidence and independence (Oros et al., 2018). In the article, we focus on the impact of socio-gaming technologies on student preparation (Osadchenko et al., 2019).

Theoretical framework

Gaming technology is a broad topic that has been studied for many years. The implementation of socio-gaming technologies in vocational education has been successfully implemented for a long time (Vaganova et al., 2019e). Various scientists have dedicated soybeans to this issue (Petrichev et al., 2018). However, with the change in the educational paradigm, the functionality of socio-gaming technologies has expanded; their implementation has acquired new features that require additional attention of researchers (Raven, 2017).

The role of gaming technologies in the process of preparing students was considered in the works of P.P. Blonsky, L.S. Vygotsky. Game modeling is disclosed in the works of K. Gross, K. Buhler, A.A. Verbitsky and many other scholarly researchers. Social-gaming technologies are technologies (Prokhorova et al., 2018), based on group interaction, drawing on the experience of each student to solve the question posed during the game (Vaganova, et al 2019d). The game allows you to visualize the consequences of decisions made, identify errors, trace the process from beginning to end, so that in the future there are no shortcomings (Nikishina et al., 2017). In the game, students can try on various social roles and check alternative solutions to the problem (Pichugina et al., 2019), which makes it possible to obtain not always complete, but accurate and reliable content (Pliushch et al., 2018), which increases confidence in obtained results and stimulates the process of taking responsibility and motivates the further study of courses (Denysenko et al., 2018).

For the implementation of socio-gaming technologies, according to most researchers, teachers must create special conditions:

- spatial environment arrangement (Vaganova, et al 2019b);
- each student’s ability to play different roles (Bulaeva et al., 2018);
- compliance with the rules of the game (Vaganova, et al 2019f);
- compliance with the time limit.

A high learning rate depends on the constant activity of students and the presence of feedback from the teacher.

The main advantages of socio-gaming technologies are:

- independent mastery of educational content;
- application of the acquired knowledge here and now;
- development of research skills;
- The active development of communication skills in the process of interaction in the team.

Methodology

The paper presents a study conducted in 2017 and 2018. The influence of socio-gaming technologies on the preparation of students, the development of their communicative competence was established. The study involved students from the Pedagogical University in the amount of 58 people, including foreign students. The results of statistical data processing to verify the level of development of communicative competence was carried out at the beginning of 2017 and at the end of 2018.

A survey of students was conducted which helped to identify their opinions on the impact on their training of socio-gaming technologies.

They were asked to answer a few questions. We will present some of them in the article:
Do you like to participate in games?
In your opinion, have the games in the classes in professional courses helped you master the material more deeply?
In your opinion, do games contribute to the development of verbal communication with classmates?

Identification of the level of development of the communicative competence of students was carried out according to the criteria.

**Results and discussion**

Identification of the level of development of the communicative competence of students was carried out according to the criteria indicated in Table 1.

| No. | Criterion                                                                                                                                  | Level |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 1   | Active involvement in the learning process, building effective interaction with other students, a full understanding of the essence of the tasks, interest in resolving the problems posed, willingness to take responsibility for the overall result, the ability to clearly communicate your ideas to fellow students, easy verbal communication | High  |
| 2   | Involvement in the process of learning, the ability to build interaction with other students, understanding of tasks, showing interest in problems solving willingness. The overall result is not always manifested and it occurs in problems with understanding of students abilities to perform a variety of group tasks; transmission of one’s own ideas to fellow students is difficult; verbal communication also causes difficulties | Middle|
| 3   | Low in the exception in the process of learning, not the ability to build interaction with other students, a weak understanding of the tasks, the low interest to resolve the problems involved, there are difficulties with understanding of their functions under performance of SRI different group tasks, and as a consequence there is reluctance to take on responsibility for team results, transferring one’s own ideas to fellow students is difficult, verbal communication also causes difficulties | Low   |

The results of statistical data processing before the active introduction of socio-gaming technologies in student training are presented in Figure 1.

![Graph](image_url)

**Fig. 1.** The results of measuring the level of students' communicative competence at the beginning of the 2017 academic year (as part of our research).
The results of measuring the level of development of communicative competence showed that half of the students are not able to build an effective process of interaction in learning. Group tasks are difficult for them. Mastering the material becomes difficult.

Socio-gaming technology was introduced in students’ preparation. To participate in the game, students were divided into subgroups of 5-6 people. Work in small groups contributes to the development of cooperation and mutual understanding. Students independently choose the leader of their group, who is the coordinator of the activity and acts on behalf of the whole team in defending the results, justifying the general opinion. In the process of implementing socio-gaming technologies, discussions are involved, the preparation for which encourages students to study additional content, discuss the main ideas that are to be discussed with other participants in the game. During the discussion, students master the skill of interaction, negotiating in Russian and try to understand the essence of the problem, familiarizing themselves with professional topics.

In the process of implementing socio-gaming technologies, students take part in games aimed at establishing an intercultural dialogue between Russian and foreign students. During the games, students learn from the cultural experience of different countries. Acquaintance with other cultures forms a multicultural competent person who is ready to conduct a dialogue in a multicultural environment. This skill helps both in public life and in the process of implementing future professional activities. Students in the future will have the opportunity to gain experience in foreign companies.

Future teachers of vocational training take part in games dedicated to the topics of humanization of education in general and vocational education in particular, humanistic ideals in pedagogy, society, industry and the professional sphere, and the peculiarities of the emergence of humanistic ideals.

In the process of implementing games, electronic learning tools are involved. For extracurricular interaction between students and students and the teacher, the Moodle electronic platform is used, where students can exchange files, communicate, and consult with the teacher. Involvement in the preparation of electronic means for students provides them with the widest opportunities in building effective interaction. They have constant access to lecture material, can use the functions of a translator, if necessary, and contribute to the preparation for the game, expanding their knowledge and training the ability to communicate. Students create presentations and discuss the material that will be presented in it, the main provisions highlighted in the process of preparing for the game.

**Fig. 2.** The results of measuring the level of students’ communicative competence at the end of the 2018 school year (as part of our research).
The result’s measurement showed an increase in the level of development of communicative competence. At the same time, foreign students showed their adaptability to educational activities, to completing assignments in a team. Their involvement in the interaction has increased. We conducted a survey among students, which helped to identify their attitude to socio-gaming technologies implementation. They were asked to answer a few questions. We will present some of them in the article:

− Do you like to participate in games?
− In your opinion, have the games in the classes in professional courses helped you master the material more deeply?
− In your opinion, do games contribute to the development of verbal communication with classmates?

Figure 3 shows the results of statistical processing of student responses.

![Bar chart showing student responses](image)

Fig. 3. Results of statistical processing of questionnaires (as part of our research)

Most students like to take part in games organized to immerse students in conditions close to professional ones. While studying professional issues, they learn to interact with each other and to come to mutual agreement. Students strive to contribute to the achievement of the overall result. They note that they feel their own success when participating in games. The support and experience of other participants help foreign students to better adapt to educational conditions.

Conclusions

In the process, we reviewed the experience of implementing socio-gaming technologies in a higher educational institution. The study allowed us to establish a positive impact of this technology on the development of the communicative competence of students, including foreign students, and as a result on the entire process of their preparation. Due to the development of the material during the game, students become more active and motivated to further study professional courses.

At the beginning of the study, the results showed that half of the students were not ready to build an effective process of interaction in training. Group assignments seemed difficult for them. Mastering the material was difficult.

The introduction of socio-gaming technologies has provided students with the opportunity to reach their potential through active interaction with their fellow students. Exchange of experience, support of participants and corrective activities of the teacher had a positive impact on the ability to interact, to achieve team results. Re-examination showed an increase in the level of communicative competence of students. Their involvement in the interaction has increased. A survey among students helped to identify their attitude to of socio-gaming technologies implementation.
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