

## BACHELORS' INDEPENDENT WORK: STAGES OF ORGANIZATION THROUGH THE APPLICATION OF SIMULATION TECHNOLOGY

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### Abstract

**Purpose of the study:** The article analyses the problem of the students' independent work organization within the framework of simulation technology. We placed the main emphasis on the stages of the organization of University students' self-study of a foreign language. Moreover, we assess how the application of simulation technology raises the efficiency of students' independent work.

**Methodology:** We wrote the article on data collected from surveys in 2018. Students from the Orenburg State University participated in this research. This study used the quantitative approach of experimental research by dividing students into two groups, experimental and control ones. We collected the data through questionnaires, interviews, and documentation. We used statistical methods of survey data processing for analysis, among them descriptive analysis, correlation, and factor analyses.

**Main Findings:** Simulation technology is an active and innovative tool in education. The organization of students' independent work within the frame of the simulation technology promotes the development of initiative and self-sufficient students. It contributes to the improvement of the subjective bachelors' qualities such as strength of linguistic knowledge, linguistic and reflexive skills. Besides, students understood the importance of independent work in the educational process.

**Applications of this study:** The material of the study can be useful for university teachers and students and a wide range of readers interested in a new developing and innovative way of learning in the education of students.

**Novelty/Originality of this study:** In this article, we described the organization of students' independent work within the frame of the simulation technology. The results can be used by university teachers as an innovative tool for students learning. This method of intensification of learning activity can lead to the creation of an own model of teaching the students.

**Keywords:** *Education, Students' Independent Work, Simulation Technology, Descriptive Analysis.*

### INTRODUCTION

Nowadays, the organization of students' independent work serves as the pedagogical context for the modernization of higher education. The focus areas are the development of the trainees' personality, the individualization of instruction, the introduction of information technology in education, the implementation of the competence approach ([Pidkasistui, 2005](#)).

The appeal to the competence-oriented education we explained by the changed requirements for vocational training of graduates. According to the competence approach, the ability to tackle the challenges of varying complexity is the key indicator of the bachelors' educational attainment.

The competence approach emphasizes the acquisition of the ability to use the skills accumulated in the university in the future professional activity of graduates. However, it does not diminish the importance of knowledge. In other words, in the process of implementing this approach, education acquires a personal orientation while preserving the depth and universality.

We considered students' independent work as a priority element of the educational process. The teacher needs to motivate undergraduate students to it. Otherwise, the lack of any interest in self students studying will negatively affect the development of cognitive independence of the future bachelor, which contradicts the required outcome standards.

Considering that not all freshmen can work independently, it is necessary first to teach them this kind of activity. Pursuing this goal, teachers are increasingly appealing to various innovative technologies.

The Russian Federation states the Conception of long - term socio-economic development. One of the most important values for the citizens of the country is to get a high - quality education. Universities should train competent, mobile, and creative graduates. High-quality preparation of bachelors substantially depends on the organization of their independent work. In this regard, the implementation of the Federal state educational standards of the third generation required higher education institutions to ensure efficient independent work of bachelors in combination with the improvement of its organization by the teacher. The importance of the problem is associated with the new role of independent work in the

educational process. As a result of the transition to competency-based education, independent work has become a necessary form of organization of the educational process, and there is a need to review its organization.

Therefore, the objectives of our study are:

- To analyze the basic concepts of study: independent work, organization, simulation technology;
- To reveal the conditions for the effective organization of the bachelors' independent work using simulation technology;
- Theoretically substantiate and test in practice the conditions for the effective organization of the bachelors' independent work using simulation technology.

## LITERATURE REVIEW

[Kirkpatrick, D., 1998](#). The central purpose of the paper is to explore the main stages of the simulation.

Stage 1: Perception

Stage 2: Understanding

Stage 3: Activity (finding a solution to the problem)

Stage 4: Result

This simulation model focuses on the bachelor's perception and life experience. The analysis of different approaches to the problem of the simulation showed that simulation helps: 1) To generate correct communicative competence of students; 2) To create the "real" reality in which each of the participants will be the subject of its activity.

While simulating bachelors get the following opportunities:

- Concentrate on conveying the meaning of the utterance, rather than on the simple practice of language;
- Study different ways of behavior according to the situation;
- Work within the group and independently;
- Take risks and negotiate to achieve the goal;
- Apply linguistic knowledge and skills;
- Gain experience to conduct the situation.

[Semushina, L.G., 1999](#). The work reveals different approaches to the term technology. Special attention is given to the activity technologies. Such technologies allow to organize bachelors' independent work to learn the content of education, secondly, these technologies help bachelors to work with various sources of information, and thirdly, these are technologies for organizing group interaction; fourthly, this is the technology of metacognitive activity of students (since the subject position of the bachelor becomes a determining factor in the educational process, and his personal development acts as one of the main educational goals); fifthly, these are context-based learning technologies that allow solving pre-professional tasks.

[Rubinstein, S.L., 2002](#). The purpose of the paper is to reveal the independent work through the concept of "subjectivity", which is understood as "the ability of a person to be a strategist of his activity, the ability to set and adjust goals, recognize motives, act independently following his plan." The research emphasis on the skills of the independent educational activities of bachelors:

- Mastery of self-organization and organization techniques;
- The ability to recognize goals;
- The ability to plan actions to achieve the goal (systemic);
- The ability to control and evaluate the process and the result of the educational activity (reflection).

[Radugin, A.A., 2002](#). The study confirmed that the technology is a successive set of operations and procedures that together constitute an integrated didactic system, the implementation of which in pedagogical practice leads to the achievement of specific goals of education and upbringing.

[Jones, K., 2002](#). The researcher interprets the simulation as problematic speech activity, which takes place in a clearly described realistic environment. The motivation for creating a simulation in the educational process is a communicative problem that requires students to have a personal attitude to it.

[Lukinova, N.G., 2003](#). The study aims to consider the independent work in the activity relation, which is defined and organized by the bachelor by his internal cognitive motives, at the most convenient, rational time from his point of view,

controlled by him in the process and, as a result, activity based on the indirect systematic management of it by the teacher.

[Pidkasistui, P.I., 2005](#). The researcher points out, “the higher school gradually but steadily passes from transferring information to students in a ready-made form to the management of independent educational and cognitive activities, as well as the formation of independent creative work experiences”. The main differences between creative cognitive and reproductive activities are the activation of students' cognitive abilities and creative powers, penetrations into the essence of studied issues and novelty of judgments and conclusions.

[Kreiger, H., 2006](#). The study defines the simulation as a false, synthetic creation of the artificial world, which creates the reality of the working world.

[Slastenin, V.A., 2007](#). The purpose of the study is to explore various aspects of the organization, the search for ways to improve the independent work is reflected in the studies. Special attention is paid to the organization of independent work of bachelors within the framework of the activity approach. The researches emphasize on the changing mission of the teacher: choosing and organizing types of independent work, activating and transferring a bachelor to a subjective position, actualizes the need to move from the position of a passive recipient of information to the position of an independent active participant of the educational process.

[Zagvyazinsky, V.I., 2007](#). The study specified that simulation technology is the creation of the educational process of various kinds of relationships and conditions of real life. The technology assumes the specificity of pre-determined targets, the optimal of the procedures for achieving them, feedback, correction, and diagnosis of the results that help bachelors' to work independently.

[Rogozin, S.A., 2008](#). The researcher confirmed the algorithmic structure of the simulation technology. Simulation technology, like any other technology, assumes the existence of a given algorithm, which can be effectively used in the educational process. In this case, the algorithm is the exact order for a performer to make a series of actions aimed to achieve the goal for a certain type of problem. The use of simulation technology assumes the organization of targeted interaction between the teacher and undergraduate students to develop their knowledge, skills, as well as some professional and personal qualities.

[Aldrich, C., 2009](#). The researcher interpreted simulation technology as strictly built, structured educational scenarios with tested rules, tasks and strategies that are carefully designed to develop the learner's specific competencies. The usage of this technology motivates bachelors to organize their independent work more successfully.

[Novikov, A.N., 2011](#). The study confirms the basic concepts of the term “organization: 1) “... internal orderliness, coordination of interaction”, 2) “... a set of processes and actions leading to the formation and improvement of relationships”; 3) “... a system of interconnected actions (technologies) aimed at uniting groups of people to achieve a common goal; 4) “...distribution of activities and actions in time and space” considers the organization of educational activities.

[Gladkikh, V.G., 2011](#). The researcher indicated that while using independent technologies developed based on information resources of the global network, bachelors, with the support of teachers, will be formed as “comprehensively and harmoniously developed personalities” that combine spiritual wealth with high professional competence in the relevant field of professional activity.

[Zelib, T.I., 2011](#). The work presents an earlier study of simulation technology, which appeared in France in the late '70s. One of the founders, Francis Debizer, defines it as: “... an imitative, invented and played reproduction of interpersonal contacts organized around a problem situation: studying a case, solving a problem, making a decision.”

[Oskina, S.D., 2017](#). The researcher defines the simulation as independent decision-making activity in a specific situation where participants (on their behalf or speaking in various social roles) discuss a problem or a series of interrelated problems in certain given conditions. The focus of the study is the effective usage of the technology of simulation as a tool for independent work of bachelor.

### Summary of Literature Review

Having analyzed the scientific literature on the research problem, we concluded that the technology of simulation is a very effective tool for organizing bachelors' independent work. This technology is widely spread in different countries and help bachelors to master all necessary professional competencies while studying.

### METHODOLOGY

We conducted our survey on the base of simulation technology that refers to active methods of teaching, that promote the development of initiative and students' self-sufficiency, involving the evolution of critical thinking, free expression, the creation of authentic communicative skills, since, produced by the representation of real life, students are actively involved in a certain system of reality and act according to the specified roles.

Simulation technology, like any other technology, assumes the existence of a given algorithm, which can be effectively used in the educational process. In this case, the algorithm is the exact order for a performer to make a series of actions aimed to achieve the goal for a certain type of problem [Rogozin, S.A. \(2008\)](#). The use of simulation technology assumes the organization of targeted interaction between the teacher and undergraduate students to develop their knowledge, skills, as well as some professional and personal qualities.

Modeling of educational tasks, situations, and their solution are possible with the help of computer simulations based on computer training programs that provide continuous interaction between user and a computer, enable students to influence the learning process, adjust the speed of learning, and return to the previous material. So, we used the Hot Potatoes program that allows teachers to create their electronic tasks and tests.

Students' task was to find job announcements on the website of "the Moscow Times". Besides they had to make a resume, to write an application for an interview, and to pass an online interview. So, the students practiced and systematized the vocabulary necessary for writing an interview application with the help of the Hot Potatoes program. Besides, the program allows the students to check their results themselves and not to wait for the teacher. It should be noted that a student can do the same exercise more than once if it is necessary. All tasks are performed in individual mode.

This study used the quantitative approach of experimental research by dividing subjects into two groups, experimental and control groups. So, we applied the correlation analysis to assess the relationship between the groups of bachelors (experimental or control). The correlation coefficient values were calculated in Microsoft Excel using the "correlation" function.

Along with the correlation analysis, we used factor analysis. Factor analysis allowed us to identify the latent (hidden) variable factors responsible for the existence of linear statistical correlations between the observed variables.

The basic idea of factor analysis is to isolate only a small number of latent independent groupings from the whole set of variables, within which the variables are more closely related than the variables belonging to different groupings. Each measurement depends on the following factors: general (affect results on multiple measurement scales); specific (affect the results on one scale) and the "error" factor (a set of reasons not to be taken into account).

### Study participants

We have conducted the survey, reflected in this article during 2018. 253 students of the Orenburg State University took part in our research. They were the students of the following faculties: faculty of economy and management, transport faculty, faculty of architecture and construction. All students were divided into two groups: experimental and control ones.

## RESULTS

To prove the validity of our results, we used the Kendell concordance coefficient (the coefficient of multiple rank correlations). With the help of this correlation analysis, we could quantitatively determine the existence of such a relationship and estimate its' importance.

The correlation coefficient can take values from -1 to +1. In this case, the value of -1 will be considered as the lack of correlation between the values, value of 0 - is zero correlation, and +1 will be considered as the correlation of the total values. In other words, the closer the correlation coefficient is to +1, the stronger the relationship between the two random variables.

To evaluate the oral speech of bachelors we used the following criteria:

- Communicative tasks decision criterion (C1);
- Bachelors' interaction ability criterion (C2);
- Lexical speech forming criterion (C3);
- Grammatical speech forming criterion (C4);
- Pronunciation criterion (C5).

According to our scientific research, we should notice that indicators C1, C3 belong to the cognitive competence, and C2, C4, C5 – to the communicative competence. The results obtained in the control group (CG) and the experimental group (EG) are presented in Table 1:

**Table 1:** The results obtained in the control group (CG) and the experimental group (EG)

Correlation with the C1	-0,78
Correlation with C2	-0,76

Correlation with C3	-0,85
Correlation with C4	-0,89
Correlation with C 5	-0,86

According to the results of the correlation analysis, we came concluded that the relationship between the groups of bachelors (experimental or control) and all 5 categories is strong and inverse. This means that bachelors from the experimental group receive higher scores than bachelors from the control group. The correlation coefficient values were calculated in Microsoft Excel using the “correlation” function.

The linear pair correlation coefficient is as follows:

$$\rho = \frac{\sum(x-\bar{x})(y-\bar{y})}{n \cdot \sigma_x \cdot \sigma_y}$$

x and y – the values of factor and performance indicators

$\bar{x}, \bar{y}$  – average values of relevant indicators

$\sigma_x, \sigma_y$  – average square deviations (standard deviations of x and y)

$$\sigma_x = \sqrt{\frac{\sum(x - \bar{x})^2}{n}}$$

$$\sigma_y = \sqrt{\frac{\sum(y - \bar{y})^2}{n}}$$

Where n - is the number of students

Determining the effectiveness of bachelors’ independent work within the framework of using simulation technology was the main task of our research, which we were going to solve with the help of factor analysis. More exactly, it was necessary for us: 1) To study the structure of variables relationships, their belonging to certain groups and factors according to which these variables have the maximum load; 2) Define latent variables; 3) Identify common and specific factors.

To solve the above-mentioned objectives of our study, we used the original matrix of N. V. Mikhaylova. This matrix contains 16 parameters suitable to different bachelors' personality qualities following our singled out components and criteria for evaluating the effectiveness of the bachelors’ independent work organization within the usage simulation technology ([Mikhaylova,2012](#)):

1. Motivation and attitude – the 1<sup>st</sup> question (take an interest in independent work).
2. Motivation and attitude – the 2<sup>d</sup> question (awareness of the importance of independent work in professional and personal development).
3. Motivation and attitude – the 3<sup>d</sup> question (understanding the importance of independent work in the educational process).
4. Motivation and attitude –the 4<sup>th</sup> question (a necessity for independent work implementation).
5. Motivation and attitude – the 5<sup>th</sup> question (development of the bachelors’ subjective qualities).
6. Motivation and attitude – the 6<sup>th</sup> question (attitude to the process and objects of knowledge: the level of linguistic and professional orientations).
7. Linguistic knowledge –the 7<sup>th</sup> question (breadth).
8. Linguistic knowledge –the 8<sup>th</sup> question (volume).
9. Linguistic knowledge –the 9<sup>th</sup> question (consistency).
10. Linguistic knowledge –the 10<sup>th</sup> question (system).
11. Ability to organize the independent work– the 11<sup>th</sup> question (goal-setting).
12. Ability to organize the independent work – the 12<sup>th</sup> question (productive self-organization).
13. Ability to organize the independent work – the 13<sup>th</sup> question (systematic work).
14. Ability to organize the independent work – the 14<sup>th</sup> question (early work implementation).



15. Ability to organize the independent work – the 15<sup>th</sup> question (reflective skills).

16. Linguistic skills – the 16<sup>th</sup> question (level of speech activity development).

For the values of variables, we took the values of the intensity degree evaluation scale of the criteria under consideration: 1) Strong development; 2) Average development; 3) Weak development.

Using the method of principal factors, we analyzed the correlation matrix of variables. As a result, general and specific factors were identified.

**Table 2:** Ascertaining experiment results

Factor number	Question	Initial characteristic	Factor Total load
1	9	Linguistic knowledge system	6.463
5	13	Systematic performance of work	3.202
2	3	Understanding of the importance of independent work in the educational process	2.352
3	2	Awareness of the independent work role in professional and personal development	1.958
4	4	The necessity for independent work implementation	1.834
6	6	Level of linguistic and professional orientations	1.625

**Table 3:** Formative experiment results

Factor number	Question	Initial characteristic	Factor total load
1	8	Effective self-organization	5.733
4	3	Understanding of the importance of independent work in the educational process	4.624
3	2	Awareness of the independent work role in professional and personal development	3.422

As we can see from the tables, the factors identified by us at the ascertaining and formative stages of the experiments are different.

Before our experiment, we've identified six factors that influenced the effectiveness of the bachelors' independent work. The parameter "system of bachelor linguistic knowledge" we considered as a general factor and as the determining factor for all other characteristics of linguistic knowledge.

To the specific factors we've related:

- Systematic implementation of independent work;
- Understanding the importance of independent work in the educational process;
- Awareness of the independent work role in professional and personal development;
- The necessity for independent work implementation;
- Level of linguistic and professional orientations.

As a result of the experiment formative stage, we've found that the organization of the bachelor's independent work is influenced by two common factors: 1) parameters connected with the subjective bachelors qualities (breadth, volume, consistency, the strength of linguistic knowledge, linguistic skills, reflexive skills) and 2) understanding the importance of independent work in the educational process as a basic parameter of independent work efficiency indicators (interest in independent work, effective self-organization, systemic, early).

## DISCUSSION

Designing the training course and taking into account that the simulation has a technological basis, we divided it into stages.

At the first, *adaptive diagnostic* stage, we determined the level of students' independence, their academic style and the initial level of foreign language communicative competence. As it turned out, only 12 percent of students demonstrate a positive attitude towards independent work; however, the majority of them prefer to work collectively (61%). Among the interviewed are students who can work independently only if they have a desire and the type of tasks suits them (9%) and students who do not want to work alone categorically (18%). The majority of teachers, who also participated in our experiment, consider that this attitude to independent work is explained by the lack of student motivation to work

regularly because undergraduate students are allowed to eliminate all their debts before exams, therefore, they become active only at the beginning of the session.

Taking into account the lack of student motivation, as well as the inability of undergraduate students to organize their independent activity properly, at this stage we plan to acquaint students with different features of independent work, which is particularly carried out in the Internet environment. Under the Internet environment, we mean the use of Internet resources, electronic textbooks, reference books, etc.

The second, *value-goal* stage is characterized by the creation and development of student motivation. Speaking about the role of student motivation in personality development, V.N. Myasishchev emphasized that «only 20-30% of people's achievements are affected by the intellect, while the real force that causes persons to behave in a certain way is their motives (70-80%)» ([Myasichshev,2004](#)).

After having analyzed negative factors that affect the creation of motivation, we distinguished the difficulties which undergraduate students run into while working independently. So this happens due to the lack of knowledge (43%); inability to organize time (56%); inability to evaluate capabilities properly (39%); inability to work independently (45%); unclear definitions of goals (28%).

At this stage, undergraduate students get acquainted with the goals and objectives of the discipline as well as the aims and objectives of independent work resulting from the use of simulation technology. Here we emphasize the students' self-development in the educational process (independent search, self-coordination of independent activity, evaluation results, critical perception of information, students' opinion). The number of tasks of a productive character is gradually increasing. The result of this stage is the reasoned possession of independent learning activities in the framework of using simulation technology.

On the third – *active learning* stage, the teacher provides the conditions for an adequate student's self-assessment based on students' self-control and self-correction during the learning course. Teaching directions of independent work should be gradually transferred to students' self-management and organization. Search and creative tasks constantly appear in the system of independent work, but their share is still insignificant.

On the fourth - *professional-creative* stage, the teacher creates conditions for independent education and training activities of undergraduate students. This activity is of individual creative character and it is planned taking into account the formed competencies, interests, ways of thinking, value orientations.

As P.I. Pidkasistui points out, «the higher school gradually but steadily passes from transferring information to students in a ready-made form to the management of independent educational and cognitive activities, as well as the formation of independent creative work experiences» ([Pidkasistui,2005](#)). The main differences between creative cognitive and reproductive activities are the activation of students' cognitive abilities and creative powers, penetrations into the essence of studied issues and the novelty of judgments and conclusions.

This stage is characterized by a significant increase in the share of partially search and creative tasks, which assume raising problematic questions. It provides the search for unusual solutions, the choice of educational activity methods, and simulation situations related to the future professional activity of undergraduate students.

Undergraduate students act as creators of the learning environment content through the execution of the creative task, which is subsequently posted on the site. The opportunity of students to discuss and evaluate tasks remains the primary aim. Students' discussion of completed tasks contributes to their judgments and conclusions, acquiring skills to enter into discussion, defend their point of view, which, in turn, positively influences the development of communicative competence.

Experience has shown that the use of simulation technology provides a verbal practice for each student, which is a priority in the study of a foreign language. So, due to the possibility to correspond in the synchronous mode in a foreign language in *V Kontakte*, the teacher gives the task to compose dialogues on various topics. Undergraduate students work in an interactive mode, and then send the teacher screenshots and an audio file with a recorded dialogue to check.

Modeling of educational tasks, situations, and their solution are possible with the help of computer simulations based on computer training programs that provide continuous interaction between user and a computer, enable students to influence the learning process, adjust the speed of learning, and return to the previous material.

The use of computer simulations allows students to master the theoretical knowledge and necessary practical skills, reduces the risk of erroneous actions, allows them to work through the situation for several times taking into account previous experience, and allows a teacher to set various conditions of activity with different levels of complexity.

Computer simulations can be considered as a powerful means of professional training, training of so-called “soft skills”: negotiating, conflict management, customer service skills, etc.

There are some basic differences between computer simulations and traditional training:

- The practical orientation of computer simulations;



- Personal feedback;
- The possibility of various professional environments, modeling of standard and non-standard situations, levels of complexity in solving professional problems, etc.
- Variety of forms in realizing the professional content using computer modeling (<http://old.surgpu.ru/news/kompyuternaya-simulyatsiya-kak-interaktivnaya-forma-obucheniya>).

So, at present, the program worked out in 1997-2003 at the center of information technologies at the University of Victoria (Canada) is used to study various disciplines, including the study of foreign languages. This Hot Potatoes wrapper tool is a series of programs that allow you to create a variety of interactive tasks using text, graphics, sound, and video. The program allows teachers who do not have a perfect knowledge of programming languages to create their electronic tasks and tests.

We have tested this program during our English lessons with the students of Orenburg State University. Students' task was to find job announcements on the website of "the Moscow Times". Besides they had to make a resume, to write an application for an interview, and to pass an online interview. So, the students practiced and systematized the vocabulary necessary for writing an interview application with the help of the Hot Potatoes program. Besides, the program allows the students to check their results themselves and not to wait for the teacher. It should be noted that a student can do the same exercise more than once if it is necessary. All tasks are performed in individual mode.

As we can see, modern technologies can create real situations, which help students not only to master foreign language from the practical point of view but also enable them to develop some professional behavior, the main components of which are independence, activity, creativity.

The advantages of using such technologies are:

- Students' introduction in the sphere of professional communication;
- Significant expansion of active vocabulary;
- Interactive form in the development of students' communicative abilities with the means of a foreign language;
- The authenticity of the material.

As the students note, after participating in the experiment on studying the discipline "Foreign language" with the help of simulation technology, they began to realize how much independent work affects their learning outcomes as a whole and that they needed independent research for new knowledge and their further application.

As the students note, after participating in the experiment on studying the discipline "Foreign language" with the help of simulation technology, they began to realize how much independent work affects their learning outcomes as a whole and that they needed for independent research for new knowledge and their further application. As the students say, the need for acquiring new knowledge is explained by the fact that they began to realize the importance of a foreign language for their future professional tasks.

## CONCLUSION

After reviewing the studies on the simulation technology, we defined this technology refers to active methods of teaching, that promote the development of initiative and students' self-sufficiency, involving the evolution of critical thinking, free expression, the creation of authentic communicative skills, since, produced by the representation of real life, students are actively involved in a certain system of reality and act according to the specified roles. We've developed four stages of simulation technology: adaptive diagnostic stage, value-goal stage, active learning stage, professional-creative stage. All this allows us to conclude that the phased organization of students' independent work in the framework of simulation technology which we offer is very successful. It ensures the main teacher's task that is to help each student to become a full-fledged subject of the educational process and give a real opportunity to go beyond the educational information to independent knowledge. At the same time, the teacher does this step-by-step. He starts to help the students to determine the aims of the education, to choose the means of its implementation and ways of adjusting and to evaluate the results.

The study has also confirmed that implementing simulation technology, motivation creation plays a significant role. First of all, this is because the formation of undergraduate students' ability to work independently turns into a preliminary increase learning motivation. Moreover, in the conditions of using simulation technology, the independent work of undergraduate students becomes more active and systematic, requiring learner's self-organization. Although current students actively use information technology in their daily lives, a certain approach is required for forming student learning motivation and interest in the process of studying.



## IMPLICATION OF THE STUDY

Thus, the problem of the organization of bachelors' independent work is one of the most complex and still not sufficiently researched. We have shown the important role of the usage simulation technology while organizing independent work. Such an organization of the educational process becomes effective, self-oriented, motivated. The implementation of this technology was considered an example of the discipline of a foreign language.

We can conclude that the efficiency of bachelors' independent work largely depends on the way of its organization and methods which are used in the process of the organization. And the main aim of implementing simulation technology is to adopt bachelor's to the constantly changing learning and economic conditions.

## LIMITATION AND STUDY FORWARD

The study focuses on the theoretical analysis and practical research. The study contains some quantitative data that is collected from the primary source. Further scientific research is seen in the development of content for simulation. Future studies can be connected with further research on the new role of the teacher while using simulation technology. In future researchers will continue to study the independent work of students.

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