

**INTERNATIONAL SCIENTIFIC AND PRACTICE  
CONFERENCE ON " INTERNATIONAL EXPERIENCE  
IN INCREASING THE EFFECTIVENESS OF DISTANCE  
EDUCATION: PROBLEMS AND SOLUTIONS" SPECIAL  
ISSUE., 27 th JANUARY., 2022.,  
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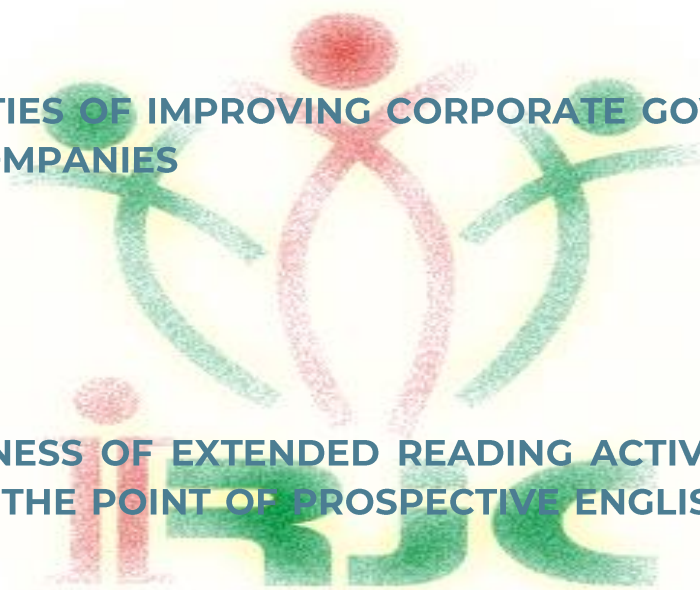
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**Formation of a system of prevention of deviant behavior of minors in modern Uzbekistan**

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**Abstract:** *The fact that social norms are an integral part of the management of society, social norms are a set of rules that harmonize the behavior of an individual or social group with a particular social environment, the essence of serious changes and trends in the system of social norms in the period of the globe, the role of the principles of studying modern factors - the internet, the virtual world, the analysis of the flow of information, the study of its sociological aspects and the study of the problems of young people show that in the process of globalization, serious risks aimed at disrupting our spiritual life and the development of measures to prevent them are important. In this article, opinions and comments on the formation of a system of prevention of deviant behavior of minors are made in modern Uzbekistan.*

**Key words:** *Deviant behavior, modern society, the influence of minors, manners, youth upbringing, social environment.*

Each of the social vices associated with alcoholism, drug addiction, self-murder, which are included in the Deviant types of behavior, has different aspects in essence according to the occurrence and social consequences. The first difference is that long-lasting social harmful habits become an integral part of a deviant lifestyle. Constant family disagreement, dissatisfaction with the family and the environment, misunderstanding in the house, etc. - all this injures the psyche of the child and he tries to change the existing situation. The shortcomings in this place, including the social control systems that prevent and combat the development of conflicts, play a negative role in social institutions.

It is necessary to note that the deviant behavior of minors-is not in accordance with the laws of deviation behavior of adults. In particular, criminology explains the violation by criminals of generally accepted norms of behavior in which there is a violation by criminals of officially approved or generally recognized norms of behavior by criminals with the presence in them of a system of special values that are contrary to officially approved or generally recognized norms of behavior. And for this reason, the analysis of crime, first of all, professional crime, is based on the theory of basic subordination. However, this approach, applied to minors, is not always correct. For example, often a teenager cannot be guilty of his own guilt without denying what he committed, or he himself breaks a legal ban, which in principle does not deny. Meanwhile, some experts point out that at the moment, more financially, children and adolescents from dark families fall into the deviant Hulk group. Generally speaking, "today one of the few layers of society, not that protected

1	ISSN2277-3630 (online),PublishedbyInternational journal of Social Sciences & Interdisciplinary Research, January-2022 <a href="https://www.gejournal.net/index.php/IJSSIR">https://www.gejournal.net/index.php/IJSSIR</a>
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from deviant behavior, is faced with a smirking danger and attachment to hat. Material adequacy, high social status of parents cannot guarantee the observance of social norms of children."

In the work of profiling the behavior of minors, it is important to carry out propaganda and educational work through the media. Public opinion survey data Television information for adolescents and young people, it is considered the preferred source of withdrawal. In this regard, the role of social advertising grows. Social advertising with its proposals —motivation of human activity for achieving positive goals, stimulating labor. Advertising spreads and promotes social values.

The best profilactics of Deviant behavior is to have a purposeful organizational impact on the minds of minors, having clearly defined the tools, forms and methods of upbringing. The possibilities of preventing legal training are much more effective than other means of abstinence. Because legal prophylactic measures are usually delayed for a while and begin to follow after the act is committed. Legal measures related to prevention —for performance, it must be put into the mind of the child, become part of his personality, experience. This can be achieved through educational exposure to a specific goal. It is known to us that the analysis of many crimes committed in our society, including crimes committed by minors and negative cases that affect the spiritual and moral formation of juvenile offenders, is also of particular importance. In particular, a teenager who is a witness of various immoral acts in the family, also tries to commit immoral crimes. Among such crimes, we can see cases of abuse by underage adolescents

In this place, a question arises, What are the reasons for the occurrence of such crimes, what is the root essence? In this regard, we will touch on the conditions and causes of the occurrence of these crimes. Very many are engaged in the upbringing of minors. These are parents, other members of the family with an older age, pre-school, teachers in the secondary special and higher educational institutions of the public organizations, etc. In fact, the influence of these minors on the upbringing of persons engaged in their education will have its effect in the future. The father or mother in the families is distinguished by a drunkard or spiritual immorality. In our view, the fight against crime committed by minors, as well as its prevention, must first of all begin with the adaptation of family morality to our values.

A characteristic feature of adolescents is that in the external aspect and according to their own claims this is a large age, and according to their internal characteristics and capabilities, they are still children. The tendency of adolescents to be pampered, to be paid attention to themselves, the game robbery is connected with this. At the same time, in adolescents, together with the perception that he is becoming an adult, consciousness is awakened and actively formed, the perception of his dignity, sexual orientation. The adolescent age also represents the sum of conditions in which there is a high risk of catching on to the influence of various mental well-being factors. Conducted sociological studies data suggest that the war between parents-quarrels, the presence of defects in them, which, according to the teenager's point of view, belittles the teenager and the surrounding people, being an abusive attitude towards the teenager, not believing in him or not respecting him are factors that have such a strong impact. All this makes the process of socialization of children and adolescents difficult, and on this basis they come up with different deviations in their behavior.

<b>2</b>	<b>ISSN2277-3630 (online),PublishedbyInternational journal of Social Sciences &amp; Interdisciplinary Research.,January-2022 <a href="https://www.gejournal.net/index.php/IJSSIR">https://www.gejournal.net/index.php/IJSSIR</a></b>
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Adolescent rights embody in themselves the dignity of all mankind. This means that childhood is a unique, important period in the development of a person's personality. Human rights begin first of all from the rights of children. The future of any society and all mankind depends on the extremely high level of material and physical development of the younger generation, its understanding of the role and importance of human rights in the life of a person and society, as well as its own destiny and responsibility for its actions.

**In conclusion**, the foundation of a legal democratic state is being built in our country. The construction of the in this state is carried out by a legal literacy, a young generation that has firmly mastered the culture of law. To build a great state, a harmonious upbringing of a person is necessary. Therefore, educating young people in the spirit of a deeper understanding of the legal system and essence of the state, knowing the basics of law, respecting the law, having a culture of unconditional subordination to them is the main task of this day.

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**The structure of fuzzy multiple model of assessing students' knowledge, skills and qualification in higher education**

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**Abstract:** *Teaching students with modern knowledge, the formation of independent learning skills, the creative application of acquired knowledge is one of the main issues of modern education. Experienced educators are increasingly focusing on the creation of pedagogical technologies or teaching technologies, rather than continuing to look for ways to reform the teaching process. The term "pedagogical technology" appeared in foreign countries in the early 60s of the last century. has been published in the series.*

*In order to improve the quality of education, it is necessary to update the system of student assessment, that is, to develop personality, broaden the imagination, enrich thinking and create a system of assessment management in the subject, based on solid mathematical methods.*

*The article develops an algorithm for solving the problem of taking students to the new stage of the assessment process, that is, the algorithm of the assessment system.*

*The relationship between the criteria of assessment in decision-making in teaching and assessment of students of higher education institutions in the context of a large amount of information that is not fixed, the solution of the problem of improving the system of knowledge assessment.*

*An algorithm for the selection and evaluation of methods for the organization and effective teaching of computer science differentiated according to the type of education system and the choice of forms and methods of teaching computer science, the organization of teaching, methods of teaching computer science, forms and methods of teaching computer science.*

**Key words:** *Indefinite-set, indefinite functions, indefinite term-set, indefinite base, indefinite equations, maximum value.*

**Introduction:** Problem-based learning is based on the problem (Greek "obstacle", "difficulty") or problem situation, and problem-based learning technology serves to find their solution (Advanced pedagogical technologies. – Tashkent Uzbekistan .:Teacher. 2004).

Students' knowledge of the specific subjects, including Mathematics, depends on many factors, including lectures and practical exercises, as well as the extent of homework and labs. It is advisable to make a decision on how to assess students' achievement based on a vague evaluation of students' attendance and students' performance. (Bottino R.M., Forcheri P., Molfino M.T. Technology Transfer in School: from Research to Innovation // British Journal of Educational Technology. 1998.)

**Materials and methods.** Based on the aforementioned, students can present the structure of the absorptive diagnostic model-collection model as follows (Figure 1):

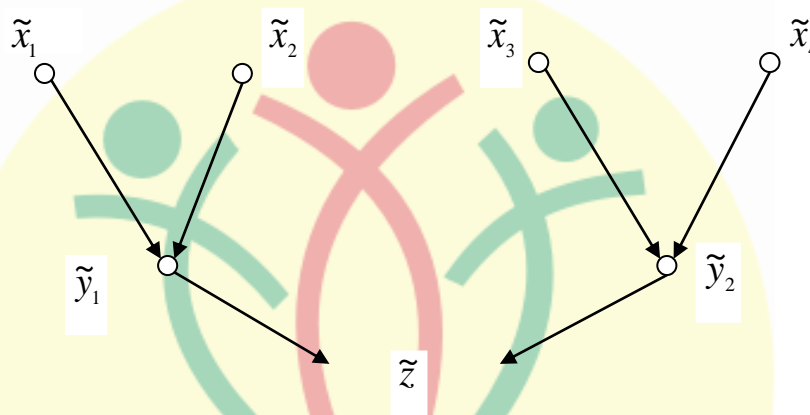


Figure 1. Structure of the model of non-specific set of students' diagnostics on the subject "Computer Network" (ACADEMICIA: An International Multidisciplinary Research Journal. 2021).

Here are: - attendance at lectures and workshops;

- control and laboratory work;

- Uncertain functions that characterize the intensity and efficiency of student activity on non-specific functions:

$$\tilde{y}_1 = \tilde{f}_1(\tilde{x}_1, \tilde{x}_2), \tilde{y}_2 = \tilde{f}_2(\tilde{x}_3, \tilde{x}_4) \quad (1)$$

The final evaluation - the diagnostics of mastering is determined by the following link:

$$\tilde{z} = \tilde{f}_3(\tilde{y}_1, \tilde{y}_2) \quad (2)$$

The implementation of uncertain functions (1) and (2) is performed as follows:

- For Linguistic Characteristics LP indefinite term is entered  $\tilde{x}_1, \tilde{x}_2, \tilde{x}_3, \tilde{x}_4, \tilde{y}_1, \tilde{y}_2, \tilde{z}$

For convenience, we are introducing here a single system of terms:

Low - NZ,

Average -SR,

Good - HOR,

High - VS.

- Development of an indefinite database of knowledge for (2) and (1).

- Development of a system of indefinite equations, which combines (2) and (1) on a vague base of knowledge.

- Implementation of systems of uncertain models (1) and (2) and performing computational experiments on the basis of decision-making [3-5].

Let's create a database (Table 1).

Table 1. Uncertain knowledge base for assessing student performance

$\tilde{x}_1$	$\tilde{x}_2$	$\tilde{x}_3$	$\tilde{x}_4$	$\tilde{z}$
NZ SR SR	SR NZ SR	SR NZ SR	SR SR NZ	$S_0$
SR SR SR	SR HOR SR	HOR SR HOR	SR SR HOR	$S_1$
SR HOR HOR HOR	HOR SR HOR HOR	HOR HOR SR VS	HOR HOR SR HOR	$S_2$
HOR VS HOR	HOR HOR VS	VS VS HOR	HOR VS VS	$S_3$

Diagnostics of students is presented according to the table 1:

$$\mu^{S_0}(z) = [\mu^{NZ}(\tilde{x}_1) \wedge \mu^{SR}(\tilde{x}_2) \wedge \mu^{SR}(\tilde{x}_3) \wedge \mu^{SR}(\tilde{x}_4)] \vee$$

$$[\mu^{SR}(\tilde{x}_1) \wedge \mu^{NZ}(\tilde{x}_2) \wedge \mu^{NZ}(\tilde{x}_3) \wedge \mu^{SR}(\tilde{x}_4)] \vee$$

$$[\mu^{SR}(\tilde{x}_1) \wedge \mu^{SR}(\tilde{x}_2) \wedge \mu^{SR}(\tilde{x}_3) \wedge \mu^{NZ}(\tilde{x}_4)]$$

$$\mu^{S_1}(z) = [\mu^{SR}(\tilde{x}_1) \wedge \mu^{SR}(\tilde{x}_2) \wedge \mu^{HOR}(\tilde{x}_3) \wedge \mu^{SR}(\tilde{x}_4)] \vee$$

$$[\mu^{SR}(\tilde{x}_1) \wedge \mu^{NOR}(\tilde{x}_2) \wedge \mu^{SR}(\tilde{x}_3) \wedge \mu^{SR}(\tilde{x}_4)] \vee$$

$$[\mu^{SR}(\tilde{x}_1) \wedge \mu^{SR}(\tilde{x}_2) \wedge \mu^{HOR}(\tilde{x}_3) \wedge \mu^{HOR}(\tilde{x}_4)]$$



$$\begin{aligned} \mu^{S_2}(z) = & [\mu^{SR}(\tilde{x}_1) \wedge \mu^{HOR}(\tilde{x}_2) \wedge \mu^{HOR}(\tilde{x}_3) \wedge \mu^{HOR}(\tilde{x}_4)] \vee \\ & [\mu^{HOR}(\tilde{x}_1) \wedge \mu^{SR}(\tilde{x}_2) \wedge \mu^{HOR}(\tilde{x}_3) \wedge \mu^{HOR}(\tilde{x}_4)] \vee \\ & [\mu^{HOR}(\tilde{x}_1) \wedge \mu^{HOR}(\tilde{x}_2) \wedge \mu^{SR}(\tilde{x}_3) \wedge \mu^{SR}(\tilde{x}_4)] \vee \\ & [\mu^{HOR}(\tilde{x}_1) \wedge \mu^{HOR}(\tilde{x}_2) \wedge \mu^{VS}(\tilde{x}_3) \wedge \mu^{HOR}(\tilde{x}_4)]; \end{aligned}$$

$$\begin{aligned} \mu^{S_3}(z) = & [\mu^{HOR}(\tilde{x}_1) \wedge \mu^{HOR}(\tilde{x}_2) \wedge \mu^{VS}(\tilde{x}_3) \wedge \mu^{HOR}(\tilde{x}_4)] \vee \\ & [\mu^{VS}(\tilde{x}_1) \wedge \mu^{NOR}(\tilde{x}_2) \wedge \mu^{VS}(\tilde{x}_3) \wedge \mu^{VS}(\tilde{x}_4)] \vee \\ & [\mu^{HOR}(\tilde{x}_1) \wedge \mu^{VS}(\tilde{x}_2) \wedge \mu^{HOR}(\tilde{x}_3) \wedge \mu^{VS}(\tilde{x}_4)]; \end{aligned}$$

Hereby  $\mu^{NZ}, \mu^{SR}, \mu^{HOR}, \mu^{VS}(x_i)$  are related functions:

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**INTERNATIONAL SCIENTIFIC AND PRACTICE CONFERENCE ON " INTERNATIONAL EXPERIENCE IN INCREASING THE EFFECTIVENESS OF DISTANCE EDUCATION: PROBLEMS AND SOLUTIONS" *SPECIAL ISSUE., 27<sup>th</sup> JANUARY., 2022., Maharashtra, India***

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8	ISSN2277-3630 (online),Published by International journal of Social Sciences & Interdisciplinary Research., January-2022 <a href="https://www.gejournal.net/index.php/IJSSIR">https://www.gejournal.net/index.php/IJSSIR</a>
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## Some techniques and approaches to teaching foreign languages at higher educational institutions

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**Abstract:** *The article reveals some interesting methods of teaching foreign language as a second language. Nowadays education system forms an environment of knowledge, as well as the experience of independent activity and personal responsibility of language learners. The main task of the teachers of educational institutions is the search for methods for the development of educational competencies for students learning the language as a condition for ensuring the quality of the program.*

**Key words:** *competence, communication, independent activity, integration, educational process, productive cooperation, active teaching methods, traditional teaching, individual opportunities, cognitive process, language proficiency.*

Language teaching is becoming a crucial issue in all countries and there are dozens of methods used to develop this issue. In contrast to traditional teaching, where communication is developed mainly between the teacher and the student, new interactions arise in interactive learning. For the improvement and development of communicative and social competence, the listening and speaking abilities, participating in a different types of discussion, they must be integrated into productive interaction and cooperation with the media.

Over the long history of teaching languages, a great many different educational methods have been developed. Initially, all methods of teaching foreign languages were borrowed from programs designed to teach the so-called "dead languages" - Latin and Greek, in which almost the entire educational process covered reading and translating. It was such a method, the foundations of which were laid by the enlighteners at the end of the 18th century, that took shape by the middle of the 20th century under the name "grammar-translation method".

According to this method, language proficiency is proficiency in grammar and vocabulary. The process of improvement is understood as a movement from one grammatical scheme to another. In this method, the teacher planning first should choose what grammatical schemes he / she wants to teach. Then, texts are selected for these topics, from which individual sentences are singled out, and everything ends with a translation. First, from a foreign language to a native language, then vice versa. Despite some wrangling, this method has several advantages. Firstly, it really allows you to learn the grammar of the language. Secondly, this method is very good for people with highly developed logical thinking, for whom it is natural to perceive language precisely as a combination of grammatical formulas.

The next method - "Silent way" (the method of silence), which appeared in the mid-60s, according to the principle of teaching a foreign language - knowledge of the language was

originally laid down in the person who wants to learn it, and most importantly - do not interfere with the listener and do not impose a point teacher's view. What are the advantages of this method? Probably, the fact that the level of knowledge of the language teacher has practically no effect on the language level of the student, and in some cases in the end it may turn out that the student as a result will know the language better than the teacher.

Another method which was used by teachers is called the "Total-physical response". The basic rule of this method is: you cannot understand what you did not pass through yourself. According to this theory, it is the student in the first stages of training who does not say anything. First, he must obtain a sufficient amount of knowledge and at the first lessons, the student constantly listens to foreign speech, he reads something, but does not say a single word in the language being studied. Then, in the learning process, there comes a period when he should already react to what he has heard or read - but only respond by action. This method is good primarily because the student in the learning process feels very comfortable. The necessary effect is achieved due to the fact that a person passes all the information received through himself. It is also important that in the process of learning a language according to this method, students communicate (directly or indirectly) not only with the teacher, but also with each other.

Another way to learn foreign languages, which I would like to talk about, appeared in the late 70s. It is called the "Audio-lingual method" (audio linguistic method). Its essence is as follows: at the first stage of training, the student repeats what he heard after the teacher or the speaker. And only starting from the second level, he is allowed to speak one or two phrases from himself, everything else consists again of repetitions.

Active teaching methods provide a solution to educational problems in various aspects: the formation of positive educational motivation; increasing cognitive activity of students; active involvement of students in the educational process; stimulation of independent activity; development of cognitive processes - speech, memory, thinking; effective assimilation of a large amount of educational information; development of creative abilities and thinking outside the box; development of the communicative-emotional sphere of the learner's personality; disclosure of personal and individual capabilities of each student and determination of conditions for their manifestation and development; development of independent mental work skills; development of universal skills.

Teachers of a foreign language have for a long time gained considerable independence in the choice of teaching aids and methods, in creative understanding of the content and ways of implementing program requirements. Recognizing the existence of various methods in the modern process of teaching a foreign language, it should nevertheless be noted that the leading position is occupied by methods and technologies based on a personality-oriented approach to teaching, which should:

- create an atmosphere in which the student feels comfortable and free;

- stimulate the interests of the learner, develop his desire to practically use a foreign language, as well as the need to learn, making it a real achievement of success in mastering the subject;
- affect the personality of the student as a whole, involve his feelings, emotions and feelings in the educational process;
- activate the student by making him the main character in the educational process;
- create situations in which the teacher is not a central figure; the student should be aware that the study of a foreign language is more connected with his personality and interests than with the methods and means of instruction set by the teacher;
- provide for various forms of work: individual, group, collective, fully stimulating the activity of students, their independence and creativity.

All of these criteria can be implemented in the use of interactive forms and teaching methods, which show new opportunities associated with the establishment of interpersonal interaction through external dialogue in the process of mastering educational material. Interpersonal relationships inevitably arise between language learners in a group, and the success of their learning activities depends on what they will be. The skillful organization of interaction on the basis of educational material can be a powerful factor in increasing the effectiveness of educational activities in general.

There are other methods, as well as goals and techniques that facilitate interactive activities. In modern practice of teaching a foreign language, various training options in cooperation are effectively applied. The main idea of training in cooperation is to create conditions for active joint educational activities of students in various educational situations.

At the present stage in the language teaching methodology, four aspects are distinguished: practical aspect; educational aspect; educational aspect; developing aspect.

Training practical aspect. Students master a foreign language as a means of communication and must be able to use it verbally and in writing. It is about mastering four types of speech activity: receptive - listening and reading, productive - speaking and writing, as well as the three aspects of language associated with them - vocabulary, phonetics, grammar.

The practical aspect involves mastering all forms of communication and all speech functions. The upbringing aspect of education involves the upbringing of morality in all its manifestations.

The educational aspect includes the acquisition of knowledge about the culture of the country of the language being studied, including literature, music, architecture, painting, history, knowledge of the structure of the language, system, character, features, similarities and differences with the native language, interference.

The developing aspect provides awareness of the means of expressing thoughts, how people pronounce, what words are used to nominate objects, comparing and juxtaposing phenomena of the native and foreign languages, developing the sense of language, language conjecture, memory in all its forms, logic (analysis, synthesis, comparison) , conclusions), the development of sensory perception, the motivational sphere, the ability to communicate, such traits as industriousness, will, determination, activity, and the ability to learn.

Besides of all these methods and aspects the scientists distinguish 3 components of language training: linguistic; psychological; methodological.

1. The linguistic component includes linguistic material (strictly selected phonetic, grammatical, lexical minimums), speech material (samples of speech utterances of different lengths, situationally thematically determined) and sociocultural. The speech utterance in the methodology of teaching a foreign language takes the form of a school unit. As a training unit, a structural group that combines statements of a different nature can act. The content of teaching a foreign language is influenced by such a branch of linguistics as sociolinguistics, which studies the relationship between language and culture, language and society. Therefore, it is necessary to teach a foreign language not only as a new code, but also as a source of information and the national culture of the people, on the basis that the language has two main functions: communicative and cumulative.

2. The psychological component is the formation of skills and abilities to use the language being studied for communicative purposes. When teaching a foreign language, the educational (cognitive) activity is formed, during which the student learns the language, his speech mechanisms are formed, and communication activity, during which he uses the language. Proficiency in a foreign language is knowledge of the system of speech skills.

3. The methodological component is to teach students a rational reception of learning, to learn a new language for them and to form their skills in order to practically use them for communication (oral and written).

Thus, the use of various methods, aspects and components in the educational process helps to achieve following educational goals:

- stimulation of motivation and interest in the field of the subject of study; in general educational terms; in continuing to study the topic;
- maintaining and enhancing the value of previously obtained information in a different form; facts, systemic understanding; expanded awareness of various opportunities and challenges; the consequences of implementing specific plans or opportunities;
- skills development: critical thinking and analysis; making decisions; interaction; specific skills (generalization of information, preparation of projects);

- change of attitudes: social values (competition and cooperation): perception of the interests of other participants;
- self-development or development due to other participants; opening by the teacher of the same skills of the participants; awareness of their own level of education, the acquisition of skills required in learning a language.

Thus, the use of interesting forms and methods in the implementation of a personality-oriented approach and teaching a foreign language can significantly increase the time of speech practice in the lesson for each student, achieve the assimilation of material by all members of the group, and solve various educational and developmental tasks. The teacher, in turn, becomes the organizer of an independent educational, cognitive, communicative, creative activity of students, he has the opportunity to improve the learning process, develop the communicative competence of students, the holistic development of their personality.

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## ADVANTAGES OF CREDIT-MODULE SYSTEM IN THE FIELD OF EDUCATION

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**Abstract:** *The educational system is directly responsible for the production of knowledge and science. The level of teachers, the need for pupils, the content of instructional literature, and the infrastructure geared at the establishment of Independent Education all contribute to the educational system's effectiveness. This means that advanced staff training, boosting their competitiveness in line with labor market demands, and the training of creative-thinking specialists are all strongly linked to the teaching process in training camps. Opinions and comments on the benefits of the credit module system in the sphere of education are presented in this article.*

**Key words:** *Education system, credit-Module System, Preferences, history, possibility of independent selection.*

A model of assessment based on the aggregate of module technologies of teaching and credit measurement is the credit-module system, which is the process of arranging education. It is a diverse and sophisticated systemic process to carry it out as a whole. Two primary challenges are prioritized in the credit-module principle: assuring independent student performance and rating-based assessment of student understanding. The following functions of the credit-module system are widely recognized:

- Organization of educational processes based on modules;
- single science, course (credit) assessment;
- assessment of students' knowledge based on rating score;
- creating the opportunity for students to design their own study plans;
- increasing the share of Independent Education in the educational process;
- the convenience of educational programs and the ability to change due to labor market demand for a specialist

The preceding is an instruction not only to conduct training using innovative educational technologies, but also to study independently from students, to adopt a new attitude toward education, to acquire the necessary and in-depth theoretical knowledge, and to teach the development of practical skills based on labor market demand. In a nutshell, this method is geared



toward the student's professional growth and perfection. Its goal is to ensure that the owner of knowledge obtains knowledge for the rest of his or her life, as well as the development of human capital capable of satisfying labor market and modern needs.

A module is a section of the curriculum that covers a variety of disciplines and courses. It is a collection of disciplines (courses) intended at instilling in pupils a specific level of knowledge and abilities, as well as the ability to perform analytical and logical observation. In this role, the instructor arranges the educational process, gives live, video, and audio lectures, and supervises and oversees the activities of the students. And the student learns the subject on his or her own time and completes the assigned tasks.

The educational procedure in the credit-module system will consist of 2-4 modules per semester, according to international experience. The themes concentrated in the module are easily built logically on the basis of mutually complementary printing, complexity, theoretical and methodological subjects, and reliance on practical subjects. It is necessary for a student to be formed as a specialist not only to have knowledge, but also to have the ability to digest that knowledge and put it into practice. A grading system is utilized in the teaching system to grade students' knowledge, qualifications, and skills based on the module. All of the student's educational activities, that is, the knowledge he or she has obtained outside of the audience and the audience, are scored in it. In the traditional system, there were no materials on what kind of information the student would gain in the future, how many professors and teachers would teach, the profile of the direction, or the brief content of the subjects. All information on the direction of education and specialties of developed foreign countries in the University, in particular, a brief summary of the subjects reflected in the curriculum (the identification of science, information about the professor-teacher, the description of the lesson, the purpose of the science, the results of the study, the methodology of teaching, the plans of science, literature, and information on the availability of skills and prowess). At the moment, a thousand applicants, unfortunately, find it difficult to find this information on the sites of our universities. While it is time to formulate a culture in this regard has already come.

The use of this method in higher education lays the groundwork for improving educational quality, assuring transparency, eliminating corruption, showing the genuine expertise of the educational recipient, and allowing students to study and work independently. To date, the European credit system has been implemented in almost all of the continent's major higher education institutions. The implementation of a credit module system is a significant role in the teacher and student's collaborative performance. The educator organizes, manages, advises, and analyses the process of mastering the listener in modular education. And the pupil advances toward the directed object on his or her own. The Independent Education of pupils will receive the most attention.

The relevance of autonomous education grows in the educational process, which will lead to a growth in the independence, creative initiative, and activity of professionals in the future. University students will always be able to seek aid and advice from lecturers and fellow students under the credit-module system. This strengthens mutual solidarity and helps to shape teamwork

abilities. Professors and teachers at higher education institutions would have more obligation and demand as the credit-module teaching system is implemented. A modular training system, as previously stated, allows the instructor to perform not only the functions of supplying and controlling information, but also those of consultant and coordinator. In the pedagogical setting, the teacher's function as a leader is crucial. The credit system of education increases the exchange of students. Because the loans received in one university are taken into account in the other and students can move from one university to another without losing credit. This system provides an opportunity for students of Uzbekistan to continue their studies in advanced foreign universities and to remove complex bureaucratic obstacles.

However, it is also important to remember that implementing any international experience blindly, without taking into account our own values, cannot be done without a thorough examination of each of its components based on scientific evidence, and that there will be some negative consequences in the future. That is to say, this system does not adequately reflect our worldview, conditions, or principles targeted at developing a peaceful individual to adulthood. As a result, we must change the perspectives of both professors and students, who are active participants in the educational process, in order to incorporate the system's criteria and create a distinct culture.

After all, we must believe that losing our place, or position in the competition, is certain unless we prepare workers in accordance with labor market need. But there is neither a better path nor an option in front of us. In terms of why, all developed countries' higher education institutions are following this road and obtaining excellent results. We are obligated to apply advanced standards and methods to higher education institutions since our traditional higher education system is not accepted around the world. As a result, in all areas, the pursuit of innovation, as well as the continuance of efforts that have begun to significantly transform the higher education system, is the appropriate decision.

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## Teaching English from a cultural perspective

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**Abstract:** *Culture is learned from the people you interact with as you are socialized. Watching how adults react and talk to new babies is an excellent way to see the actual symbolic transmission of culture among people. People from different cultures would complete the blank in contrasting ways. our specific interest is in the relationship between culture and interpersonal communication, we focus on how cultures provide their members with a set of interpretations that they then use as filters to make sense of messages and experiences.*

**Key words:** *communication, culture ,interact, language, English, instruction, development.*

Culture is a notoriously difficult term to define. In 1952, the American anthropologists, Kroeber and Kluckhohn, critically reviewed concepts and definitions of culture, and compiled a list of 164 different definitions. Apte (1994: 2001), writing in the ten-volume Encyclopedia of Language and Linguistics, summarized the problem as follows: 'Despite a century of efforts to define culture adequately, there was in the early 1990s no agreement among anthropologists regarding its nature.'

Culture is learned from the people you interact with as you are socialized. Watching how adults react and talk to new babies is an excellent way to see the actual symbolic transmission of culture among people. Two babies born at exactly the same time in two parts of the globe may be taught to respond to physical and social stimuli in very different ways. For example, some babies are taught to smile at strangers, whereas others are taught to smile only in very specific circumstances. In the United States, most children are asked from a very early age to make decisions about what they want to do and what they prefer; in many other cultures, a parent would never ask a child what she or he wants to do but would simply tell the child what to do.

Culture is also taught by the explanations people receive for the natural and human events around them. People from different cultures would complete the blank in contrasting ways. The people with whom the children interact will praise and encourage particular kinds of behaviors (such as crying or not crying, being quiet or being talkative). Certainly there are variations in what a child is taught from family to family in any given culture. However, our interest is not in these variations but in the similarities across most or all families that form the basis of a culture. Because our specific interest is in the relationship between culture and interpersonal communication, we focus on how cultures provide their members with a set of interpretations that they then use as filters to make sense of messages and experiences.[ 3: 15]

Teaching the standard language from a cultural perspective differs from the traditional language education approach in that it does not blame the victim. Standard English instruction from a cultural perspective does not presuppose the devaluation or elimination of a learner's indigenous

language as a pre-requisite for learning. It recognizes that students need to retain their home dialect where its use is appropriate.

Several major requirements for teaching standard English from a cultural perspective follow. Instruction should:

- Focus on both the structure of language, and on how to communicate;
- Maintain an oral basis;
- Concentrate on the structure of language, situational language requirements and language as a vehicle for thinking;
- Be linked to clearly defined long term goals; and
- Be integrated across the curriculum.

A successful culturally based standard English program recognizes that learning proceeds in an orderly way from the introduction of a particular aspect of language through its mastery. The model which has enjoyed the widest use and greatest success was designed in the late 1970s by the San Diego Oral Language Program. It has been used with modifications in Standard English as a Second Dialect (SESD) programs in Dallas, Texas, and in Richmond and Oakland in California. The model lists several necessary steps for learning a new linguistic system while preserving the student's indigenous system. The model includes the following eight steps:

- *Developing positive attitudes toward one's own language.* The first and continuing job of the teacher is to counteract negative evaluations of the students' indigenous language. Lessons on the historical development of various dialects and on language diversity are useful in accomplishing this goal.
- *Developing awareness of language varieties.* Students develop a sensitivity to the various forms of a given language via stories in standard English, poems in different dialects, and records, tapes or video recordings of various speakers. At this stage, specific likenesses and differences are emphasized.
- *Recognizing, labeling and contrasting dialects.* Students learn to recognize differences in various languages and dialects and to associate specific features with each linguistic system.
- *Comprehending meanings.* Students learn to recognize differences in meanings and intentions when an idea is translated from one language or dialect to another.
- *Recognizing situational communication requirements.* Students determine the types of speech appropriate to various situations.
- *Producing in structured situations.* Students practice producing successive approximations of standard English. Initially, students follow a model at this stage, e.g., a script, choral reading or poem.
- *Producing in controlled situations.* Students receive instruction and practice in producing standard English without a model, e.g., role playing or retelling a story.
- *Matching the language to the situation.* Students practice speaking appropriately in real life, spontaneous situations leading to communicative competence [4: 29].

Before beginning to teach standard English from a cultural perspective, the teacher and school need a clear language arts philosophy which embraces modern principles of ethnology, sociolinguistics and second language instruction. The philosophy and assumptions statement developed by the Richmond Unified School District in California is a good example of what schools and teachers may usefully adopt.

Finally, before beginning program implementation, the teacher and school community must become thoroughly familiar with the following general principles of second dialect instruction:

- Instruction should be preceded by a non biased assessment of each learner's knowledge of his or her first dialect and of the second dialect.
- Students must feel positive toward their own dialects.
- Students must want to learn another dialect. If motivation is not present, the teacher must help students discover the advantages of acquiring the second dialect.
- Instruction must consider the language goals of students, their families and their communities.
- Instruction must take into account cultural values associated with learning and teaching.
- Instruction must accommodate the preferred cognitive learning styles of the students. Some children prefer a field independent (object oriented) cognitive style. Others prefer a field dependent (social oriented) cognitive style. Both are valid, however, schools tend to be more oriented toward the field independent style. See Appendix II for a summary of these two preferred cognitive styles.
- Both the teacher and students must be able to contrast the linguistic and communicative rules of the existing and targeted dialects.
- Linguistic and communicative features of the existing dialect should be compared with those of the targeted dialect.
- Instruction should be integrated with students' experiences.
- Both the teacher and students must believe that it is possible to acquire a second dialect.

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## Lexicographic features of banking and financial terms in English and Uzbek

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**Abstract:** *Extralinguistic, interlinguistic and linguistic factors in the development process in various spheres, such as science and technology, market economy and culture, as a result of lead to the emergence of many new terms in banking and finance of the Republic of Uzbekistan. One of the French dictionary is called "Epinal Glossary" which based on old English words.*

**Key words:** *lexicography, banking and finance, dictionary, international terms, word combination, glossary, vocabulary, linguistics, international terms, comparison*

The issues of regulation and standardization of banking and financial terms have always been in the focus of terminologists. The contributions of our famous linguists in ancient times to lexicography are invaluable. In particular, "Devonu lug'atit turk" compiled by the famous poet and lexicographer Mahmud Kashgari, "Devonu lug'atit turk", "Hibbat ul-Haqoyiq" by Ahmad Yugnaki, "Qutadgu bilig" by Yusuf Khas Hajib, "Bado-ul-lug" by Sheikh Suleiman Bukhari. It is significant that in the works of Alisher Navoi "Khazoinul-maoniy", "Khayratul-abror", Amir Temur's "Temur tuzuklari", Zahiriddin Muhammad Babur's "Baburnama" and many other thinkers the terms of the field are reflected to a certain extent. Also in this direction V.V. Vinogradov, G.O. Vinokur, A.A. Reformatsky, O.S. Akhmanova, A.S. Gerd, R.A. Budagov, S. Usmanov, P. Nishonov, Ch. S. Abdullaeva, H.A. Dadabaev, Q.M. Musaev, O.O. Olimjanov, O. Akhmedov, Sh.N. Abdullaeva also made their worthy contributions.

It is known that one of the first recognized dictionaries abroad was the French dictionary, which is directly related to the name of the city of Epinal. It is called the Epinal Glossary. Although this dictionary is similar to other dictionaries of that period, the weight of Latin words in the dictionary is much smaller, their interpretation being explained by popular words. It should be noted that the main component of the epinal glossary dictionary is not Latin words, but Old English words. For example: alium - garleac «garlic», sardines - herringas, etc.

Foreign linguists conditionally divide the history of the development of English lexicography into several periods.

The first period is called "glossarization". At this stage, a simple approach to the description of the lexical structure of the language has acquired a special significance. In this case, the dictionary included randomly selected words, the interpretation of which was not of a scientific nature. Dictionaries also do not provide information on the grammatical and phonetic features of lexical units. There are also no practical examples of the use of words in the text (contextual). The following dictionaries belong to the dictionaries of this period. Promptuarium Parvulorum (Treasure chest for young people - «Sokrovishchnitsa dlya molodeji»), Ortus Vocabulorum is a place of words («Sad slov»), Alvearie («Uley»).

The second period in the history of English lexicography can be considered as the period of "complex dictionaries". The peculiarity of this period is that it focuses mainly on the content of the everyday dictionary (set of words), which is explained by giving language units that are difficult to understand or very short definitions that do not differ from each other. Dictionaries created during this period include: Table Alphabetical Robert Codr, An English Expositor John Balloca, English Dictionarie English Dictionary ") Henry Cochrema, The New World of English Words - " New World of English Words ") (" New World of English Words ") Edward Phillips .

The third period of English lexicography can be described as "pre-scientific (do nauchnyy)." A distinctive feature of this period with other periods is the tendency of lexicographers to pronounce words, to introduce certain norms in the process of their phonetic-phonological pronunciation. Therefore, at this stage, almost all the words had to be normatively defined and the above-mentioned principles had to be proved in practice. Some lexicographers try to give more information about a lexeme when creating dictionaries. Also, in this process, more attention was paid to the morphological structure, that is, the grammatical structure, than to the lexical-semantic definition of words.

It should be noted that in some dictionaries contextual (applied to the situation) lexemes are interpreted by quoting from the literature, and their etymology is given only. Such dictionaries include: Dictionary of English Language by Samuel Johnson, An American Dictionary of English Language by Noya Webster, and others.

The first scientifically based dictionary was Thesaurus Roje. Roget Thesaurus, a thesaurus of English words and phrases of original origin, is one of the first dictionaries in history. To date, this dictionary has become quite popular. The dictionary was compiled in 1805 by the English lexicographer Peter Mark Roger and published in 1852.

It encompasses words and concepts that are considered to be the jewels of English lexicography and are widely and actively used. Also noteworthy is The Oxford English Dictionary.

Mahmud Kashgari's work "Devonu lug'otit turk" plays a special role in the formation of lexicography of the Uzbek language. Devonu Lug'atit Turk is a unique work designed to explain the vocabulary and vocabulary of the Turkic peoples, to reveal the unique, delicate meanings of words, to show the unique phonetic and morphological differences between the languages of different nations. As S. Mutallibov rightly admits, his statement that this dictionary is not only an explanatory dictionary, but also a phonetic and grammatical "richness" of the language of the XI century is much closer to the truth .

Even today, such dictionaries are important in our society. They help to develop communication between citizens who speak different languages and to carry out significant work in various fields.

There is a need to study the banking and financial terminology of modern Uzbek, to classify it scientifically, to compare it in English and Uzbek. "Creation of dictionaries of terms of special lexicons in the development of relations between the banking and financial system due to the division of the terminological field of the banking and financial sector into components based on

the specifics of interdisciplinary banking, finance, tax law, trade, marketing, foreign economic activity" [5], there is a need to create bilingual dictionaries of banking and financial terms in polygraphic and electronic formats.

A comparative study of banking and financial terms is of more practical importance. At present, the problem of creating and improving monologue, bilingual and even trilingual (English-Uzbek, Uzbek-English, Russian-Uzbek, Uzbek-Russian, English-Russian-Uzbek) terminological dictionaries that are scientifically based, high-quality, understandable, able to meet the requirements of the time remains relevant.

Once Uzbek has been given the status of the state language, it is clear that the use of Uzbek alternatives to most terms is a priority. A certain group of assimilated terms adapts to the phonetic and grammatical features of the Uzbek language, subject to its laws. However, in the dictionaries of the banking and financial sector, official documents and literature in the field, there are many terminological units.

A specific form of word acquisition is kalkalash, which has been found to be more active in expanding and enriching the vocabulary of a language. According to the examples taken from the largest dictionaries, English-Uzbek and financial-banking terminology are dominated by two types, namely, semantic and structural. However, dictionaries related to the field have borrowed from other foreign languages, some of which currently have no translation, ie terms that are used in their original form. These terms are used today without translation by experts in the field and linguists. As a confirmation of our opinion, we give the following examples. For example: import, inflation, restriction, restriction, ultimo, deflation.

Such international terms play an important role in banking and financial terminology. It should be noted that the process of assimilation of international terms into our language remains active. This process is explained by the fact that the banking and financial sector is an integral part of the economy. The economic sector, in direct harmony with the world economy, is constantly evolving.

At the same time, a certain part of the banking and financial terminology units in the Uzbek language was replaced by word-forming affixes in accordance with the laws of the national language, and Russian-international terms emerged. In fact, mastering words with word-forming suffixes is significantly more productive in the calming process. Examples of the following industry terms are: Banker - banker, creditor - creditor, debtor - debtor, depositor - depositor, cashier - cashier.

In short, in the process of our country's transition to an international market economy, mutually beneficial relations in the financial and banking spheres with developed foreign countries are improving day by day. As a result, thousands of new terms and concepts are emerging in the Uzbek language. In order to name them, a number of terms were formed in a compositional (syntactic) way from the root, from the interaction of the root with the word-forming affixes.

In recent years, there has been a tendency in English lexicography to reflect language phenomena in relation to lingvoculturological principles and factors. There is a peculiar positive



influence of culture on the formation of language, its improvement and enrichment. It is no exaggeration to say that the publication of dictionaries such as the Longman English Dictionary of Language and Culture, Macmillan Dictionary is one of the most productive results of linguoculturology.

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## Modern treatment of early dental caries in children.

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**Introduction.** Complete removal of softened dentin in the treatment of deep caries is considered very dangerous for pulp tissue [Fitzgerald et al., 1991]. Rentgenologically,  $\frac{3}{4}$  of the dentin floor is considered deep caries when the depth is damaged [Bjddal. 2008]. It is possible to preserve the vitality of the pulp by stage treatment of caries. In deep caries through the IPC, all necrosed tissue is removed, except for the part that is very close to the pulp. Then, a calcium hydroxide treatment base is placed on the bottom of the pit, the pit is poured with shishaionomer filler, and the tooth is treated in one stage and restored [AAPD. 2017].

**The purpose of the work.** In many countries, scientific research is being conducted on the implementation of minimally invasive methods and surgical methods in the treatment of deep caries in clinical practice sessions. The purpose of our research work is an expression from taking conservative treatment measures using the IPC method in the treatment of deep caries on milk teeth and permanent teeth of fresh origin.

**Material and methods.** For current scientific research, we used the electronic information sources of articles in English, „PudMed”, „Google Scholar” and „Cochrane Database” in 2019-2020. In doing this research, we used several keywords, „excavation”, „deep caries”, „deeply caries lesion” and „IPC”. Conclusion and analysis. Treatment of deep caries on milk teeth and young permanent teeth is a very difficult and controversial issue for children's dentistry. With the help of the traditional method, all part of the dentin softened in order to prevent the caries process was removed [Thompson et al., 2008]. But research has shown that this method is at risk of damaging the pulp tissue and leads to pulp necrosis. Literature based on the findings showed that conservative treatment measures in the treatment of deep caries are more effective than others, and this method maintains the viability of the pulp for a long time [Mattos et al., 2014].

If the pulp condition is good; no pain; resistant to thermal, mechanical influences; support the IPC method can maintain the viability of the pulp if the root is not resorbed when X-ray is seen. The IPC method involves taking conservative treatment measures with the help of remineralization calcium pastes, leaving an infused thin dentin layer very close to the pulp. Several studies have shown that the IPC method is very successful compared to other techniques. Methods of treatment of multi-stage performing deep caries can lead to the risk that the patient will take excessive time and that the pulp chamber will be opened by removing the remaining softened dentin each

time [Oliveira et al., 2006]. And in the IPC method, each time there is no mechanical effect on the tooth, no excess time is removed for the patient and the doctor and prevents the development of the caries process. The success of the IPC method is considered to be an accurate diagnosis before its treatment, the removal of a certain amount of necrotic tissue and a high level of dental restorations [Akhlaghi et al., 2015]. Several studies have shown that the calcium hydroxide, which is laid as a treatment base, has dried up in 4-7 months and has destroyed the remaining aerobic and anaerobic bacteria there. It was seen that in 3 months the tertiary dentin was formed, the dentine floor was solid and entered the dark color [Bressani et al., 2013]. Studies have shown that the amount of bacteria is greatly reduced in a dry and hard place compared to a soft and moist place. Several analyzes were conducted to determine which of the IPC method and the method of multi-stage performed conservative treatment is effective. 1-analysis: 300 patients aged 6 and older were taken, divided into 2 were treated and monitored for 2 years. The IPC method was found to be more effective than a multi-stage treatment measure, and the percentage ratio was subtracted: 95.45% / 80.85%. 2-analysis: 150 patients were taken and treated in the same 2 usul, their pulp was observed to be haematous. The IPC method was found to be much more effective and the percentage ratio was subtracted: 91% / 69% [Maltz et al., 2012].

**Conclusions:** it was found that the IPC method, which is performed in one stage, is effective in the conservative treatment of deep caries in milk and permanent teeth compared to the treatment measures that are performed in many stages. But the task of both techniques is aimed at maintaining the vitality of the pulp for a long time. Which of these techniques are relatively more effective is being studied through scientific research in clinical practice. Their effective aspect is calculated depending on the time it takes and to what extent it is possible to maintain the viability of the pulp in a particular patient.

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**Quantitative accounting and qualitative characteristics of phytoplankton in surface reservoir of the Bukhara region**

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Hydrobionts of various water bodies take part in the circulation of matter and energy, in the accumulation of bottom sediments, and are also of great medical and social importance due to the use of numerous surface water bodies for household and drinking and cultural and domestic purposes [1, 3]. For this reason, the definition of phytoplankton [9,10,11]. is mandatory according to O'zDSt 950-2011 "Drinking water. Hygienic requirements and quality control" (GOST) and O'zDSt 951-2011 "Sources of centralized utility and drinking water supply. Hygienic, technical requirements and selection rules" (GOST).

Constant monitoring, assessment of the variability of the microbial and chemical composition of water in water bodies is of great importance [6].

Changes in the chemical, mineral composition of water affect the microbial composition of water in reservoirs. [7].

The purpose of this study is to study and evaluate the main qualitative and quantitative characteristics of phytoplankton in the studied areas of surface water bodies in the Bukhara region.

Materials and methods. The composition, abundance, distribution of phytoplankton in the surface (open) water bodies of the region we study (Bukhara region of the Republic of Uzbekistan) are due to unequal hydrological, hydrochemical conditions and anthropogenic impact.

In biological studies, the bathometric method was used. Phytoplankton was collected with a plankton net of silk gauze №76. For "soft" fixation of phytoplankton samples, Lugol's solution was used (up to a slightly yellow color) followed by the addition of 40% formalin (10 ml of 40% formalin for 0.5 l of the sample). It was taken into account that high concentrations of this fixative cause deformation of algae and a change in the color of their pigment [8].

Phytoplankton sampling was carried out according to generally accepted algological methods [5, 8], and determinants were used to identify the species composition of microalgae [10, 11].

The sample taken in a polyethylene bottle was fixed with 40% formalin and Lugol's solution; the sample number, date, water body, by whom and in the presence of whom the sample was taken were indicated on the label. Standard water sampling horizons were: 0 (surface); 0.5; 1.0; 2.5; 5 m

Under conditions, the sedimentary method was used for phytoplankton samples. In laboratory conditions, the sedimentation method (sedimentation) was used to concentrate the samples, then the filtrate was slowly sucked off by a siphon through a double layer of plankton net from silk gauze No. 76, which contributed to the preservation of the fine structures of algae.

The compaction of the taken sample was carried out in 2 stages: from 0.5 l (500 ml) to 0.1 l (100 ml). Then, after secondary settling (no more than 5 days), the solution was sucked off again. Poor samples (winter-spring) were brought to a volume of 10 ml (usually up to 20 ml), very rich samples (summer during the "blooming" of blue-green) - up to 50 ml, sometimes even up to 100 ml).

Results of the received researches and their discussion.

1. During the reconnaissance trip, phytoplankton samples were taken, in which 75 species, varieties and forms of algae were found: diatoms (Bacillariophyta) - 34 species; green (Chlorophyta) - 20 species; blue-green (Cyanophyta) - 15 species; dinophyta (Dinophyta) - 5 species; euglenoids (Euglenophyta) - 1 species

The obtained hydrobiological information of the studied reservoirs of the Bukhara region testified that anthropogenic factors, especially pollution, cause changes in the composition, structure and ecological state of aquatic biocenoses of various depths, expressed in a change in the dominant complexes of organisms, simplification of the ecological structure, the appearance of highly saprobic species.

2. It was revealed that the highest total abundance of phytoplankton in water samples of both reservoirs was Cyanophyta (6500.00x10<sup>3</sup> cells/l and 706.250x10<sup>3</sup> cells/l, respectively), and the highest phytoplankton biomass was noted in Bacillariophyta (187.800 mg/l) and Chlorophyta (188.400 mg/l). At the same time, Englenophyta and Dinophyta were not found in water samples from the Kuyumazar reservoir.

3. It has been proved that planktonic freshwater-brackish-water b-mesosaprobic forms prevailed in phytoplankton samples of Lake Tudakul; brackish-water b- and b- and  $\alpha$ -mesosaprobic algae species prevailed.

4. The increased abundance of phytoplankton was created mainly by representatives of colonial and filamentous blue-green algae of the family Oscillatoriaceae, and widespread diatoms Synedra, Fragilaria, Navicula, Nitzschia and green desmids, protococcal algae.

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28	ISSN2277-3630 (online), Published by International journal of Social Sciences & Interdisciplinary Research, January-2022 <a href="https://www.gejournal.net/index.php/IJSSIR">https://www.gejournal.net/index.php/IJSSIR</a>
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**INTERNATIONAL SCIENTIFIC AND PRACTICE CONFERENCE ON " INTERNATIONAL EXPERIENCE IN INCREASING THE EFFECTIVENESS OF DISTANCE EDUCATION: PROBLEMS AND SOLUTIONS" *SPECIAL ISSUE., 27<sup>th</sup> JANUARY., 2022., Maharashtra, India***

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## Stylistic features of the use of asinetone in languages of different systems

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**Abstract:** *speech system, their structural-semantic and communicative-pragmatic aspects, their role and importance in the implementation of communication is taught by a separate branch of linguistics - stylistics.*

**Keywords:** *Comparative , stilema , asineton, polisineton, the antithesis of xiazm, structural, and semantic translation, communicativ- pragmatic analysis of description, it seems, the equivalent translation, complex relationships.*

Existing national resources in languages - it is natural that units have a direct stylistic color, which indicates that language units are directly related to a particular functional style. Thus, any language resource carries some stylistic load, so it is appropriate to call it a "stilema" .

Styles serve to make communication in a language more colorful, expressive, colorful, and understandable, and are inextricably linked to functional styles in languages with the presence of such stylistic loads on them.

Associated with the various layers stilemas' talk to their structural role in the system - semantic and communicative-pragmatic aspects of the dialogue, the role and importance of the implementation of a separate branch of linguistics - teaching stylistics.

Stylistics is divided into phonetic, lexical, morphological, syntactic stylistics, etc., based on language layers. Stylistic departments have their own objects of examination. Our study is devoted to the stylistic features of compound sentences, and this issue is one of the most complex problems of syntactic stylistics (see Mamajonov, 1990, 1993).

The problems of syntactic stylistics have long been studied with great interest by scholars in general linguistics.

In Turkic studies, a number of articles and monographs on the problems of syntactic stylistics were created, it was included in textbooks, and some dissertations were defended.

The study of the problems of stylistics of linguistic units in Uzbek linguistics has been in the focus of attention of our linguists since the 60s of the last century. As a result , articles, monographs, textbooks and manuals on the stylistics of the Uzbek language were published.

Given the paucity of work on compound sentence stylistics in comparative and general linguistics, and the lack of complex research work, we aimed to provide a systematic coverage of comparative stylistic issues of compound sentences, a problem of general syntactic stylistics relevant to our time.

In this paper, we present the results of our observations on the following issues related to the comparative and general stylistics of conjunctions:

1. Stylistic means , expressed at the syntactic level by means of joint sentences - definition of a separate layer, system of stilemmas; Identify structural-semantic types of stilemmas expressed



through

compound

sentences;

2. Identify communicative-pragmatic types of stilemmas expressed through compound sentences;

3. Development of principles and methods of comparative analysis of stilemmas expressed by compound sentences;

4. To give a comparative analysis of stilemmas expressed in compound sentences in English, Uzbek and Russian;

1. To reveal the similarities (isomorphic) and dissimilar (allomorphic) aspects of stilemmas expressed by compound sentences in comparable languages and to identify, highlight and draw appropriate conclusions on the factors that require such aspects;

2. Development of recommendations for solving linguodidactical and translational problems of stilems expressed through compound sentences;

3. To create the basis of the general stylistic theory of stilemmas expressed by compound sentences on the basis of comparative-typological analysis.

Given that there are 5 functional styles in any language, including English, Russian, and Uzbek, it makes sense to limit the research to syntactic-stylistic figures used in compound sentences and their function and use of compound sentences in speech styles. therefore, when studying the above-mentioned problems of compound sentence stylistics, it is not enough to look at only one or two speech appearances, but to try to refer to all speech styles equally for factual evidence and directly to the method of comparing language and speech units, which is the main method of stylistics. relies on.

It is known that any speech unit has at least two participants:

1) the author of the speech, i.e. the addressee.

2) the recipient, i.e. the addressee. The existence of these participants requires that there be a specific organic relationship between them, and that this relationship is reflected in an appropriate legal form. The existence of such a connection, which is made through the text of any speech, has been emphasized by many scholars.

Each published book or manual "addresses the reader on his behalf as a speaker and expects an appropriate response from him." It follows that any unit of speech, that is, a unit of communication, has at least two functions:

1) express an opinion about a particular event

2) to demand or cite an attitude to that idea. These two ministers of speech units are inextricably linked, and one cannot perform any function without the other - there is no communication without their interdependence. The first task is performed by the author of the speech. As a result of the realization of the attitude to the thought expressed through the unity of speech to one degree or another, the decisive third function of speech - the influence, "awakening" or "arousal" - is observed. This is a stylistic task and is the ultimate goal of speech - communication.

The stylistic task is characterized by the awakening and manifestation of feelings and moods such as contentment or impression, pleasure or excitement, sadness or joy, from the thought expressed by the writer in the reader.

The stylistic function, expressiveness and figurative possibilities of large linguistic units, including syntactic units and constructions, have not been studied in detail in linguistics.

The joint sentence is characterized by the breadth of the scope of content, the diversity of the means of binding, their richness in different stylistic colors. In such constructions, there is a unity of ideas that is one with each other and requires each other, through which different pieces of meaning and content, as the author intends, clearly and fully express the purpose of his communication.

The formation of compound sentences is directly related to the possibilities and achievements of thinking. As a result of the diversity of natural and social phenomena, the identification of complex relationships between them, the process of interpreting these phenomena expands, and advances in science and technology begin to have an impact on speech styles. In this way, different types of compound sentences begin to be used in different speech styles (Mamajonov, 1991, pp. 11-16).

Syntactic units, including compound sentences, are constructed based on specific constructive and communicative requirements. These requirements are primarily related to the logical and grammatical aspects of the language. As a result of their combination, a definite goal is achieved, the purpose of the communication is realized, a joint sentence is formed. Russian scientist MV Lomonosov explained the formation of compound sentences as follows:

Simple ideas (sentences) become compound sentences as a result of connecting the subject through one connector or their semantic connection. (Bogoroditsky, 1935, p. 354; Askarova, 1960, pp. 5-6).

The formation and emergence of types of compound sentences occurs according to their stylistic nature, based on the principle of selection of compound sentences related to any particular functional style. The following syntactic constructions  
Let's compare compound sentences: For example:

- 1) In the evening, people started coming home from work. (In English: The dusk fell, the people began to flow into their homes. In Russian: Вечер наступил, люди начали расходиться по домам).
- 2) It was evening and people started coming home from work. (In English: The dusk fell and the people began to flow into their homes; in Russian: Вечер наступил и люди начали расходиться по домам).
- 3) In the evening, people started coming home from work. (In English: As the dusk fell, the people began to flow into their homes; in Russian: Так как вечер наступил, люди начали расходиться по домам).
- 4) In the evening, people started coming home from work. (In English: The dusk having fallen, the people began to flow into their homes; in Russian: С наступлением (после наступления) вечера люди начали расходиться по домам).
- 5) As the evening fell, people started coming home from work. (In English: Because of the falling dusk, the people began to flow into their homes; in Russian: Связи с наступлением вечера люди начали расходиться по домам).

Conjunctions in modern Uzbek. Tashkent. 1960. Pages 5-6.

When we compare the above syntactic constructions, we see that they are very close to each other in terms of general content, i.e. there is a cause-and-effect relationship between the components of a compound sentence. However, each of the above syntactic constructions is characterized by the fact that the compound sentence type has specific semantic and grammatical features, including the absence of a connective in sentence 1, the presence of an equal connector in sentence 2, the presence of a follower in sentence 3, the specific intonation of components, 4 - The presence of followers in

English and Russian in 5 sentences, and the presence of a common syntactic construction in Uzbek as a joint sentence, as well as a direct reflection of reality of different capacities.

The fact that the above types of conjunctions and other devices close to them express a common idea of the content and differ from each other shows that we are able to select and apply the desired type in a particular speech situation, as well as to achieve the desired stylistic load.

Adherence to the principle of choice is based on the semantic and stylistic side of syntactic constructions, a specific contextual requirement, or rather a communicative intention - emerges inextricably linked with the subject. This is primarily due to both the constructive and communicative appearance of the text and the nature of the speech style.

In languages, conjunctions are a very necessary and most convenient means of expression, not only for written but also for oral speech. Invariant types of compound sentences are syntactic constructions specific to all languages. Such constructions are large syntactic constructions resulting from the development, refinement, and complication of linguistic phenomena. A compound sentence is the result of a set of important stylistic possibilities that can fully express the essence of language as a means of communication.

The possibilities of expressing ideas and communication in languages are not limited. These possibilities expand in direct connection with the level of development of human thinking, because the deeper and broader the thinking of the speaker (writer), the more different types of conjunctions are used in his speech, or vice versa, that is, conjunctions in the speech of people with disabilities diversity and diversity may also be somewhat limited.

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**THE CONTEMPORARY CONCEPTUALIZATION OF ENGLISH- SECOND LANGUAGE MENTORSHIP BY THREE FOLLOWING STRATEGIES :AN UPDATED METHODOLOGY OF AUTONOMOUS STUDY AMONG NEW AND YOUNG LANGUAGE LEARNERS , THE DEFINITION OF AGE ACQUISITION AND CONTEMPORARY TEACHING METHODS FOR PUPILS IN BOTH INSIDE AND BEYOND THE CLASSROOM.**

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**Abstract:** *This article presents cutting- edge ways and methods of teaching for young comparing to independent learning. It defines the age acquisition among learners and classroom atmosphere to adopt new language for pupils at schools.*

**Key words:** *autonomous learning, cognition, teaching new techniques and technologies, capability of learning, acquisition.*

In today's harsh development there is a maintaining debate on second language learning as an educator or a pupil. You've heard all the reasons why some people don't learn languages, many of these founded on long-held myths and misconceptions. The right thing is, in today's increasingly interconnected and interdependent world, proficiency in other languages is a vital skill that gives you the opportunity to engage with the world in a more immediate and meaningful way—whether in your neighborhood or thousands of miles away—while better preparing you to compete and succeed in the global economy. One of the most rewarding aspects of the human experience is our ability to connect with others. Being able to communicate with someone in his or her language is an incredible gift. Bilinguals have the unique opportunity to communicate with a wider range of people in their personal and professional lives. Knowing the language makes you a local no matter where you are, opening up your world literally and figuratively. You will be shaped by communities. You will be humbled by the kindness of strangers. You will build lifelong friendships. And for these reasons alone, you will see the reward of learning languages for many years to come[1]. There is need for a teacher. By falling into totally diverse and typically distinctive categories we are witness to make clear points by going into details. This article is to shed light what skills of a educator seem to be so crucial strategies to instruct second language and presents obviously new education based- upon patterns for new and totally young language learners bordered with school thoughts to master and polish their language knowledge .

Methods to utilise in all distinguished layouts: Initially, to make clear and right outlines in order to achieve breakthroughs in language learning there is only way for effectiveness so that is exactly more autonomous learning and hand of help of a educator. This is more based with old - aged learners according to age acquisition. To support this claim, it is better to gain appropriate evidence which impact on exact facts. As a keen observer , nowadays it has been mostly straight

forward to see self- study but not much. When we apply to age acquisition definition, it is obviously better and deserved point to categorize age line. Younger learners feel the sense of need to an educator. Even if you are new to learn your second language , you will also fall into this way. First help goes under the shade and aid of the teacher. Learners differ from their age , acquiring speed, mental ability and comprehending capability. As if to exemplify , differently- aged learners possess their problems, pitfalls and life- based situations. Psychologists have pointed out that fresh minds and young brains always are ready to catch unknown and difficult conceptions and notions. Once, the scientists and linguistics have long been thought and carried out research papers dedicated to whether independent study is effective or teacher- based method is more supportive. Clearly , when potentially methodical ideas are put into practice to clarify a better way ,most learners touched on self- education and counting on it. The reason why , they shape a base of motivation and inspiration in the inner world. They won' t be led astray by any interruptions. But they have failing holes and losses. The review authors suggested that the key ingredient in independent learning was the shift of responsibility for the learning process from the teacher to the student. This involved students acquiring an understanding of their learning, being motivated to learn and collaborating with teachers to structure their learning environment. They found a consensus in the literature that independent learning did not merely involve students working alone; teachers have a key part to play in enabling and supporting independent learning though, for example, structuring group work[2]. There is distinction ,truly, self -study can ever be highly effective but mentor instruction goes to highly competitive and deserved direction pull all learners into colorful learning for all - aged language eagers. To point key factors that this is a real fun and fully bright atmosphere with a teacher. Learning alone never offers competition horizon. To be out of comfort zone that is a challenging for most learners. That is the reason that most would fail to commence their independent learnings. There is a great role of a teacher to teach via perfect examples and deserved methods including contest zone, teaming ups, grouping , and working into collaboration with versatile ways .Results have shown that right direction leads to right way. But to save more time and squeeze more up- to -do lists , learners tend to learn by their own .It sounds perfect but to rectify their mistake - exactly ,this phase goes empty. There is a leading role of teachers to introduce students or young and old pupils to new knowledge and science. After a few time duration , a new leaners may start his self - study to boost and gather more knowledge. We can easily observe that this topic always goes under debate-demanding points .Turning to the possible solutions , it is a better to count on gathered facts and known and saved notions .A more practical perspective may project and show us that knowledge begins with a teacher and a mentorship begins with knowledge. This is advisable and bullet point for initial steps. To add valuable part there are ongoing theories been renewed for ages .Today is the age and era of enhancement and it defines that technology and modernism are with us .New teaching methods have always been in alternation circle. Learning a second language demands and depends on methods and methodology. Teaching a second language plainly is determined by cognitive , natural and educational characteristic patterns. We know that teaching techniques and technologies opted properly make really educational atmosphere and there are some beneficial tips to follow: flexible seating, free speech situation, regularly assessment , appropriate assignments, collobrative activities , differentiated learning, universally and multi-cultured designed learning ,active atmosphere, personalized learning and peer editing as well as peer teaching. Cutting - edge teaching strategies are always classified, categorised eventually put into practice .Norman Webb's depth of

knowledge is so crucial way for all teachers to utilize for their classrooms. There are four sub-directions:

- recollection and reproduction
- knowledge application
- strategic thinking
- extended critical thinking[3].

We can use all of them for behavioral , educational , spiritual and individual growth of pupils. But knowledge application and extended critical thinking methods adding making commitments on learning a language, a burning interest and desire , highly tempting are more determined for language learners at school.

Today's age shows more and more effective ways and strategic approaches for second language theory. We can sum up that teaching and learning of second languages with a teacher and by modern steps can gain more effectiveness and to go further for self - development there is an autonomous learning more helpful and key factor only after a mentorship aspect and perspective.

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**PROCESSING OF SHAFTS WITH LOW STRENGTH**

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**Abstract:** *The article describes the process of shaft grinding, all the constituent elements of this process, the optimization of this process.*

**Key words:** *low strength shafts, production, grinding process, cylindrical grinding machines*

An analysis was made according to the degree of development of Engineering Technology in the Republic of Uzbekistan, modernization and automation of this industry in the republic. Modern machine-building enterprises that exist on the territory of the republic have been studied.

The object of this study is the optimization of the grinding process of shafts with low strength.

The analysis of methods for the production and processing of cylindrical surfaces in the modern world is carried out, the shortcomings of this process are studied, which implies several stages of processing to achieve the roughness requirements, based on the fact that cylindrical surfaces work in friction with the parts placed on them.

For the processing of external cylindrical surfaces, several types of grinding are used:

- Roughing
- Accurate (preliminary and finishing)
- Thin

Thus, to carry out this process, one of the important points will be the selection and study of equipment, i.e. grinding machine. This required an in-depth study of the range of grinding machines and their capabilities:

Grinding equipment is one of the most important tools used for surface grinding by machining parts. Details are processed on grinding machines, depending on the operating conditions. This article provides information about the different types of grinders and their advantages and disadvantages, as well as the importance of machining parts on the inside and outside. In addition, the accuracy of processing is important.

**Basic Cylindrical Grinding Operations**

The main operations include:

- rough (rough) grinding
- preliminary grinding
- final grinding

- fine grinding

Roughing (roughing) grinding involves processing without preliminary turning operation with the removal of an enlarged (from 1 mm or more) allowance for diameter. It is expedient to carry out this operation in the modes power and high-speed grinding at  $v_{Kp}=50...60$  m/c. Unlike turning grinding rough grinding provides higher accuracy (8...9th grade) and lower surface roughness ( $R_a = 2,5...5$   $\mu\text{m}$ ), does not require subsequent pre-grinding. His the use is advisable in the presence of precise blanks or blanks, poorly processed with a blade tool. Pre-grinding is usually performed after turning processing with increased cutting speed ( $v_{kp}= 40...60$  m/c).

Carry out before heat treatment to create base surfaces or as intermediate operation to prepare the surface for the final processing. Pre-grinding achieves precision, corresponding to 6 ... 9 grades, and surface roughness  $R_a = 1,2...2,5$   $\mu\text{m}$ .

The optimal choice of equipment for this process is made on the basis of all factors affecting quality and requirements.

### ***Theoretical part***

In the theoretical part of this study, the factors affecting the accuracy of cylindrical surfaces during grinding are studied.

The processing accuracy is influenced by the following production factors: the properties of the material being processed and its dimensions; the accuracy of the machines used; the accuracy of the tool and fixture; selection of technological bases; processing methods and techniques; qualification of the worker-operator.

For comparative analysis, other types of processing of cylindrical surfaces with a stepped design were also studied. Basically, multi-cutting processing of a stepped shaft on a lathe has been studied.

The most likely impact on the grinding process of cylindrical surfaces is the optimization of cutting conditions. To achieve this goal, the existing cutting conditions for cylindrical grinding of cylindrical surfaces have been studied. Suchas:

- *Work with cooling;*
- *The frequency of rotation of the part  $n$  and the longitudinal feed  $S_{pr}$ ;*
- *The circle works as a periphery or end face.*

Workpiece rotation frequency ( $\text{min}^{-1}$ ): 63...400 (adjustable steplessly). Grinding wheel speed - 1112  $\text{min}^{-1}$ . The speed of the longitudinal stroke of the table is 0.1 ... 6 m / min (adjustable steplessly).

Grinding wheel intermittent feed (mm/table travel): 0.0025; 0.005; 0.0075; 0.01; 0.0125; 0.015; 0.0175; 0.02; 0.0225; 0.025; 0.0275; 0.03; 0.0325; 0.035; 0.0375; 0.04; 0.0425; 0.045; 0.05.



Sizes of the grinding wheel (new):  $D_k=600\text{mm}$ ;  $V_k=63\text{mm}$ . Grinding speed for a wheel of this type  $V_{kr} = 35 \text{ m / s}$  On the machine, the circle rotates with a speed of  $n = 1112 \text{ min}$ .

The calculations of cutting conditions of several external cylindrical grinding processes were studied.

The next step was to identify the shortcomings of cutting modes, and subsequently eliminate these shortcomings. Thus, the expected optimization of the grinding process was obtained.

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**THE SUPERIORITY OF A CYLINDRICAL GEAR MOTOR (WITH AN ELECTRIC MOTOR) USED AS AN ELECTRIC DRIVE OF MACHINE TOOLS AND TECHNICAL EQUIPMENT OVER THE USUAL**

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**Abstract:** *The article contains a general concept of spur gearboxes and their improved types of spur gear motor, design features, characteristics and advantages.*

**Key words:** *Spur gear, gear motor, transmission, efficiency, torque, wheels, teeth.*

The transfer of torque between some elements of mechanisms has been of interest to designers for centuries. And the appearance of the internal combustion engine gave impetus to the creation of a cylindrical gearbox.

The word gearbox itself means "retracting", "transmitting" back, which characterizes its main quality, the removal of rotational force.

This gearbox is called cylindrical not because it is cylindrical in shape, but because this unit has a cylindrical operation scheme, namely, cylindrical wheels are used in its design. Inside the gearbox, there are gear wheels and at least one cylindrical gear in several rows.

The transmission in cylindrical gearboxes can be direct, chain or gear.

Thus, a cylindrical gear is called a mechanical system assembled for the purpose of transmitting and converting torque force. The system is capable of converting a high angular velocity into a lower one with high efficiency with an increase in torque, i.e. an increase in the transmitted force. When an electric motor is added to the system, we get a cylindrical gear motor - a compact device that creates and converts torque.

Torque transmission in cylindrical gearboxes can occur in different planes and at different angular arrangements of the shafts relative to each other. Depending on the angle of inclination of the gear teeth, the devices under consideration are divided into spur gears and helical gears.

According to their names, spur gears have straight teeth; helical gears have helical teeth to transmit torque.

The location of the teeth relative to the axis of the gears is a rather important characteristic. But a more significant role is played by the design features of the gearbox in the transmission of torque. In addition to, in fact, spur gearboxes, consisting exclusively of spur gears or helical gears, the following are widely used:

Bevel-helical gearboxes. One of the most popular design options is a two-stage gearbox, but more stages are possible.

Helical gearboxes combined with an electric motor, of the type combined with an electric motor, is called a helical gear motor. A cylindrical gear motor with parallel shafts allows you to optimally solve the problem of connecting the gearbox to the equipment and save the overall dimensions of the structure as a whole.

It is possible to use a cylindrical motor reducer, it is possible to transfer rotational motion between coaxial or parallel shafts and its transformation. The design of the equipment may have one, two or three steps. This factor allows you to increase the scale of variable power on the gross element. The efficiency in such mechanisms is high and can reach 98%, even at maximum power. Also, the advantages of cylindrical motor gearboxes include reliability and long service life. With proper operation and maximum loads, the service life reaches 20,000 hours.

An important role in ensuring the required characteristics is played by the distance between the axes of the gearbox. Alignment is when the distance between the input and output shafts is less than the distance between the center gears. The gear coaxial cylindrical has a right angle of summing up the shafts. The main advantage is the low load on the high-speed shaft, which can significantly increase the power and efficiency of the device. The disadvantage is the more complex design of the gearbox, especially the high-speed shaft.

Due to their high technical and operational characteristics, helical gearboxes are widely used in various fields of activity, especially in mechanical engineering and automotive industry. This type of device is used in various industrial equipment - cranes, mixers, machine tools, extruders, and more. other machines and mechanisms. A limitation for the use of devices is the need for a smooth running of machines and mechanisms, as well as small dimensions with a large gear ratio of steps.

Thus, the use in the production of a helical gear motor is appropriate. Since, by replacing a conventional cylindrical gearbox with a motor-reducer (with an electric motor), the reliability of starting parameters is significantly increased, and stable operation is ensured under various overloads, which in turn ensures an increase in production efficiency as a whole.

It would also be appropriate to say that this type of gearbox increases the service life of the equipment, preventing its rapid wear.

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OPTIMIZATION OF DRILLING PROCESS PARAMETERS

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**Abstract:** *The article describes the essence of holes and the process of obtaining them, analyzes the methods of processing holes, the parameters of the process of drilling holes, optimizing the drilling process by choosing the most optimal drill.*

**Key words:** *Hole, through, blind, drills, drilling machine, drills with interchangeable tips.*

A hole is the result of extracting a certain amount of material from the internal cavity of the part, which has a certain shape, and is produced mainly by drills.

Holes can be through - these are holes that pass through the part, and can be blind - these are holes that do not reach another parallel plane of the part, these holes are drilled to a certain depth, i.e. smaller part size.

Parts with holes in their design are made in a variety of ways. For example, if there is a hole in the design of a part that is too small in diameter, then most likely the workpiece of this part will be made without a hole, for its subsequent opening with a drilling machine and a drill of the required diameter. And in parts with a large hole diameter, the workpiece will be designed in such a way that there will be a hole in its design, but with a smaller diameter than the finished part, this is done in order to further bring it to the desired size using the optimal hole finishing tool.

The opening of the internal holes of parts is carried out in most cases using a drilling machine.

Drilling machines are designed for drilling blind and through holes in solid material, reaming, countersinking, reaming, cutting internal threads, cutting discs from sheet material. To perform such operations, drills, countersinks, reamers, taps and other tools are used. The shaping movements in the processing of holes on drilling machines are the main rotational movement of the tool and the translational movement of the tool along its axis.

The main parameter of the machine is the largest nominal diameter of drilling a hole (for steel). In addition, the machine is characterized by overhang and the largest spindle travel, speed and other indicators.

Drilling machines are divided into the following types:

- Vertical drilling machines;
- One-spindle semiautomatic devices;
- Multi-spindle semiautomatic devices;
- Coordinate boring machines;
- Radial drilling machines;
- Horizontal boring;

- Diamond boring;
- Horizontal drilling machines;

Drilling is a technological operation of successive gradual removal of layers of the base material (in our case, it is metal) by means of a cutting tool in a circle of the required diameter.

This procedure is performed by combining movements of two types - translational, as well as rotational. Obtaining the specified hole sizes in blanks requires precise compliance with the following operating parameters:

- the speed of movement in the vertical or horizontal direction, which is determined by the relative position in the space of the workpiece and the drill;
- speed of rotary movement of the cutting tool.

Often, in order to obtain a given accuracy, a pre-drilling step is carried out. It is called "black". This operation is performed with a reduced level of precision. It is followed by a cleanup. At this stage, high-precision units and fixtures / tools for metal blanks are involved. The following drilling options are available:

- using
- specialized metal-cutting or drilling machines;
- hand tools (we are talking primarily about a drill).

On a metal-cutting - lathe - machine, the drill is fixed in an element of this unit called the "tailstock", and the workpiece, clamped by the jaws of the cartridge, rotates. In the drilling machine, the drill is already rotating, also fixed in the chuck. The locksmith smoothly brings it to the place of processing marked on the outer surface of the workpiece. When created by the first method, the holes obtained are characterized by higher accuracy and are distinguished by less rough walls.

There are three most important parameters when drilling a hole:

- Holediameter
- Holedepth
- Holequality

A rare type of drilling tool manages to completely dominate the field of such a metalworking process as drilling holes. The tool used in the field of metalworking is usually represented by several subspecies, the characteristics of which are updated as the main series is updated and improved. A rare type of drilling tool manages to completely dominate the field of such a metalworking process as drilling holes. The tool used in the field of metalworking is usually represented by several subspecies, the characteristics of which are updated as the main series is updated and improved.

The cutting tool, its strength and performance is also one of the most important parameters of the hole drilling process. Therefore, the improvement and optimization of the cutting tool will lead us to the desired result and will increase the efficiency of this process.

Nowadays, there are drills with interchangeable tips.

The use of interchangeable tip drills is limited both by their own capabilities and by the peculiarities of the application in terms of minimum and maximum allowable tip diameters and equipment technological parameters, however, when used correctly, they can achieve excellent results.

To be most effective, an exchangeable drill should achieve IT9 to IT11 tolerances and an average roughness of less than 2.5 microns, depending on the particular application. Hole depth

should be up to 12 diameters with standard drilling parameters for small and medium depth holes, high stability of indicators and depth of holes, as well as the possibility of obtaining stepped holes and chamfers. There needs to be the potential to increase penetration rates, increase tip life, and provide fast and safe automatic tip changes in today's automated equipment.

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CLINICAL-EPIDEMIOLOGICAL-EPIDEMIOLOGICAL ASPECTS OF HYMENOLEPIDIOSIS IN PEDIATRIC AND EPIDEMIOLOGICAL ASPECTS OF HYMENOLEPIDIOSIS IN PEDIATRICS

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**Abstract:** According to statistics from the World Health Organization (WHO), more than 4.5 billion people in the world are infected with various parasites, many of which are helminths [1, 2]. According to WHO, of the 50 million people who die each year worldwide, more than 16 million die from infectious and parasitic diseases (WHO, 2005). In the structure of infectious diseases, the fourth place is occupied by parasitic diseases [3, 4]. An analysis of the distribution of patients by age showed that hymenolepidosis was recorded mainly in children from 4 to 11 years old. When comparing clinical signs in the patients studied in the article, memory loss, increased nervousness, depressed mood, eyelid cramps, and blinking due to astheno-vegetative symptoms were significantly higher ( $P < 0.001$ ) in patients with hymenolepidosis.

**Key words:** helminthiases, hymenolepiasis, children, clinic.

**Target.** To analyze the dynamics of the main clinical and laboratory parameters in children suffering from hymenolepiasis with allergic rhinitis against the background of antiallergic, antiparasitic and combination therapy

**Materials and methods.** To solve the tasks set, a clinical examination of 120 patients with intestinal parasitosis in children aged 4 to 18 years was carried out in the Bukhara Regional Infectious Diseases Hospital. The diagnosis of hymenolepidosis was confirmed by the detection of Hymenolepis nana eggs on triple coproscopy. Parasitological examination of the stool was performed 3 times with a break of 3-4 days. The diagnosis of hymenolepiasis was confirmed by the detection of helminth eggs in freshly excreted feces.

**Results and discussion.** To solve the tasks set, clinical and epidemiological examinations of 120 patients with intestinal cestodosis (hymenolepidosis) in children aged 4 to 18 years were carried out. Children were distributed as follows: from 4 to 7 years old - 52 children, from 8 to 11 years old - 33 and from 12 to 15 years old 19, 16 to 18 years old 16. Boys 54 (45.0%) and 66 girls (55.0%). Thus, the analysis of distribution by age showed that hymenolepidosis was recorded mainly in children from 4 to 11 years old.

**Conclusions.** Thus, the analysis of distribution by age showed that hymenolepidosis was recorded mainly in children from 4 to 11 years old. An analysis of the clinical manifestations showed that the astheno-neurotic symptoms that were noted in helminthiases were more pronounced in patients with hymenolepidosis. Hymenolepidosis in children leads to an increase in the occurrence and development of various secondary diseases, which is distinguished by a peculiar clinical course.

It has a clear relationship with the severity of Hymenolepidosis and the frequency of development of various secondary diseases in children.

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FEATURES OF OBTAINING MATERIALS FROM PET WASTE FOR PROTOTYPING ON A 3D PRINTER

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**Abstract:** *The article deals with the use of recycled materials from PET (polyethylene terephthalate) waste for the manufacture of plastic for 3d printing at minimal labor costs, with the aim of its further use in layouts - models in which the user is not interested in the appearance and high quality characteristics inherent in some types of purchased plastic, and is only interested in the correspondence of the dimensions of the printed part to the necessary ones. The possibility of using previously printed parts and the use of PET containers was analyzed.*

**Key words:** *PET plastic, recycling, 3D printing, available materials.*

PET plastic is one of the most popular materials for 3D printing and has high strength, transparency, wear resistance and heat resistance.

This material is used when it is necessary to produce durable, wear-resistant products. 3D PET plastic is crystal clear and highly wear resistant. It is shock-resistant and heat-resistant, maintains temperatures in the range from - 40 °C to 75 °C. In addition to this, 3D PET plastic is resistant to abrasion and is also known as a good dielectric. It is resistant to oils, alcohols, acids, alkalis and paraffins. Good for post-processing. Products made of PET plastic can be sanded, primed, painted and varnished without much effort.

PET plastic is used in many different products. The properties of PET make it ideal for many different applications and these advantages make it one of the most common plastics available today. Understanding the history of PET as well as its chemical properties will allow you to further appreciate this plastic. In addition, most communities recycle this type of plastic, allowing it to be used over and over again.

PET is a highly flexible, colorless and semi-crystalline resin in its natural state. Depending on how it is processed, it can range from semi-hard to hard. Shows good dimensional stability, resistance to impact, moisture, alcohols and solvents.

As you know, plastic pollution is a serious environmental problem on a global scale. Every day, millions and millions of tons are dumped all over the world. These plastics end up in the sea and rivers and pollute the environment. It also leads to the death of thousands of animals that swallow them or accidentally get trapped. Depending on the origin and material from which they are made, there are different types of plastics. Among them are PET plastics. They are considered friendlier plastics, but we should be aware that they are not completely harmless.

Therefore, we are going to dedicate this article to tell you about all the characteristics, uses and problems of polyethylene terephthalate.

This type of plastic is made up of polyethylene terephthalate. Hence its abbreviation in English. They are well known throughout the world as they are among the most widely used recyclables on the planet. More and more products are being packaged with these materials due to their qualities. These are unbreakable, inexpensive, lightweight, waterproof and recyclable plastics. The last point is very interesting from an ecological point of view. We must remember that plastics must be recyclable so as not to use more raw materials.

As you know, recycling in the world is much lower than the export of these wastes. Today it is easier to produce new plastics than to recycle old ones. All of these advantages that PET plastic has make it the best recyclable plastic according to Greenpeace.

3D printers are increasingly being used to perform various technological, design, and everyday tasks. A few years ago, they were something far from us, but now, thanks to the development of technology and its popularization among people interested in the production of their own products, 3D printers have become an integral part of their arsenal of tools in the manufacture of plastic products. Since this paper will deal only with plastic printers, other types of 3D printers will not be mentioned.

For many users of 3D printers, the problem of a large amount of plastic spent on trial products is an urgent problem. Since the key parameters of a test product are precisely its correct geometric shape and dimensions [1], there is accordingly no need for high quality characteristics, such as wear resistance, strength and durability, inherent in expensive purchased plastic [2]. Based on this, there is a need to find a new way to obtain material for printing.

For example, 3D printers are convenient for creating many technical devices, which include gears, wheels, housings, or other complex products that require high compliance with a computer model [3]. At the moment, for all these purposes, high-quality purchased plastic is used, which has suitable characteristics, for which the user of the printer pays. Due to the fact that a product that meets the requirements of the user can be obtained only after the manufacture of several prototypes [4], there is a problem of economic irrationality of using such plastic in test models, since its properties will not be used if the dimensions of the test part do not match the required ones.

During the analysis of the identified problem, several possible ways to obtain economic benefits were found. Moreover, in the course of solving the problem [5], there will also be a positive impact on the environmental situation. Among the methods identified are the following:

- reuse of plastic obtained from manufactured, but for some reason, not relevant or no longer needed products obtained using a 3D printer.
- processing of previously used plastic raw materials, which are containers for liquids, as well as for bulk substances, that is, PET bottles, as well as packaging plastic bags.

Determining the advantages and disadvantages of each of the proposed methods allows you to objectively choose the best option for further consideration and possible implementation in life [6].

One of the main tasks of this work was to determine a method that allows to provide the user with a sufficient amount of plastic in a timely manner, while, when processing previously manufactured models, obtaining a volume sufficient for processing requires a long accumulation of test parts, which contradicts the task set [7].

The advantage of reusing previously printed models is that the plastic obtained with this method of processing differs little in its properties from the purchased one from which the recycled

parts were printed. Considering the option of recycling PET plastic, one can single out its obvious advantages.

Ease of access. PET is a plastic used to make containers for a wide range of consumer products. Bottles, containers, films and many other packages are made from it. Accordingly, this type of raw material is widespread and its production is practically not difficult.

Easy processing. The melting point of this material is 260 degrees Celsius, the softening point is 245. Knowing the characteristics of PET plastic, one can imagine that the energy consumption for the recycling process is low. You can also draw an analogy with the extruder of the 3D printer itself. The heater installed in it consumes about 40 watts of power.

Environmental friendliness. Thanks to this method, users of 3D printers will not only be able to provide themselves with the necessary amount of available material, but also have a positive impact on the environment. If we assume that 100% of plastic waste will end up in processing plants, it will still not work to get rid of the negative impact of plastic. The main methods for the disposal of plastic waste remain:

- incineration;
- granulation;
- disposal by chemical means;
- pyrolysis.

Unfortunately, none of the above methods can ensure the recycling of plastic without harmful emissions into the atmosphere, or without residual material, which one way or another will be buried in landfills.

Among the disadvantages of this method, it is worth noting that plastic containers have a different shape, size, color and characteristics. It is quite difficult to predict what they will be in a given batch of finished plastic. The color in one bar can change from one to another when changing the tape: from transparent to brown. The plastic itself used by bottle manufacturers can also have different properties for different bottles. Given this, the conclusion suggests itself: it is possible to print with such plastic only parts that will later be painted, due to the color difference in the bar. Or the part will be sent for recycling at all, after the user checks all the print settings and the dimensions of his product on it before printing with high-quality plastic.

Having studied both the positive and negative aspects of the affected methods, one should also pay attention to the disadvantages of using purchased plastic, based on which, it will be possible to come to a more correct conclusion about the rationality of using a different method of obtaining printing material. Of course, the main disadvantage is, as already mentioned, its price, but there are other problems. A situation may arise in which it will be necessary to manufacture volumetric products of complex geometry, which requires a large amount of material. In such a situation, the available amount of plastic may run out, and the need to complete the work that has begun will remain. The problem is that not all localities and not all stores may have the necessary plastic. In this case, you will have to spend a significant amount of time waiting when ordering in an online store, but that's not all.

As already mentioned, the number of people using 3D printing is rapidly increasing, and, consequently, there are many beginners who need the printing practice necessary to understand the principles of the printer, various parameters and settings. Sometimes this initial period can drag on for quite a long time until a person gets comfortable with all the subtleties. During this time, he will

need a large amount of cheap material, which would not be a pity to use for trial models and training. This further expands the range of possibilities for using a recycled counterpart made from PET bottles.

After conducting this analysis, the preference was given to the method of melting plastic obtained from PET bottles, since it is its high prevalence that allows the user of a 3D printer to be sure that the material will not run out at the last moment, and also allows beginners not to be limited in experiments and test prints, since cheap and affordable material will always be at hand. In addition to everything, the positive impact on the environment is a significant plus in favor of this method, because recently serious environmental issues have been raised more and more often.

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ON THE TECHNOLOGY OF ANTI-CORROSION GALVANIZING BY ZINC SPRAYING

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**Abstract:** *The article deals with the destruction of metals under the influence of the chemical or physicochemical influence of the environment. Methods for its prevention are also proposed.*

**Key words:** *corrosion, galvanizing, saturation, rust, galvanic steam, metallization, spraying.*

In the modern world, the corrosion of metals and their protection against corrosion is one of the most important scientific, technical and economic problems. Its relevance is especially manifested in enterprises that use metal structures, equipment, machinery, tools and vehicles with significant wear and tear of their service life. Corrosion processes have a different nature of their occurrence, but they all have one thing in common - they appear as a result of contact and interaction of metals with the environment.

Corrosion (Latin *corrosio*) is the spontaneous destruction of metals under the influence of the chemical or physico-chemical influence of the environment. The process of destruction of metals and their protection against corrosion is one of the most important scientific, technical and economic problems. In many areas of industry, technical progress is hampered by the unresolved, and sometimes unsolvable, of a number of corrosion problems. And they are becoming especially relevant today, when the use of metals in various industries has reached a historical peak.

Numerous studies of corrosion have made it possible to develop a number of methods for its prevention. One of the most effective is the galvanizing method.

Galvanizing is the application of a layer of zinc or its alloy to the surface of metal products or the saturation of surface layers with zinc to protect against corrosion. The protection method is based on the fact that zinc in the coating composition enters into corrosion reactions first, without exposing the metal itself. Zinc is able to protect iron from rust, which inevitably appears during the operation of metal objects. And this protection is not purely mechanical in nature - together with iron, zinc forms a galvanic couple, and the result of the interaction of zinc with oxygen provides even greater protection - a surface crust forms on zinc. Anti-corrosion coatings using zinc, namely galvanizing, have a number of obvious advantages: an increase in the service life of the metal up to 60 years; covering the entire product with a uniform layer; peel resistance.

Galvanizing is used in construction, oil and oil refining industry, energy, gas industry, automotive industry, and agriculture. Modern technologies provide for several types of galvanizing. Each of them differs in operation time, properties, equipment used and the thickness of the resulting zinc film. The choice of one or another application method is determined by protection requirements, operational factors, application conditions and economic aspects.

Today, production processes associated with the use of various metals and their alloys are growing rapidly. Technologies for their production, methods of obtaining them are developing, while issues of an economic nature are being solved in parallel, i.e. energy costs are reduced, the cost of the final product is reduced. The task of galvanizing structural steel and parts in modern conditions is solved in different ways. The relevance of the issue for our reality is obvious.

The introduction of new technologies into the production process currently has no alternative. When solving high-tech problems, there is a need for a set of requirements, without which the expected result is not obtained. Firstly, the question of raw materials, secondly, the methods of using it in a particular technological process, thirdly, the energy intensity in the implementation of this work, and in the aggregate the final result. According to experts on a global scale, the production of zinc and its consumption is about 10.0 million tons per year. Demand for metal remains strong, thanks to the rapid growth in the production of anti-corrosion coatings. Various methods are used to obtain such coatings. Approximately half of all zinc produced is used for the production of galvanized steel, one third - in the hot dip galvanizing of finished products, the rest - for strip and wire. Over the past 20 years, the global market for these products has more than doubled, adding an average of 3.7% per year. The possibility of long-term use of metal and steel products depends on the ability to prevent corrosion of these materials. Zinc coating lasts longer, the more zinc it contains. The coating method is chosen depending on the conditions for further use of the product and the necessary properties of the protective layer.

We have proposed metallization, i.e. spray galvanizing. Coatings are applied by spraying with a jet of air or hot gas of molten zinc. Depending on the spraying method, zinc wire (rod) or zinc powder is used. In industry, gas-flame spraying and electric arc metallization are used. All types of galvanizing have a wide scope. We note the main consumer sectors and specific areas of use of this type of protection: energy, communications, road, industrial and civil construction, industry, oil production and oil refining, urban infrastructure and utilities. Examples of metal products recommended for applying anti-corrosion coatings by gas thermal spraying: oil and gas storage facilities, gas tanks, pipelines in heating mains, mine car bunkers, profiled roofing and wall panels, car bodies, mufflers, large-sized building profiles (channels, double-sided T-bars, corners) , steel sheets, embedded reinforcement, welded and prefabricated building structures of bridges, chimneys, tanks, hydraulic structures, oil rigs, metal road fences, road signs, high-voltage transmission supports, deck equipment, piers, pontoons, locks, docks, refrigerators, containers for storage and transportation of chemical reagents metal ornaments, gratings, fences, street lighting poles, gates of hydroelectric power plants, metal structures of the contact network of railways (supports, brackets, suspensions, rigid crossbars), rolling stock chassis, wheel rims, elements of rail skr heating, communications of livestock farms, etc. It should be noted that the process is environmentally friendly due to the absence of production waste.

Gas thermal spraying of anti-corrosion coatings has the following advantages: barriers to the penetration of corrosive pathogens, long service life, the possibility of coating parts of any size and complex configuration, the absence of warping and deterioration of the properties of the base metal due to the occurrence of hydrogen embrittlement due to treatment with an etchant (etching, as a method surface preparation, when gas thermal spraying is not required), increased fatigue strength

characteristics due to the creation of compressive residual stresses, the microscopic porosity of the anti-corrosion coating contributes to the preservation of corrosion products in the pores, ensuring good adhesion to concrete in various embedded elements, the possibility of providing additional protection for welding zones, processed products directly at the site of installation of structures, the relative simplicity of the process, which does not require advanced qualifications of maintenance personnel.

The economic efficiency of the process is expressed in the service life of a particular product. The use of gas anti-corrosion thermal spraying of coatings provides long-term protection of metal structures operating both in atmospheric conditions and in water and other media. This eliminates the need for frequent restoration, which, in addition to high labor and material costs, may also be associated with a temporary cessation of operation of facilities. The cost of gas thermal spraying compared to painting is about 250%. However, such coatings require refurbishment only after 30-50 years, and the cost of its repair is only 25% of the cost of restoring the paintwork.

As shown by the data on the comparative cost of various types of anti-corrosion protection, depending on the service life, provided that the service life of the protected product is at least 20 years, the cost of gas thermal spraying is less than half of the cost of painting.

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THE THEORETICAL FOUNDATIONS OF OPEN MARKET INSTRUMENTS OF MONETARY POLICY

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**Abstract:** *This research paper is devoted to the consideration of the reasons for the occurrence of open market operations of monetary policy and its theoretical foundations. In addition, it examines foreign experience in the development of open market policy. According to the research findings, it has been concluded that not only government debt obligations, but also other liquid securities are widely used by Central banks as an object of the open market instruments.*

**Key words:** *monetary policy, open market policy, government debt obligations, bonds.*

The open market policy is used as the primary instrument in the monetary policy of the central banks in developed countries. This has happened due to the increase in government expenditures incurred because of various wars, which took place at the beginning of XX century and the consequent issuance of the government treasury bills. In particular, J. Keynes made a great contribution for studying the reasons of the great depression of 1929-1936 and developing the proposal to raise public expenditures to overcome this economic crisis. Currently the majority of developed countries are expanding their economies in reliance upon the model by J. Keynes. One peculiarity of this model is that it requires government expenditures to be higher than its revenues, while at the same time raising aggregate demand in the economy. The compliance of this model with our analysis is that the state budget deficit is covered by securities issuance, and these securities are considered the most liquid securities in the financial market, and central banks serve as the primary object of open market policy.

The peculiarity of open market operations is that the central bank can exert market influence on the amount of excess resources at the disposal of commercial banks. This fact promotes reduction or expansion of loan investments directed to the economy, while at the same time having an impact by reducing or raising the liquidity of banks. This impact is attained by the central bank by setting the price of securities purchased or sold from commercial banks on the open market.

With a strict restrictive policy aimed at the withdrawal of loan resources from the lending market, the central bank reduces the selling price or raises the purchase price and, accordingly, increases or decreases its deviation from the market rate. If the central bank's aim is to reduce the reserves of the banking system, it will pursue a contractual policy and act on the supply side in the open market. In this case, it has two chances to achieve its aim:

1. Announces the rate of securities. In this case, the central bank offers any number of securities to reach this rate;
2. Offers a certain amount of additional securities.

If the central bank's aim is to enhance the banking system's reserves, it will act on the demand side in the open market. In this case, the central bank selects one of two options to achieve its aim:

1. Fixes the rate of securities. In this case, the central bank buys any number of securities to achieve this aim;
2. Regardless of the value of the offer it acquires a certain amount of liquid securities.

If the central bank buys securities from commercial banks, it transfers funds to their correspondent accounts with the central bank, thereby enhancing creditworthiness of banks. They commence to extend loans in non-cash in the form of real money, calculated on the money supply, and converted into cash when needed. If the central bank sells securities, commercial banks will cover such purchases from their correspondent accounts, thereby reducing the issuance of money, which, in turn, will reduce the banks' ability to lend to the economy.

The basic securities traded in the open market are the most liquid securities that are actively traded in the secondary market and the risk is very low. Such securities represent various obligations imposed by monetary policy makers. In particular:

- certificates of indebtedness (Bank of the Netherlands, National Bank of Denmark, Bank of Spain, European Central Bank);
- financial bills of exchange (Bank of England, Rixsbank of Sweden, Bundesbank of Germany, Bank of Japan);
- bonds (Bank of Korea, Central Bank of Chile, Bank of Russia).

Selection of securities depends on the level of development of the financial market and independence of the Central Bank, i.e. its ability to implement transactions not only with government securities, but also with securities of other issuers. The openness of the economy and its dependence on the national currency dynamics raises transactions with external debt obligations (Norway, Austria, Denmark).

The central bank's impact on the money market and capital market is that by changing interest rates in the open market, the bank creates favorable conditions for the purchase or sale of government securities to enhance liquidity of lending institutions. Open market operations are normally implemented by the central bank in cooperation with a group of major banks and other financial institutions. Open market operations are more adaptable to short-term market changes than accounting policies.

It should be noted, that developed countries mainly focus on the development of an open market instrument of monetary policy of central banks, as this instrument is currently the most flexible way to regulate the liquidity and lending capacity of banks in developed financial markets.

At the early stages of the open market operations development in the United States, the Federal Reserve system purchased federal government securities with the aim of obtaining an additional profit while the interest income from loans and excess liquidity provided to member banks of the Federal Reserve was low. The majority of the Federal Reserve banks identified New York as the most suitable place to implement such operations, and it was here in the 1920s that an informal committee composed of representatives of all twelve independent Federal Reserve banks coordinated their performance on federal government securities. Almost immediately after commencement of its business, the committee began to make an impact on the development of the economy by covering the gold circulation in the economy through the purchase and sale of

securities and creating additional liquidity for the commercial banking system. The activities of this committee as the Federal Open Market Committee (FOMC) were officially formalized and legalized only after the adoption of the Banking Law in 1935. The Federal Open Market Committee manages current operations of securities in the open market, that is, the central bank pursues an open market policy. At its meeting, this committee investigates the economic situation and selects the most optimal way for implementing monetary policy.

Herewith the Federal Reserve may not only make amendments in the monetary policy, but also “protect” the open market of securities in response to unfavorable changes in liquidity in the banking system. In particular, until 1971, the Federal Reserve implemented several “protection” operations in the open market to indemnify for the deficit in the US trade balance, which began in 1957 and subsequent outflow of gold. In addition, operation of “protection” through the open market instrument of monetary policy of the Federal Reserve System is made in the event of a change in the volume of deposits of the state treasury of the FRS. If an open market operation is not implemented in due time, this change can make a negative impact on the monetary base.

Between 1953 and 1958, the FOMC limited its activities in the open market only to government treasury bills and other short-term securities with the maturity of up to one year. So-called “promoters” of this type of fiscal policy, called a “promissory note”, have noted that buyers and sellers who are aware of the specific type of federal government securities to which the FRS’s future open market operations are allocated, have some advantage. Being aware of the repurchase periods of these securities by the issuer greatly simplifies the task for dealers and investors to predict the consequences of future open market operations. Currently the majority of open market operations are implemented with short-term securities, although a number of experts believe that this is not always the case and that there are some artificial restrictions.

In the early 1960s, the US Treasury in cooperation with the FRS sought to simultaneously lower interest rates on these securities through the purchase of long-term securities and bonds, as well as to raise interest rates on them by selling short-term securities on the open market. This fiscal policy is called an “operation twist”. Such FRS measures have been aimed at promoting the domestic economy by lowering long-term interest rates, as well as attracting foreign investors to invest in the US economy by raising interest rates on short-term securities. However, actually in economic life, such fiscal policy has demonstrated a slight impact on raising interest rates on short-term securities. Although yields on long-term US government securities and bonds declined in this case, interest rates on corporate bonds and liabilities have not changed significantly. The financial policy of the “operation twist” has not made any significant impact on the economy, because in addition to the targeted purchase and sale of securities on the open market, interest rates also depend on a number of financial and economic factors. Moreover, it should be noted, that once a financial resource is “injected” into the banking system, the central banks cannot control their further use, while central banks cannot control the financial markets when financial resources are removed from the banking system.

In conclusion, an open market policy is essential for the central banks to implement money supply. In addition, it is recommended to use in the open market policy not only government debt obligations, but also other types of highly liquid securities.

We can learn from the experience of developed countries that the use of long-term securities in the open market is more profitable than the use of short-term securities. The Central Bank of

Uzbekistan does not possess an adequate experience in the open market. In particular, open market operations started in late 2018 and up to present time have been conducted mainly with short-term securities, i.e. with the maturity of up to one year. Indeed, until 2011 there were also operations with public debt in the open market, but the volume of these operations did not make any significant impact on the liquidity of the banking system and the economy as a whole.

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ANALYSIS OF FACTORS AND PARAMETERS AFFECTING THE ACCURACY OF PROCESSING LARGE-SIZED PARTS ON TURNING AND CAROUSEL MACHINES

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**Abstract:** *The article contains general information about large-sized parts, their features, and the organization of the production process. Selection of equipment for processing large-sized parts and analysis of factors and parameters affecting the accuracy of processing.*

**Key words:** *Large-sized parts, processing process, casting, rod and molding masses, unique parts, turning and carousel machines.*

Large-sized parts are unique, since they have very large impressive dimensions. But in addition, they require a very complex organizational process of their processing.

The organization of the processing process lies in the fact that equipment is needed to obtain blanks and processing suitable for the dimensions of these parts, this factor affects the production time, as well as the cost of the final product. In view of this, the cost of large-sized parts is much higher than small-sized analogues.

Blanks of large-sized parts are most often obtained by casting cast iron or steel alloys, which depends on the service purpose of these parts.

Cast blanks are usually obtained by casting into earthen or shell molds. In the manufacture of molds, manual molding is used. An important task in the production of large castings is to reduce processing allowances.

This problem is solved by using molding and core masses that harden due to chemical reactions, creating large shell molds based on them, using heat-resistant molding mixtures, as well as collapsible models, when using which there is no need for molding slopes on high vertical walls of castings.

The technological processes of manufacturing large-sized parts provide for the production of samples for testing.

That is, as already mentioned above, the uniqueness of these parts lies in the fact that they are usually not large-scale parts, therefore, for the production of any series of large-sized parts, the adjustment of a full production cycle is required. This includes the entire production process, starting from molds for blanks, ending with technical control of the finished part.

Parts of the usual size are processed on machines by installing the appropriate devices. As for large-sized parts, sometimes due to too large dimensions and complexity of structures, such an opportunity is not provided.

For processing heavy large-sized parts that are difficult to install and process on lathes, two types of carousel machines are used: single-column and double-column. In these machines, the spindle axis is placed vertically, so the workpiece has a more convenient location for processing.

The high accuracy and reliability of the carousel machines (universal and specialized) allows us to produce parts of non-standard appearance and large weight.

Turning and carousel processing of metal workpieces can be carried out, if necessary, with single-column or double-column machines.

Turning and carousel machine 1L532F3 is designed for machining parts:

With grinding surfaces at a constant cutting speed, finishing and semi-finishing;

Threading on bodies of rotation;

Segments of parts of parts, cutting grooves;

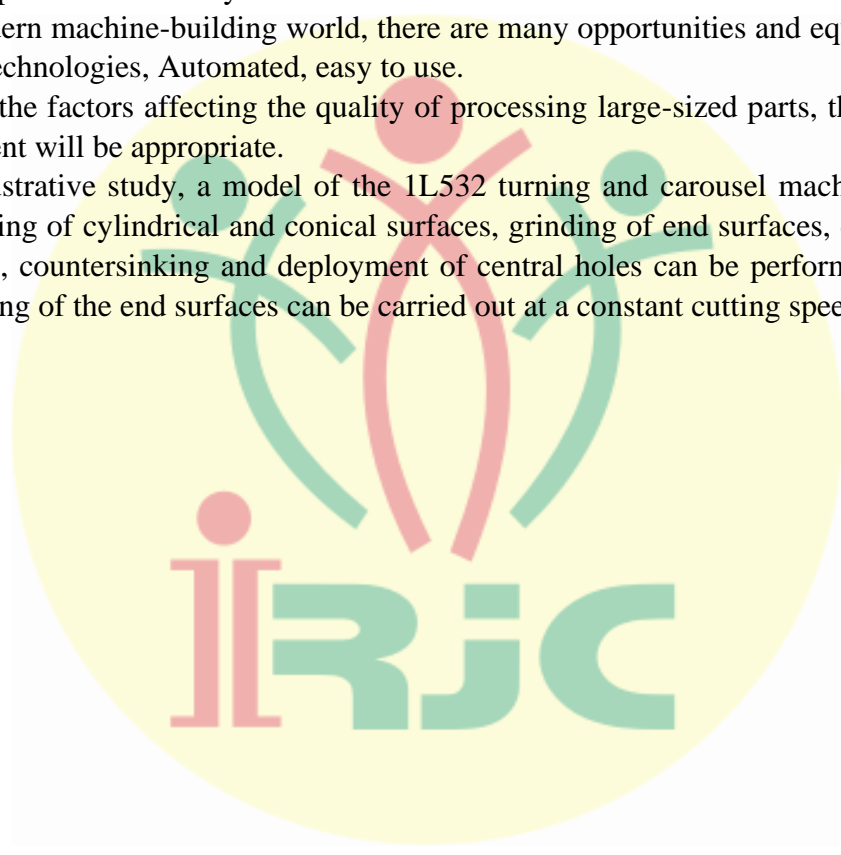
Turning of parts with a diameter of up to 3000 mm;

In order for the finished parts to meet the required quality and accuracy classes, a careful selection of equipment is necessary.

In the modern machine-building world, there are many opportunities and equipment equipped with advanced technologies, Automated, easy to use.

As one of the factors affecting the quality of processing large-sized parts, the choice of more modern equipment will be appropriate.

For an illustrative study, a model of the 1L532 turning and carousel machine was selected. Turning and boring of cylindrical and conical surfaces, grinding of end surfaces, cutting of annular grooves, drilling, countersinking and deployment of central holes can be performed on the 1L532 lathe. The grinding of the end surfaces can be carried out at a constant cutting speed.





The turning-carousel 1L532 is a high-performance and precise machine with automated control, consisting of a number of complex devices, aggregates and assemblies.

The accuracy class of the machine 1L532 – N. Significant power of the main drive electric motor, high rigidity of the basic parts and sufficient strength of all elements of the kinematic chain in combination with wide ranges of control of the speed of the faceplate and feed values, allows the 1L532 machine to perform high-performance work at high-speed cutting modes. The machine can be used for both finishing and roughing.

Another factor affecting the quality of processing large-sized parts is the experience and capabilities of the operator, Which is not unimportant since this type of parts requires high accuracy.

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**INTERNATIONAL SCIENTIFIC AND PRACTICE CONFERENCE ON " INTERNATIONAL EXPERIENCE IN INCREASING THE EFFECTIVENESS OF DISTANCE EDUCATION: PROBLEMS AND SOLUTIONS" *SPECIAL ISSUE., 27<sup>th</sup> JANUARY., 2022., Maharashtra, India***

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MODERN METHODS OF USING SAMPLES OF APPLIED ART IN THE FORMATION OF COMPETENCE OF PRIMARY SCHOOL STUDENTS

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**Abstract:** *When it comes to creative teaching of Primary School students, we use both the heart and the mind at the same level. From the fluency of creativity we know that creativity is something that can be taught and learned. This is good news because in today's multimedia world, creativity is as important as problem solving, critical thinking and collaboration. In this article, opinions and comments are made about modern methods of using practical art prayers in teaching creative thinking and communication of Primary School students, as well as in the formation of their competence.*

**Key words:** *Primary Education, pupil, pupils competency, applied art, creative thinking, ability, communication, knowledge, skills.*

In order for creativity in the school to be a priority direction, we need teachers who understand the essence of creativity and appreciate its pedagogical significance. However, creativity is usually not high on the list of reasons for choosing training. What this tells us is that in increasing the competence of teachers, it is important to use mainly applied art and to be interested in creativity. They should not only inspire it in their readers, but also give themselves full access to creativity. After all, creative teaching of Primary School students means to consider how creative this creativity is attributed to any responsibility that the teacher takes.

Creatively, the importance of compounding and teaching students through applied art. The creative teaching skills of Primary School students is to work towards the genesis of something unique inside and outside the student. According to several reasons, creative training of students of the senior class is important: creativity is the heart of the motivational class. This gives students and teachers the opportunity to express ideas and ideas in unique ways. Creative training of Primary School students leads to active learning. It can be an idea, a moment of learning, an emotional experience or any creative vision. The interactive method is to guarantee the assimilation of knowledge under the influence of their mutual action by increasing the activity between the teacher and the students in the educational process, serves the development of personal qualities. The use of these methods will help to improve the quality and effectiveness of the lesson. Its main criteria are to conduct informal discussions, to freely describe the educational material, to study independently, to study, to conduct seminars, to create opportunities for the initiative of students, to work as a small group, as a large group, as a class team, to give tasks, to carry out written work, etc.

In addition to increasing the children's competence with practical efforts, the main types of interactive games are: intellectual (intelligent) and mobile, as well as mixed games. These contribute to the development of mental, physical, moral, spiritual, educational, psychological, aesthetic, artistic, entrepreneurial, creative, labor, professional skills in students. This method leads the reader to the launch of their internal capabilities, thinking, free thinking, communication, creativity. Especially in it there is an increased interest in the environment, knowledge of life, the difficulty encountered, how to overcome obstacles and form critical thinking skills. In the

educational process, it is desirable to use didactic games based on interphysiology, which mainly show the motivation for learning in students, increase their abilities and interest in the type of communication, show their predisposition to a profession.

Primary school teachers should be taught new sources of inspiration together. And the best tool in this is of course art. It is known that if we want to teach children a lesson and formulate their competences, we will achieve our goal more easily through art. Nature, music, art, fiction, travel - this list continues. Anything that stimulates the interest of readers can feed creativity. Study other manufacturers during the lesson. The world is full of people who regularly use their creativity to invent and create something new. Science tells us that alerting meditation helps the brain. In the field of creativity, this can enhance the student's ability to find fantastic solutions to the problem.

Applied art means creativity. Creativity is eternal, and it has unlimited potential, which means that we are unlimited as a creator. In our childhood, we have confidence and fear for creativity, which we can lose over time. If creativity is in all of us, and that's for sure - it means that we are also unlimited. This applies to students of all ages. We need to find a way to give this idea back to them. Of course, the risks that our children take creatively should also be reasonable. Nevertheless, continue to encourage them to go beyond the creative comfort zone.

In the formation of children's competences, if we observe the students thoroughly and study their psychology, this will help them to understand how the problem arose in them, and also will prompt consideration of the problem in different ways. It is necessary to create opportunities for useful research and data analysis. It allows students to find something surprising about their problems that they did not know before. It keeps the students from making assumptions and forming ideas without much information. It gives students time to think about why finding a solution to the problem is important.

By encouraging critical and analytical thinking in evaluation activities, you will enable your students to create a creative opportunity in testing. They need to know that these types of skills are really valuable. If creativity is in all of us, and that's for sure - it means that we are also unlimited. The effective use of formative assessment in our classroom is one of the best ways to help our students develop. Training creatively involves responsibility for success and failure.

**In conclusion**, it takes time for enthusiasm to appear in primary school students, and this process of growth is different for all of us. In the formation of children's creative potential and general competence, we can know the importance of Applied Art, from positive changes in the processes of lessons and classes to children. This will be told to you by any writer, artist, designer, inventor or entrepreneur. They also tell you that they have failed many times before finding the right idea. It takes a lot of time for educators to realize the height of their dreams. Whatever the case, creative training of Primary School students involves encouraging them at every step. Unlike other stages of continuing education, the formation of reading skills of students in the reading lessons of primary classes, work on the text of the work is the didactic purpose of Education. He is closely connected with spiritual-moral, literary-aesthetic upbringing by working on texts on various topics. Interactive games are divided into theoretical, practical, physical, role-playing, workmanship and other directional types.

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PECULIARITIES OF IMPROVING CORPORATE GOVERNANCE IN JOINT STOCK COMPANIES

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**Abstract:** *This article discusses the essence of the corporate structure and activities of joint stock companies, increasing efficiency, introducing modern methods of corporate governance in their management, increasing the investment attractiveness of enterprises and thereby expanding foreign investment, creating a corporate governance system and improving this system.*

**Key words:** *joint stock company, corporate governance, investment, dividends, supervisory board.*

The deep reforms taking place in the economy of Uzbekistan not only signify the process of global political, social and economic reconstruction at the national level, but also require a radical renewal of internal management systems within each enterprise.

Today, a number of measures are being taken in the country to increase the efficiency of joint-stock companies, the introduction of modern methods of corporate governance in their management, increase the investment attractiveness of enterprises and thereby expand the attraction of foreign investment.

It is known that business organizations with different forms of management in the economy operate side by side. Among them, the management system of corporate-managed structures is much more complex and more noteworthy. It should be noted that the effective functioning of corporate governance structures, the fullness of the interests of their shareholders, investment attractiveness, the absence of financial crisis largely depends on the existing corporate governance system in the enterprise. Therefore, in the context of modernization of the economy, one of the most important tasks is the organization of corporate governance in enterprises and scientific research on ways to improve this system.

Improving corporate governance is part of the process of reforming the Uzbek economy, which is to protect private property, ensure the interests and rights of shareholders, create conditions for the formation of attractive, competitive national corporations with a special economic role in the country.

Today, the concept of "corporation" is a common term and is widely used in economic processes. The formation of scientific and theoretical approaches to "corporate governance" coincided with the development of corporations. Several approaches are distinguished in corporate governance theory: on the one hand, corporate governance theory develops along the evolution of economic theories, and on the other hand, the evolution of corporate governance theories is equated with the development of concepts to solve problems between key participants in corporate relations.

In modern conditions, the corporation associated with the joint-stock company of many individuals is the most common and important form of large business. The word "corporation"

(latin corporatio) means union, society, union. Although corporations first emerged in the Middle Ages, in the present sense, this concept represents the optimal form of organizing the production of large-scale goods and services in a market economy. It should be noted that the role of corporations in the economy of any state is not uniformly evaluated in the scientific literature. Some researchers view corporations as the foundation of the economy, which determines the proportions and main directions of economic development. Other researchers, on the other hand, hold the opposite view, arguing that the shortcomings of large firms outweigh their advantages and thus harm the economy.

The term corporate governance itself originated historically in the mid-1970s in the United States. Later, the term became widespread in Europe, where research was continued in the areas of corporate management, corporate law, and the creation of corporate structures. Our research shows that the term corporate governance was first used by R. Ills [1] to describe the essence of corporate structure and activities.

The system of corporate relations as a process of applying corporate and private property management has been studied in the classic works of the American jurist A. Burley and economist G. Minz. [2] Although the term corporate governance is not mentioned in their work, they have studied the relationship between corporate governors - principals (outsiders, investors) and representatives - agents (insiders, managers).

In this regard, it is worth noting that the concept of corporate enterprise has a specific meaning. According to sources, a corporate enterprise is an enterprise based on the membership of its founders, participants, regardless of its organizational structure. In our opinion, such a definition, while reflecting the general aspects of this concept, cannot express its full meaning. It is expedient to define a corporate enterprise as follows: a corporate enterprise is an economic entity that ensures the harmonization of the interests of the parties involved in the effective organization of economic activity, with the separation of ownership and management of property. [3] In explaining the essence of the concept of corporate governance, as discussed above, despite the existence of different interpretations, the following definitions are most commonly used in practice.

For example, according to IA. Khrabrov, corporate governance is the organizational and legal formalization of business, optimization of the organizational structure, the establishment of relationships within the organization in accordance with the goals of the company. [4]

S. Karnaukhov defines corporate governance as the management of a certain set of synergistic effects. [5] However, in our view, these definitions apply to the results of the use of corporate forms of business and do not fully reveal the nature of the immediate problem.

The next approach is one of the most widely used approaches today, based on the separate separation of owners and management institutions as a result of the use of corporate forms of business. The main focus is on protecting the interests of participants in corporate relations from the inefficient activities of managers, including the protection of the interests of property owners-shareholders. In other approaches, corporate governance is defined as the protection of the interests of creditors who form a group of financial investors along with shareholders.

It is known that shareholders are the sources of the financial base necessary for the formation of corporate governance. Their interest in corporate governance is to receive dividends or a certain amount of profit by increasing the value of their shares in the corporation. Lenders are also financial investors who, unlike shareholders who are interested in increasing the value and profitability of a

corporation, are interested in the stability of the corporation's financial position in order to obtain a guaranteed return.

Not only financial but also non-financial investors are interested in the corporation's activities. Most economists consider the following as non-financial investors:

- employees of the corporation;
- partners of the corporation;
- society (state, consumers, etc.).

Based on these considerations, corporate governance as a broader definition of corporate governance is defined as the protection of the interests of both financial (shareholders and creditors) and non-financial investors (employees, government, partners, etc.) and the achievement of corporate goals based on certain management principles. we recommend defining it as a set of actions.

In our opinion, today it is expedient to consider such relations between the corporation and its partners as internal relations rather than external relations of the corporation, and the interests of the product supplier are represented as the interests of a separate internal structure of the corporation.

An analysis of the economic literature shows that economists today have different views on business associations that are part of a group of corporations. The study analyzed the economic literature and categorized the types and forms of corporate governance as follows (Table 1).

**Table 1**  
**Classification of corporate governance**

<b>Classification marks</b>	<b>Types of corporate governance</b>
According to the applied model	1. Anglo-American corporate governance. 2. German corporate governance. 3. Japanese corporate governance. 4. National corporate governance model of Uzbekistan
According to the form of ownership of the organization	1. Corporate governance in joint-stock companies. 2. Corporate governance in equity-based organizations. 3. Corporate governance in non-profit organizations. 4. Corporate governance in state-owned organizations
According to the hierarchy of management	1. One-tier corporate governance. 2. Two-tier corporate governance.
According to the orientation of the system	1. Stock market-oriented corporate governance. 2. Bank-oriented corporate governance. 3. Corporate governance focused on public activities
In terms of participation in the management system	1. Insider systemic corporate governance. 2. Outsider systemic corporate governance.
On the concentration of ownership	1. Corporate governance in a company with a concentrated ownership. 2. Corporate governance in a property-dispersed company.
In the direction of	1. Corporate governance focused on the interests of

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	interests	shareholders. 2. Corporate governance in the public interest. 3. Corporate governance in the interests of the corporation. 4. Corporate governance in the interests of the state.
	According to the scope of management	1. Corporate governance within the company. 2. Inter-company corporate governance.

As a result of the study and scientific generalization of scientific-theoretical approaches to corporate governance, which allowed the formation and development of corporate governance, there is no single approach to corporate governance and they are still evolving, as well as different economic, financial, legal, political, sociological and psychological considerations must be relied upon.

Thus, corporate governance is a method of interaction between the owners selected by the company, the Supervisory Board and management, a system that ensures a fair distribution of the results of the company's activities among shareholders, as well as other financial stakeholders. Also, corporate governance is a process of striking a balance between the economic and social goals of a corporation, between individual, group and social interests. In other words, it is the formation of a system of managerial relations between cooperative economic units in order to harmonize their interests.

In short, it is less accurate to link the content of corporate governance to the solution of strategic problems of corporate development; it can and is done at the operational management level, for example, in the context of the corporation's response to minority shareholder claims, the corporation's executive board's response to shareholder appeals, and so on. Corporate governance is one of the current areas of management of modern joint-stock companies, which allows to achieve additional competitive advantages by ensuring a balance of interests of different groups involved in the development of the corporation and, on this basis, increase financial and economic, and ultimately social efficiency.

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**EFFECTIVENESS OF EXTENDED READING ACTIVITIES DURING ELT CLASSES IN THE POINT OF PROSPECTIVE ENGLISH LANGUAGE TEACHERS**

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**Abstract:** As language learning became one of the most vital issues in this global village, there are abundant of ways, methods and approaches to make the learning process easier for learners. One of the best ways to improve your language is either to live with natives or to read extensively (Nuttall, 168). Over the years, reading extensively has been strongly appreciated and highly recommended by a great many ELT/EFL teachers.

**Key words:** ELT/EFL, language learning, learning curriculums.

**Introduction**

Many practitioners are applying the approach in their class as the results and conclusions of previous works are so ambitious in this field. Without any hesitation we can admit the utmost contribution of extended reading activities to the whole language learning process, as it is already part of nearly all curriculums. However, it is good to give an ear to learners as well to find out how they feel whenever there are a bunch of chapters to read. Thus, this study investigated English Language Teaching depart students' perceptions and opinions about the aforementioned approach. The survey results provided some insightful conclusions that effects extended reading activity selections in the future.

**Literature review**

Strengths, weaknesses and importance of reading extensively in Language Teaching classes have been hot topic of discussions in many researches and studies for a long period of time. Even though the earliest studies date back to 1990s in this field, they are not matching the Globalization and the Technology Era anymore.

One of the onset literatures in the methodology of integrating extended reading activities in language learning curriculums is by Christopher Green (2007). He struggled to understand why people overlook the language shaping aspects of the books they read in another languages. Green deeply examines that reading process is not only type of leisure activities. Whenever we read in the focused language we not only get new notions about the world around us, but also improve our grammar competence, vocabulary base and other cultural views (Christopher Green, 2007). A key limitation of this research is that it does not address to the students' perceptions at all.

Another very handy and analytical study carried out by Nadezda Vojtková in 2015 could highlight a number of benefits of extended reading activities in EFL classes as well as understanding students' feedbacks. Nadezda proposed that students feel more in need of rewarding and encouragement to read after classes. It is a big challenge for school attenders to find motivation to read for hours after school whenever their teacher does not evaluate or reward them. In fact, most of

the language teachers do not have clear plans and SMART goals before applying the approach in the class: when to start, when to finish, how to reward, how to motivate, which book to give, how to scaffold them to choose literature etcetera are the main items which are not wholly considered enough (Nadezda Vojtkova, 2010). She offered some applicable lesson plans for upper-intermediate and intermediate level students.

In 2015 several professors and doctors of Ishik University in Turkey: Ibrahim Nishanchi, Fatima Saadi, Niyam Said done a careful examination about learners' expectations and suggested their own graded schedule for English Language Teaching classes in correlation with extended reading. Their study indicates that extended readings in class serves students to "learn reading by reading" (Mason,1980), as well as understanding importance of autonomy in language learning process (Ibrahim, Fatima and Said, 2015). They strongly focused on helping students to pin down to their minds the conception of individuality and independence by giving them more freedom when to read, what to read and how to read. Their conclusions seem to be reasonable enough in psychological, cultural and other methodology views. However, as the all participants were the first year ELT students at university with Turkish language which is strikingly dissimilar in grammar, pronunciation, vocabulary range, word formation and many other ways , the variability of the results may be changeable in another nationality or different cultural background participants

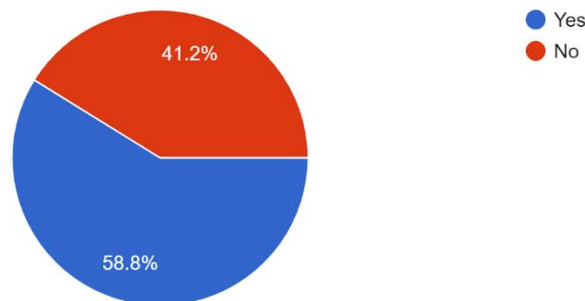
In contradiction with Ibrahim, Fatima and Said (2015) there is another author's, Figen Tezdiker's (2007) strong arguments in his Master's thesis in the same topic. Unlike Ibrahim, Fatima and Said (2015), he mostly referred to teachers' feedbacks and points in giving independence in all aspects. Teachers mostly feel uncomfortable with cheating, abundance of new and unknown words, so they prefer limiting independence and scaffolding them (Figen Tezdiker, 2007).

The latest publication by I-Chen Chen (2018) in the focused topic indicates that students must be reading extensively both in teacher-determined and student-centered way, in which the discussed approach will be potentially achieved. Having been totally agreed with Davis (1995), (students should be provided with enough motivation, encouraging, time, suitable materials), I-Chen Chen highlights strengths, weaknesses and efficiency of extended reading activities as well as offering his graded teaching methodology for task-based reading activities.

### **Methodology**

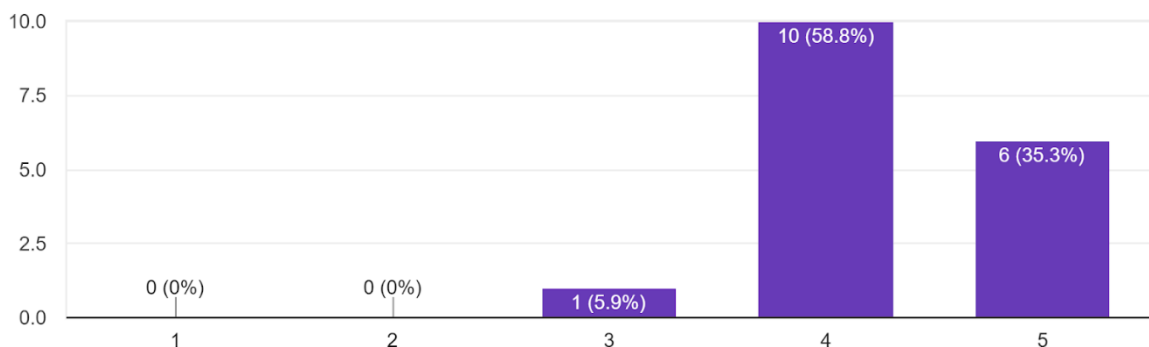
Overall, 10 questions were asked from 17 participants who are all English Language and Teaching department students at Hacettepe university in order to find out their satisfaction, expectations and perceptions about extended reading activities if they had ever experienced it in their language learning process. Generally, 15 female and 2 male students who are variable in age groups (mainly, 20-25 year olds) were asked questions about their own language learning experience. Approximately 60 percent of the ELT students who answered the survey questions had from 5 to 10 years of learning experience while 23 percentages were engaging in English classes for 2-5 years. Only 3 students, which means 17 percent of them had been learning English for more than ten years. Survey designing process was somehow complicated in order to not to make it challenging to find answer to the research question.

4. Have you ever been given any book to read wholly by ELT teacher?  
17 responses



In the first part of the data collection participants were asked about whether they had ever experienced extended reading activity in their language learning or not. 58.8 % of the responders claimed that they had engaged in that approach while learning language while the remaining 41.2 % answered “no”. Based on the provided information we can see that not all participants are well aware of extended reading.

5. How is your attitude towards reading fiction books during English classes?  
17 responses

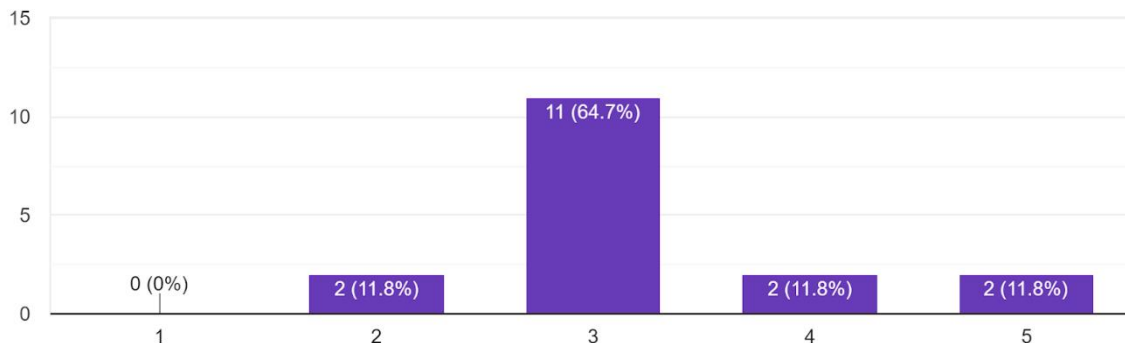


In the second part of data collection process participants were asked about their attitudes towards reading fiction books during English classes extendedly. 58.8% of the responders believe that after class readings are handy enough to improve the language skills, whereas 35.3% claim it is too useful. Only one person is undecided about its importance. The information from the survey helped to shape the notion that even though the most students were not given a whole book to read in the focused language, their attitudes are positive.



6. It is much better if a teacher chooses a book to read for a whole class.

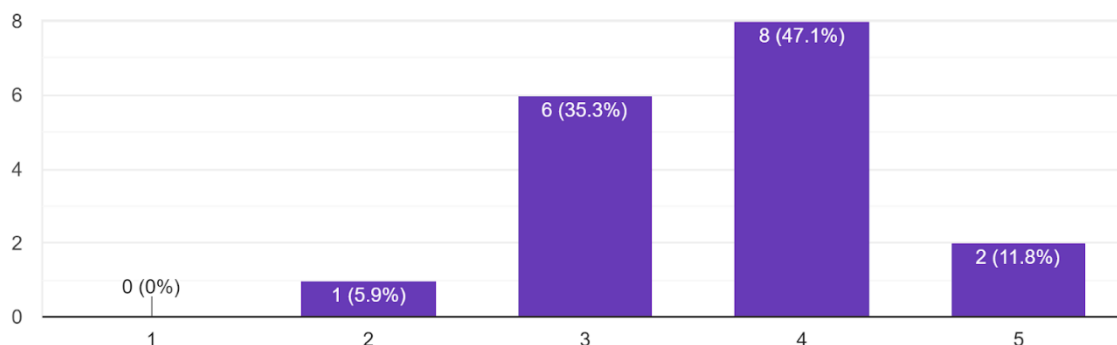
17 responses



In the next survey question which was about participants' preferences about choosing book, most students could not agree or disagree, namely 64.7%. Shares of the students who disagree, agree and strongly agree with the survey statement about the reading process should be teacher-determined are the same with the percentage of 11.8. Having been informed about the results of the question, it is clear that if the teacher chooses the book to read students do not have resistance.

7. It is much better if students choose books on their own.

17 responses

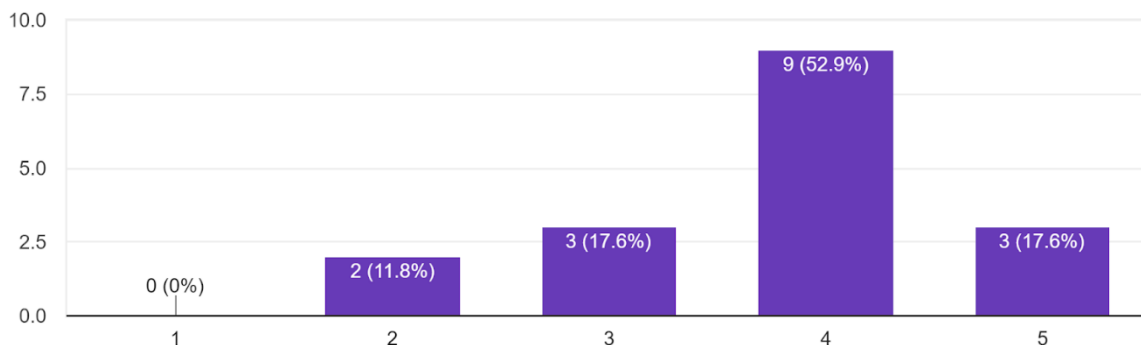


As the continuation of the previous question, students were asked about how they feel choosing books to read in EFL classes on their own. 47.1% of the respondents preferred self-chosen books to read extendedly, while 35.3% mentioned no preference at all. About 12% strongly agreed with the survey statement, while only a person (5.9%) wants the teacher to be in a main position while

choosing books. From the results, it can be inferred that students feel more need to be autonomous and carry out extended reading activities in a self-determined way.

8. Students should be assessed on what they have read during extended reading

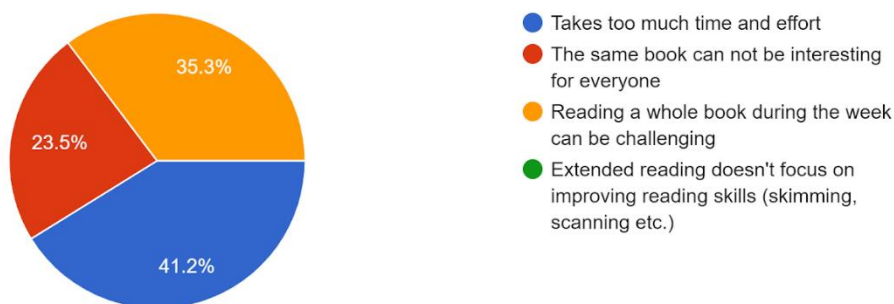
17 responses



The next question of the survey was designed to find out students' notion of evaluation process after they have read the book chosen. Large group of people (52.9%) agreed with being assessed, whereas the amount of people who are undecided are the same with the amount of the students who strongly agree with the question statement, 17.6% respectively. Based on the information, it is apparent that the language learners want their knowledge got from the books to be checked by the teachers.

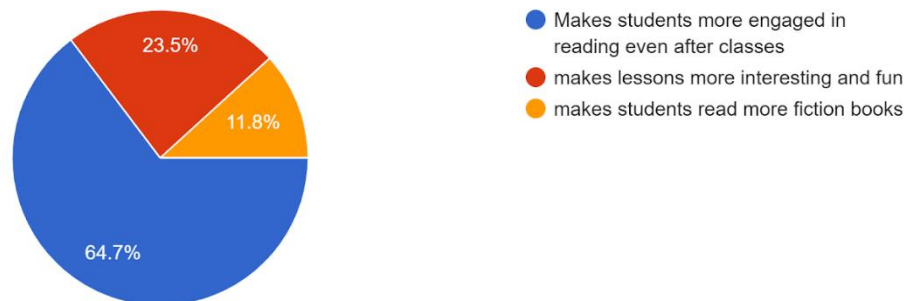
9. What can be the weaknesses of using extended reading in ELT classes?

17 responses



In order to find out the weaknesses of extended reading in the view of ELT students, they were given a multiple choice question. The data revealed that 41.2% of the answers were about time consumption of the extended reading activities and it can take much effort, while another large group with 35.3% perceived extended reading as challenging. Obviously, 23.5% are worried that the same book can not be interesting for everyone.

10. What can be strength of using task-based extended reading in Language Teaching classes?  
17 responses



As a strength of task-based extended reading in Language Teaching curriculums, almost two thirds of the participants mentioned that it can be useful to be more engaged in reading activities, while the 23.5 of the respondents believe that this kind of activities make lessons joyful and enjoyable. Only 11.8% considered that it helps students to read more fiction books. Based on the aforementioned shares it is clear that students expect to be more engaged in reading activities after the classroom in the focused language

#### Discussion and conclusion

The study showed that almost all students who experienced extended reading at some point of their language learning process are in positive attitude towards the approach as well as, as prospective teachers they plan to utilize task-based graded method of extended reading in their future career as a EFL teacher. As I-Chen Chen (2018) suggested that using both teacher-determined and student-centered ways of choosing literature are acceptable and efficient in pre-intermediate, intermediate and advanced level students, analysis of the current research also concludes the same. Even though students are given total autonomy, they do not feel too much irresponsible. The aforementioned statement is in contradiction with Figen Tezdiker's (2007) claims about irresponsibility, cheating and difficulty in information management.

Moreover, the results also indicated that female students are apt to have positive attitudes and perceptions towards reading after classes. As Jamie Ballard (2018) concluded in his master's thesis, women tend to read and enjoy fictions more than men. The vast majority of the participants who are students of English Language Teaching department are eager to use extended reading approach in their future careers.

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## THE PROBLEMS OF L. PETRUSHEVSKAYA 'S STORIES

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**Abstract.** The article examines the phenomenon of Petrushevskaya's creativity, which is at the same time so ordinary, but at the same time fascinating. The simplicity of the narrative, as well as the complexity of understanding the text. It depicts the horrors of life, the impossibility of happiness, all that an ordinary person lacks.

**Keywords and expressions:** the horror of life, the voice of the collective, the impossibility of happiness, the phenomenon of creativity, the author, the story

Literature in almost all its manifestations is a reflection of reality, therefore, the study of literary trends in recent years contributes to the awareness of changes in social life.

The phenomenon of L. Petrushevskaya's creativity is an exciting game on spectator and reader emotions. The experience of the contradiction of form and content, i.e. admiration for the naturalness of the image and desperate resistance to its essence, is the essence of the game for the perceiver. The author forces us to look closely and even give ourselves into the torment of being, from which a "normal" person turns away mentally or estranges aesthetically. What has become a "picture" or the background of a successful existence: violence, humiliation, poverty, the doom of the weak, the vulnerability of everyone to betrayal, chance, death – is revealed in uncomplicated simplicity, from which there is no expansive salvation. The death of a woman broken by betrayal ("Stayed there") or the rotting of the state and the family ("Dance of Death") is outlined, and recognition – with its joyful experience of the effect of identifying life and art - is combined with an almost unbearable anguish of compassion.

Lyudmila borrows her plots, requiem, songs, legends from the hum of the city crowd, street gossip, on benches at the entrances. Hence the originality of Petrushevskaya's style. Her works abound in the irregularities of colloquial speech, her works are dominated by the lively speech of the streets, very often violating all literary norms. As Petrushevskaya herself said, she collects these "fantastic concatenations of words." "I have whole placers of such incorrect, incorrect babble in my notebooks. Luxury of the language lover" [Petrushevskaya 2002: 320]. Actually, a significant number of cliches on the pages of her stories, plays and fairy tales are associated with the desire to introduce the vivid speech of the crowd into the work. "I willingly and joyfully use cliches, admire them, they are poetic and quickly convey the right feeling. I write in the language I hear, and I find it - the language of the crowd - energetic and faithful" [Petrushevskaya 2002: 304-305]. Some literary critics call a similar principle of writing "tape", although Petrushevskaya herself does not agree with this definition: "you will never record this language on any tape recorder" [Petrushevskaya 2002:305].

Petrushevskaya's prose is tragic. It depicts the horrors of life, the impossibility of happiness. Everyday troubles are drawn hyperrealistically. But Petrushevskaya's shock therapy with the help of words should mobilize all human forces in order not to lose humanity even in the most difficult situations.

Very often her prose is called "black" for this atmosphere of hopelessness and horror of life. Many believe that the author thickens pessimistic colors. Petrushevskaya herself says that sympathy is at the heart of her stories. But she is hiding, camouflaged under an impassive, black, ignoble narrative, where the author broadcasts with the voice of the collective, the voice of the crowd and gossips.

The voice of the collective - he does not trust anyone and never, brings to light, he is always right and always ingenuously, cannibally inhuman.

The voice of common sense, so to speak. This voice of the people will always understand everything hidden, will interrupt everything affectionate and defenseless. He is brutally reasonable and clearly sees a bad prognosis. No pity. A sober attitude to what is happening.

Petrushevskaya gives the reader the opportunity to decide for himself how right this voice is.

The author seems to be hiding behind the characters, does not make it clear in any way who is good and who is bad. Petrushevskaya claims that everyone is equally good, only life is like that.

Lyudmila Stefanovna objects to the statement that her prose is "black". She says that a person in a book, as in a mirror, sees himself. One sees the good and cries, the other evil based on the same words. Hence the role of the author is deduced: he should not seek to awaken feelings, and not be able to escape from these feelings himself. Then they may settle in the text and appear again as soon as another person reads these lines. And the artist once said about the purpose of literature: "Messianic - don't, enough is enough. But: as a reason for immediate reflection on life, maybe?" [Petrushevskaya 2002: 306].

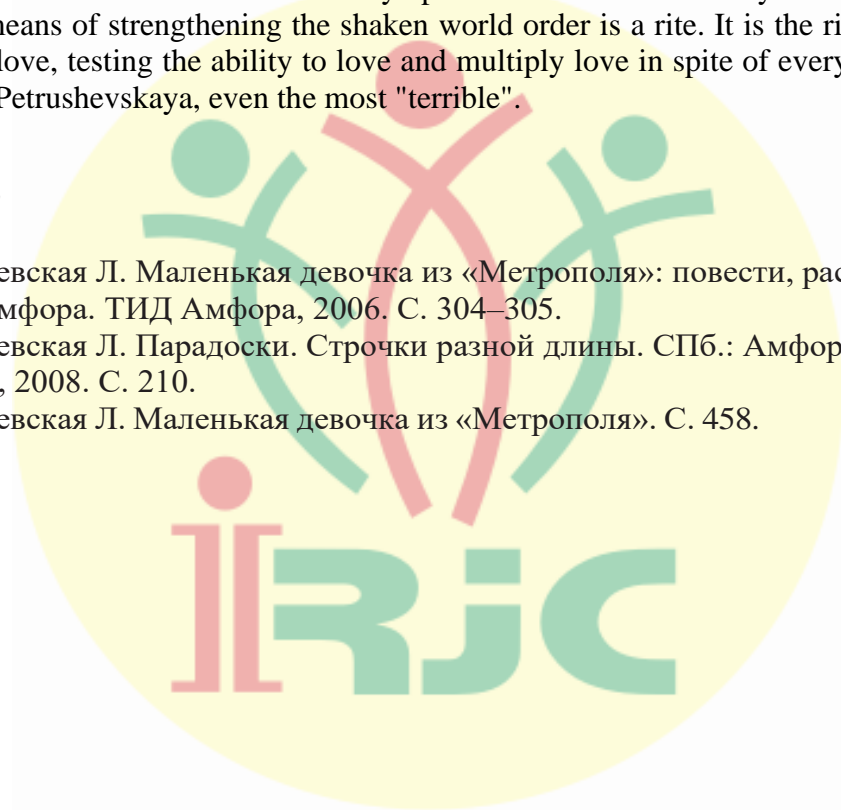
The essence of performance for the author himself is to be comprehended. Petrushevskaya offered a philosophical key to her work, she said that reading her stories from the stage, about suicides, alcoholics, abortions, all this black stuff? ("Vermouth Italiano, called "Cinzano". Materials for a lawyer")<sup>1</sup>. In two books of memoir and essayistic prose ("The Ninth Volume", 2003, and "The Little Girl from "Metropol", 2006), she outlined her life experience and the history of the appearance of some texts. She explained the meaning of the most paradoxical of them, in particular, "Bifem" - the dialogue of a woman about two heads, mother and daughter: "my mother has already died / but not in me, not in me / and I composed a hymn / about maternal love / what does not know the answer" ("Instead of an interview (Answers to questions from the BBC Russian service))<sup>2</sup>. She finally gave advice on what doses her stories should be consumed as an artistic drug. Petrushevskaya said that she writes them well, but only if once a month, and the reader reads all together at night. Then he swears. Pauses are needed, the writer said pauses. One story a day. ("About Nikolaita")<sup>3</sup>. But the effect of oversaturated hopelessness remains, and it is likely that it contains the creative idea and discovery of Petrushevskaya: artistic tragedy is a merciless truth and life-giving force. This is the formula of every

human existence, awareness/empathy of which is a means of delivering the soul of the viewer / reader, and the author directs this salvation.

All of Petrushevskaya's work is a protest against the bitterness of society, therefore, the communicative energy of the unconscious, living in the present person, is directed by the author to actualize the primordial emotions, which are not thought of as aggressively archaic, but as deeply Christian, since the nature of human connections with the world is love. Here she is related not to Freud, but to his opponents. The fact is that Steiner and Jung suggest that primitive spiritual reality is fundamentally Christian.<sup>2</sup> This refers to the commonality of the value attitude: "primitive spirituality", i.e. what elevates a person above biosocial instincts, ratifies the indisputability of absolute principles and the immutability of the ideal - as the acting force of the world order. Thus, not Eros, but ascended, sacrificial, unifying Love is elevated to the rank of a natural law. Assertions of value priorities – this is what Petrushevskaya professes in the folklore system of persuasion. As you know, the means of strengthening the shaken world order is a rite. It is the ritual immersion in the suffering of love, testing the ability to love and multiply love in spite of everything that creates all the works of Petrushevskaya, even the most "terrible".

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SECURITY ANALYSIS OF PUBLIC WI-FI NETWORKS ON THE STREETS OF FERGHANA

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**Abstract:** *Based on the increasing popularity of the use of Wi-Fi networks, the article discusses the problems of vulnerability of Wi-Fi networks, problems related to the security of the use of wireless networks and access to them. It also provides statistics on the use of Wi-Fi networks in the central district of Fergana, the degree of their security and accessibility.*

**Keywords:** *Wireless networks; Wi-Fi; Internet; encryption protocol; authentication method; security; vulnerability; information security; interception of information.*

Currently, the Internet occupies a leading position in obtaining information. With its help, humanity can receive education, exchange thoughts and opinions with other users of the network, and send various information. There are two ways to transmit data: wired and wireless. The advantage of the wired method is the high speed of operation and increased physical security of the data transmission channel.

The wireless method is more mobile. But at the same time, stable data transmission and simultaneous operation of multiple wireless points in one place causes collisions, namely, the overlapping of several transmitters on top of each other, as a result of which the total signal becomes distorted. This problem prevents the correct transmission of data over the network [1].

Wi-Fi networks have become very widespread over the past few years. More and more of the world's leading organizations are actively using the developing Wi-Fi technology and providing Wi-Fi services to their customers. A lot of different devices have recently been manufactured with built-in Wi-Fi support, whether it's mobile phones, tablets, laptops or any other device from a variety of different gadgets. To connect to a wireless network, you only need to be within its radius of action. Actions to identify Wi-Fi networks and configure the necessary parameters occur automatically. A device located within the range of several Wi-Fi networks can connect to one or another access point either at the user's choice, or automatically to the network that has the most powerful signal strength. There is also a periodic check of the availability of an access point with the best signal strength.

A wireless Wi-Fi network has the following advantages, the main of which are:

- \* Organization, use and expansion of the network without the use of a cable;
- \* The ability to dynamically change the network topology;
- \* The ability to use one access point by several users;
- \* Easy to design and implement.

At the same time, the wireless network has some disadvantages, one of which is the dependence of the connection speed on the presence of various obstacles and the number of connected devices, as well as the vulnerability of the network in terms of security due to facilitated physical access to the signal.

Every day the number of users who use devices with wireless Internet access is continuously growing. Similarly, the number of attackers is growing, trying in every possible way to gain access to other users' data and use them for personal purposes. So, connecting to a Wi-Fi network with



weak security settings is risky: the transmitted data may be accessible to unauthorized persons, as a result of which all confidential information may become open to intruders. To intercept all the necessary data, it is enough to be in the range of the Wi-Fi network in which the electronic device is located directly. The attackers' goal may be to violate each of the components of the data: confidentiality, availability, integrity, and interception of information for further use for personal purposes.

In order to identify vulnerabilities, it is necessary to understand the parameters of wireless networks. New ways of combating unauthorized data acquisition are constantly growing; new means of protection are emerging. Thus, it is necessary to analyze the basic principles of operation and organization of wireless networks in order to understand their vulnerabilities, to investigate the scale of the problem in order to further determine the volume of unprotected or using insecure Wi-Fi encryption protocols of access points.

A secure system by definition must have three properties: confidentiality, availability and integrity. The privacy property guarantees the user that his secret data will be available only to him or to a group of persons who are allowed access to them. The availability property indicates that authorized users have the right to access data at any time. The integrity property implies the immutability of the parameters and characteristics specified during the configuration of the device. This property is necessary because the privacy protection of the Wi-Fi network depends on it. Due to this property, an attacker cannot change the device settings, which could lead to a change in the order of work and even to the device's failure. In order to provide devices connected to a wireless network with security, it is necessary first of all to understand what parameters ensure confidentiality, integrity and availability of data.

First of all, an important parameter of any wireless network is the type of encryption. One of the important aspects of data transmission over the network is traffic encryption, since to intercept information transmitted over a wireless network, you do not need physical influence, but simply "listen" to the channel and intercept the information of interest.

Now several types of encryptions are most common:

\* NONE – an open type of encryption, data is transmitted without any key, anyone can access this wireless network ("insecure network"). In most cases it is used for guest access;

\* WEP is an RC4-based cipher with different static or dynamic key lengths (64 or 128 bits). Its algorithms are laid out in the public domain, which allows attackers to collect statistics until an encryption key is obtained. A network based on this encryption method is not secure. WEP is an insecure and functionally obsolete standard;

\* TKIP - This encryption method is an advanced WEP method. Additional security checks and protection have been added to it. Encryption keys are 128 bits long and are generated by a complex algorithm, and the total number of possible key variants reaches hundreds of billions, and they change very often. But TKIP is outdated, it has a lower level of security than the AES standard, which replaces it;

\* CCMP is the most advanced algorithm with additional checks and protection. This is a new method of protection for wireless data transmission. Provides a more reliable encryption method compared to TKIP. CCMP is chosen as an encryption method when enhanced data security is needed.

Also, to identify networks with insecure access, it is necessary to consider the interaction of

the access point and the wireless client, otherwise called authentication methods•

\* OPEN - an open network. All connected devices are authorized automatically;

\* WPA - Personal - This mode is suitable for most home networks. When a password is set for a wireless access point, it must be entered by user's every time they connect to a Wi-Fi network;

\* WPA - Enterprise - This mode provides the necessary protection of the wireless network in the work environment. This mode is more difficult to configure and offers individual and centralized access control to your Wi-Fi network. When users try to connect to the network, they will need to provide their authentication credentials.

WPA2 is the second version of a set of algorithms and protocols that provide data protection in wireless Wi-Fi networks. It is assumed that WPA2 should significantly increase the security of Wi-Fi wireless networks compared to previous technologies. The new standard provides, in particular, the mandatory use of a more powerful AES encryption algorithm and 802.1X authentication.

WPA2 protocols work in two authentication modes: personal and Enterprise:

\* WPA2 - Personal is currently the most reliable form of protection, offered by Wi-Fi devices, and it is recommended to use it for all purposes. In WPA2-Personal mode, a 256-bit PSK (pre-shared Key) key is generated from the plaintext passphrase entered. The PSK key together with the SSID (Service Set Identifier) are used to generate temporary session keys PTK (Pairwise Transient Key), for the interaction of wireless devices. Like the static WEP protocol, the WPA2-Personal protocol has certain problems associated with the need to distribute and support keys on wireless network devices, which makes it more suitable for use in small networks of a dozen devices, while WPA2-Enterprise is optimal for corporate networks;

\* WPA2 - Enterprise - WPA2-Enterprise mode solves problems related to the distribution and management of static keys, and its integration with most corporate authentication services provides account-based access control. To work in this mode, registration data such as the user's name and password, a security certificate or a one-time password are required, and authentication is carried out between the workstation and the central authentication server [2].

Using the example of the center of Fergana, as the area most saturated with Wi-Fi networks, it is of interest to analyze the vulnerabilities of wireless networks and assess the current distribution of networks by type of encryption and authentication methods.

To analyze the vulnerabilities of wireless networks in the central part of Fergana, information was collected. In the formulated approach, it consists in the following. With the help of the necessary equipment, namely, a GPS device (GlobalSat BU – 353s4), which allows you to accurately estimate the location of a wireless access point, the coordinates of Wi-Fi networks in the center of Fergana were obtained, according to a pre-set route.

It included central streets, alleys, embankments, driveways and squares with a wide variety of public places, which made it possible to further analyze the public Wi-Fi networks of the city of Fergana. The IV generation GPS receiver is a device with a USB interface on the SiRF STAR IV chipset, providing high quality and speed of coordinate determination. In one case there is a receiver and an active antenna. The magnetic base is used to mount the GPS receiver in any convenient place that provides high-quality reception of the satellite navigation system signal.



*Figure 1 - Equipment for finding vulnerable Wi-Fi points*

After carrying out the analytical part of the work, 2,357 networks related to 29 streets, alleys, embankments, squares and driveways in the central part of Moscow, in the Kremlin Ring area, were analyzed. For a more visual location of the points, the Google Earth program was used, on the map of which all caught Wi-Fi networks are indicated.

Conclusions. The problem of wireless network security is becoming one of the main problems of IT technologies today. One of the key factors in the development and design of any system is security. Various algorithms of mathematical models of authentication, data encryption and integrity control of their transmission are used to protect Wi-Fi networks, but, nevertheless, the problem of network vulnerability remains very significant. If proper attention is not paid to the network setup, then an attacker will be able to access the resources of Wi-Fi network users.

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## THE VIEWS OF ABDURAHMAN JAMI ON FAMILY AND FAMILY UPBRINGING

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**Abstract.** *In the following article the the views of Abdurahman Jami on family and family upbringing are based on the different sources.*

**Keywords:** *family, upbringing, peace, harmony, society, children, modesty*

**Introduction.** Jami was born in Khorasan in the family of the supreme spiritual judge. Having received a good education first in Herat and then in Samarkand, he became an authoritative expert in Muslim theology. Returning to Herat, to the court of the sultans of the Timurid dynasty, he devoted himself to mystical pursuits, science and poetry. The grandfather's family, along with his children and grandchildren, soon moved to Herat (the territory of modern Afghanistan). The boy was inquisitive, quick-witted, studied well first with his father, later at the Nizamiya madrasah [1]. He successfully mastered the Koran, and through it the Arabic language. His extraordinary abilities had to satisfy his inquisitive mind, and the young man, realizing that the Herat teachers were no longer able to give more than what they had done, went to Samarkand. Here the young man spent 9 years studying theology, mastering mathematics and astronomy, philosophy and rhetoric.

“And the honor of the family, first of all, the honor,  
If you have a family and children.  
You have given birth to children, but you should know,  
How to educate them from an early age,  
You have to be good at speech,  
So as not to condemn them to ridicule later.  
The second goal is yours on that path  
Find a worthy teacher.  
All above are those who do good,

But there are no rewards for good deeds...

They sacrifice everything for suffering people,

Without thinking about their own benefits" [2]

All his life, Jami lived modestly, but comfortably, surrounded by numerous students. He enjoyed the fame of the greatest scholar and poet of his time in the Muslim East. The pilgrimage to Mecca, undertaken by him at the age of 58, was a brilliant demonstration of his glory. The rulers of the regions through which his caravan passed sent honorary escorts to accompany him. He himself considered only three of his predecessors worthy of the title "prophet" or "genius" in poetry. These are Firdowsi in heroic tales, Anvari in praise and Saadi in the love gazelle[3].

The goal is to assist children in getting an education and finding a profession, as well as social support for those in need and treatment of children suffering from serious illnesses. Abdurakhman Jami paid special attention to topical issues and problems related to the reasonable organization of power, the protection of the rights and interests of people, ensuring the rule of law, legality, order and discipline in the state, the improvement of society and its further prosperity.

In the works of the great ancestor, such highly spiritual human values as morality, truthfulness, mercy are glorified. Love for a person is the ideological basis of Navoi humanism. In this regard, the study of Abdurakhman Jami's creativity is especially relevant in the New Uzbekistan, where there is a rethinking of values, as well as the search for the most optimal ways of social development based on a combination of achievements of world practice and national cultural traditions [4].

Abdurakhman Jami has always advocated peace and a unified world order created by the efforts of all the peoples of the planet, advocated a peaceful foreign policy of states, their fruitful cooperation and mutual exchange. The analysis of Navoi's creativity shows that the great ancestor was and remains the greatest thinker of the East. Navoi saw the social purpose of the state and the mission of the sovereign for the benefit of society, of all mankind [5]

Jami's poems are combined into three poetic divans: "The Beginning of youth" ("Fatihat al-Shabab", 1479), "The Central Pearl of the necklace" ("Wasitat al-akd", 1489) and "The End of Life" ("Hatimat al-Hayat", 1490-1491); among the most

famous religious and philosophical qasids are "The Sea of Secrets" ("Bahr al-Asrar", 1475) and "The Radiance of the Spirit", which condemns the rationalism of Ibn Syn.

Jami also owns several Sufi treatises and a collection of more than 600 biographies of Sufis "Breaths of [Divine] Friendship from the Halls of Holiness" ("Nafahat al-uns min hadarat al-Quds", 1476-1478). The biographical code "The Spring Garden" (1487) contains elegant edifying stories about the famous poets of Iran.

According to academician B.Gafurov, "In terms of the number of works, Jami occupies a leading place in the entire history of Tajik medieval literature. Author of the anthology "Mirat al-khayal" ("Mirror of thought") Shirhan Ludi reports that "Jami has written 99 books, which are all approved by people of knowledge in Iran, Turan and India, and no one could put a finger of objection to one or another of them." The main poetic work of Jami is his semeritsa "Haft avrang" ("Seven Thrones", i.e. The constellation of the Big Dipper), consisting of seven large poems of the type of the famous "Five" of Nizami (the poetic "answers" of Nizami are, in fact, three poems out of seven: "Tukhfat al-ahrar", "Leyli and Majnun" and "Hirad nameh-i Iskandari"). Many of Jami's works are imbued with the ideas of humanism and criticism of the arbitrariness of the ruling nobility" [3, 253- 254]. In his mystical work, Jami developed the ideas of Bahauddin Naqshband in close contact with another great representative of the leech, Khoja Ahror Wali. Although he officially considered himself a member of the Malomatiya sect in his daily life, his devotion to the great Naqshband was boundless in his labors. In his "Lujat ul-Asrar" he condemned greed when it came to Sufi morality and human education, highly appreciated the nobility

*Tomeshon az bakhr tuma peshi khar sas nihad,  
Qone'nro khanda bar shahu министр страны аст.*

Its purpose is to:

The greedy are ready to put their head on a bite,

Those who are satisfied can laugh at the king and the minister of the country.

Jami has written a number of scientific works: treatises on rhyme and metrics, a book on the compilation of poetic riddles, charades and puzzles. A special place in his legacy is occupied by the "Treatise on Music" ("Risolai musiki"), which summarizes the works of Jami's predecessors (al-Farabi, Ibn Sina, Safi ad-Din, Abd al-Qadir). In the 2 main parts of the treatise (the doctrine of composition, the doctrine of rhythm), the concepts of musical intervals, tetrachords, pentachords and their compounds, the

smallest rhythmic unit (nahr), "rhythmic circles" (ostinate rhythmic formulas) are given, the arrangement of sounds of a 17-step octave scale on the strings of the oud, the fret basis of 12 makoms, the principles of combining musical and poetic rhythmic are explained.

Researchers claim that "morality is an internal morality, morality is not ostentatious, not for others — for oneself. The most important thing is to form a deep human morality. The moral education of the younger generation is based on both universal values, enduring moral norms developed by people in the process of historical development of society, and new principles and norms that have emerged at the present stage of development of society. Enduring moral qualities are honesty, justice, duty, decency, responsibility, honor, conscience, dignity, humanism, selflessness, diligence, respect for elders. Among the moral qualities born of the modern development of society, we will single out internationalism, respect for the state, authorities, state symbols, laws".

He is in solidarity with Ibn Sino and in the assessment of socio-ethical and moral issues. So, Jami very actively used "Tadbiri manzil" ("Home Economics") Ibn Sina when analyzing the problems of the family, its foundations, family relations, explaining the tasks of the family, when explaining the ethics of the relationship between parents and children, as well as didactics, when describing the moral character and qualitative characteristics of the teacher, etc.

**Conclusions.** Monuments to Alisher Navoi and Abdurahman Jami have been opened in Tajikistan. Presidents Shavkat Mirziyoyev and Emomali Rahmon visited the Park named after Nizomiddin Alisher Navoi, in Dushanbe. The Park is created by the Order of the President of the Republic of Tajikistan of March 5, 2018. The document provided for installation of monuments to Nuriddin Abdurahman Jami and Nizomiddin Alisher Navoi as a gesture of friendship between people of Tajikistan and Uzbekistan. A competition was announced for preparation of their project. On the eve of the visit of the Head of Uzbekistan, monuments to great poets and thinkers have been erected in the park. On September 27, representatives of government and state authorities, writers and youth attended the event. Shavkat Mirziyoyev and Emomali Rahmon solemnly opened the park and monuments. They laid flowers at the monuments to Alisher Navoi and Abdurahman Jami. This event became a logical continuation of similar activities carried out in Uzbekistan. As it is known, on March 7, 2018, monuments to Alisher Navoi and Abdurahman Jami were built in the Central Park of Samarkand. It is noteworthy that the street adjacent to this park was also named in honor of Abdurahman

Jami, and the park named after Alisher Navoi is adjacent to square named after another Persian-Tajik poet Abu Abdullo Rudaki.

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**ANALYSIS OF THE CRITERIA OF ADAPTATION AND CODIFICATION OF ACQUISITIONS IN OUR LANGUAGE ON THE EXAMPLE OF THE WORD "BUSINESS".**

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**Abstract:** *This article analyzes the process of studying the word "business" in the Uzbek language, as well as the lexemes found in this language and their meanings.*

We begin with a brief history of how business was introduced into our national language. This word, which is a product of the English dictionary, has long been known to our people. It first appeared in our newspapers after the October Revolution (1917) split the world's countries into capitalism and socialist regimes. It was originally thought to be a phrase that denoted an imperialist worldview. By the way, at this time, our country established a proletarian dictatorship, radical changes occurred in our people's social lives and economic ties, the poor were revered, the affluent were scorned, and this was not politically acceptable. The wealthy, vast landowners, factory and plant managers, feudalists, and capitalists (businessmen) were all considered as political opponents. Similarly, business lexemes (businessmen) had a negative meaning and were mostly used to define the capitalist way of life, in the sense of "entrepreneurial action for personal gain, entrepreneurship," and even such activities were seen as flaws in our way of life:

*"Bazar Urinbaevich, the vices of the capitalist world, which we have been criticizing so far, such as business, efficiency, entrepreneurship, are entering our lives more and more rapidly." People's Word, March 7, 1992*

If the issue is understood more generally, efforts that benefit the public are praised, while those who seek personal gain and profit are labeled enemies of the

nation, jailed and deported, or executed. As a result, these terms have no place in reflecting and expressing the socialist way of life in our national language. They were used in the media and the press to criticize capitalist and imperialist approaches to material life. The words "business (businessman)" were regarded as foreign to spiritual and cultural life, as well as foreign to our national language and communication. After all, the vital issue of personal gain and income contradicted the communist worldview. Our opinion can be supported by the 1981 commentary (*In capitalist countries: personal wealth, profit-making work; speculation, commerce, high-income enterprise, etc.*) on the "Uzbek version of the Business Dictionary".

The attainment of our country's national independence, the socio-political changes that have occurred in our country, and the complete rejection of the communist society have all contributed to the word's reintroduction into our language, albeit with a small alteration in connotation.

The importance of the person (people), partnership (business), and joint-stock companies in the development of tangible wealth was highlighted, and collective production relations (collective farms, state farms, communist-style factories and plants) were eliminated. Whether for the benefit of the common man or the partner community has become the motto of our fledgling civil society. As a result, the pursuit of profit and wealth through human (individual and society) physical and mental work is a phenomena that does not require explanation or proof. As a result of the uniqueness of our way of life, some adjustments in the meaning and content of this assimilation in the process of entering our language were necessary. For example, the Uzbek Dictionary of the Uzbek Language, 2006, interprets this appropriation as: (*any organizational, economic activity that generates income, is for profit, and does not violate the law; commercial; business*).

Ordinary people, on the other hand, initially understood *business* as "*making money*" or "*living well*":

*"The words 'business' and 'leisure' are very important here."* People's Word, October 20, 1992

*"-you can't live well if you're not in business right now", he says*

People's Word, November 4, 2000

This means that our people's interests will be considered, and everyone looking for a method to make a living will look for honest ways to do it. The business was

gaining popularity. As a result, one of the most commonly used words in expressing freshly developed industrial ties in our country, representing the modern life of the Uzbek people, is "assimilation." It is noteworthy that the word "business" in the Uzbek language has significantly expanded its lexical meaning, and now it has its own meaning - *entrepreneurship, business, profit (money)*. Among them, it has a general character and means *engaging in a creative activity, profitable activity in the production and sale of goods, services (household), transport and other areas*.

It is noteworthy that the word "business" in the Uzbek language has significantly expanded its lexical meaning, and now it has its own meaning - *entrepreneurship, business, profit (money)*. Among them, it has a general character and means *engaging in a creative activity, profitable activity in the production and sale of goods, services (household), transport and other areas*.

At the same time, it should be noted that the large, medium, small adjectives used in the process of business development indicate not only the characteristics of the manufacturing enterprise, but also its number. For example, depending on the size of the business, this includes large businesses (employing more than 500 people), medium-sized businesses (20 to 500 people) and small businesses (up to 20 people).

The great interest of our people in "business", the wide openness of the state to the "business" movement, which has led to the creation of many new language units through the word.

With its participation - in the literal sense of *"doing business", "understanding business", "learning business", "training businessmen"*; figurative expressions such as *"zero in business"*, - phrases such as *business world, business management, business center, business entity, business technology, business field, business course, business club, business seminar, business project, business leader, business school, business direction*, - copulative conjunctions such as *business fund, business partner, business forum, business plan, business class, business ethics, business ombudsman, business farmer, business internship*; attributive compound words such as *agribusiness, photobusiness and drug business*; a pair of words like *woman and business, bank and business* were made. In addition, our people have differentiated "business" and began to call it by such adjectives as *small business, large business, private business, convenience business, modern business, joint business*. It was even praised in some titles:

*"Business is business on its own, gentlemen!" Darakchi 23.08.2012*

Not only did this assimilation conform to the norms and codification norms of our language, but our people believed in the fate of the word in our language and even used it to create new phrases using unexpected adjectives for the public:

*"Living in a **wild business** environment requires adherence to the principle of 'one from you, another from me'"*Darakchi 23.08.2012

It is noteworthy that the word "business" in some syntactic combinations also acquires a figurative meaning.

In support of our opinion, we can cite an article published in the newspaper "People's Word" on May 24, 2003, No. 110, under the headline "Entrepreneur's backbone and advice." The article is about the Bukhara **BusinessIncubator**. The word "incubator" is a Latin word meaning "artificial hatching apparatus." At the beginning of the article, the author explains that the word "incubator" is figurative, preventing it from leading students to different opinions: *"The business incubator is a place where advice and assistance is provided to those who want to start a business, help start-ups to create business plans and other projects, obtain loans and grants from banking institutions, foreign language courses, marketing, and management secrets, study of accounting, new information about the product market from any country in the world .... "*

As we mentioned at the beginning of the article, in addition to the word "business", the English word "businessman" has also entered our language. The fate of the acquisition of this word in our language is almost the same as the word *business*, or its adaptation to our language is inextricably linked with the socio-political events and social relations in our country. The word is interpreted in the 1981 Uzbek Dictionary of Business in the former Soviet Union. The words "business" and "entrepreneur" are used interchangeably.

It is described in the 2006 glossary as *a person engaged in business, a businessman*. The positivity was achieved by dropping the negative word *entrepreneur* in the 1981 commentary. Nowadays, a *businessman* is always understood positively in communication (owner is generous).

*"Uzbek businessmen are uniting to help people in need."*Darakchi 26.03.2020

*"Alisher Usmanov, a businessman of Uzbek origin, has risen one place in the list of the richest people in the UK. The rating was compiled by the Sunday Times.*

*According to this source, Darya reported".*  
Darakchi 17.05.2020

The *businessman* also managed to change the English form of joint business+men into an artificial word business+chi in Uzbek:

" ...*The Uzbek president has not visited the United States, but has met formally and informally with many American businessmen, political scientists, and others close to the ruling elite*" People's Word, August 6, 1992

*"Didn't the professionals give up television to amateurs and show business people?"*  
Darakchi 24.07.2017

Another phenomenon that should be noted during the analysis is that the mentality of language speakers also plays an important role in the case of assimilation. Naturally, everyone works to make a living for himself (his family) and learns a profession to make his life better. Those who do not see this are on the trail of profit, which does not require comment or objection. Because it is the main criterion for a long and stable life, but our people are such a humble and tolerant nation that it is not fair to say that I pursue profit throughout my life, I love profit or counts. It is noteworthy that in order to fully express this feeling in the hearts of our people, our people have received "business". Consequently, when a person who is out of the profession or does not have a profession leaves his family with the intention of earning money, earning a living, his activity is called business (entrepreneur). The answer to the question "Where is that man?" is "He is in the market or abroad." To the question "What are you doing there?" the answer is simply "Business"; if he is making a lot of money, the answer is "Businessman." In such a conversation, the respondent does not shy away from the answer, and the listener is sincere and sympathetic to the given answer.

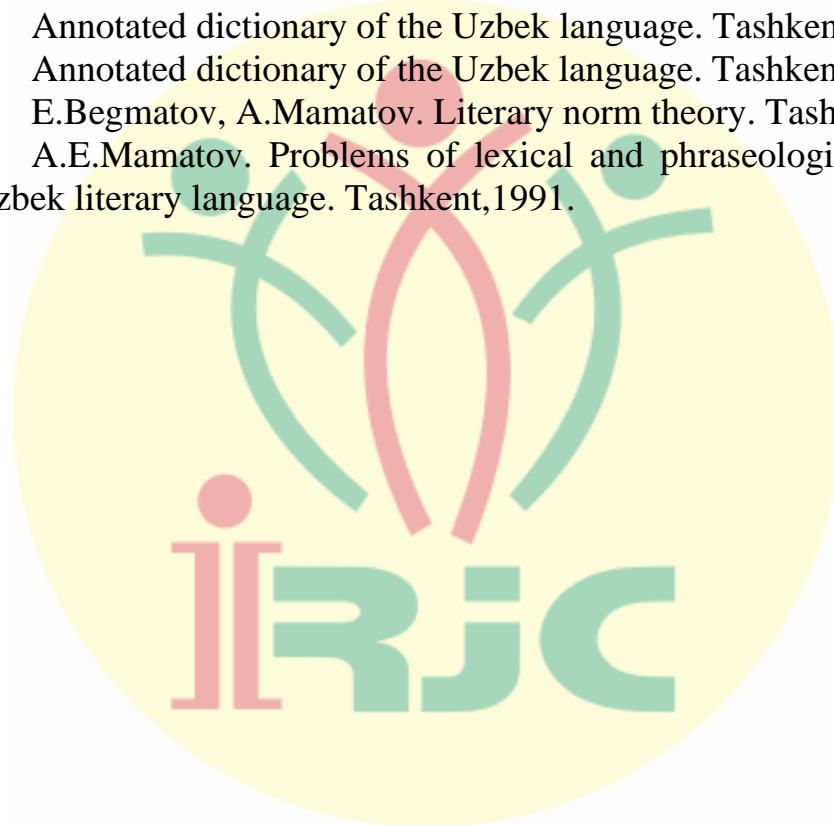
The popularity of business assimilation in communication has led it to squeeze out negative lexical units such *asspeculator* or *scammer* that have negative meanings in our language. Therefore, our people have always disliked the way of life of such people, and honestly included them in the list of people who do not earn money or income. The names "*Olibsotar*" and "*speculators*" (*ispKhorezm*) were an insult to those who had such nicknames.

If you ask anyone who is currently on the path to profit or income, they will say, "Business," and no one will feel negative about the answer, and its use in communication is not considered a departure from the norm of language.

The analysis shows that the "business (businessmen)" assimilated into our language and further expanded their meaning, they have lexical features such as concretization of meaning, generalization of meaning, evolution of meaning, depending on the place of communication were discovered. In addition, it is not difficult to understand the activities of our people, such as "useful advice, knowledge or assistance, development of projects and plans" for the purpose (business), not only "monetary or economically viable entrepreneurship". These, in turn, contribute to the activation and functional development of the Uzbek language.

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## THE CONCEPT OF IMAGE IN THE WORKS OF TOGAY MURAD

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**Annotation:** *This article analyzes the works of Togay Murad and discusses the depiction of images in the work.*

**Keywords:** *image, landscape, language of work, artistic expression, plot, creation.*

Togay Murad reveals the world of the hero or characters to be created during the creation of the work, along with the psychological dialect. Togay Murad's book "You Can't Die in This World" is a collection of four stories written in different years. Why would anyone think that these four stories were chosen and focus on the years of involuntary writing? When we read the author's stories, it is clear that the writer found the strength to tell the truth in his stories as a student, and even tried to express his thoughts in a rhythmic way. The novel "It is impossible to die in this world" in the treasury of the author's works is a work that clearly and vividly depicts the sufferings, marriages, sorrows and tragedies of the Uzbek nation in the twentieth century. It is no exaggeration to say that the stories in this book are arranged according to the literary aesthetic, political and ideological content of the events of the novel. The stories in the book, although written before the novel, seem to fill in some of the events that were not covered in the novel.

When we look at Togay Murad's stories, the mood of the heroes is clear. In the author's stories, psychological analysis is much deeper, with a focus on the human personality. The story of "One Autumn Day" depicts a hard-working teacher, Obidovich, who sees everyone as one and sees everyone as white as cotton. This means that he has been thinking long and hard about how to convey the message that "his mother has died" to Akromjon Rakhimjanov in order not to injure his student's heart. Akromjon Rakhimjanov, who is different from the teacher in the story

Obidovich in terms of his youth, upbringing and inner feelings, has just turned twenty. This guy is a man of his favorite adage, he's used to walking lightly over heavy weights. He has become accustomed to "making his way" to finish his work by any means. This guy had already become a "faceless" person. He was not as simple and innocent as the teacher thought. In front of DomlaObidovich, he looks like a decent young man with his hands on his chest, as if the telephone operator needs salvation in front of a girl, and in a conversation with his brother-in-law, he looks and speaks proudly and judgmentally. tries to be simple, concise and meaningful, and is able to work on it. In some of the stories, portraits and landscapes are almost imperceptible, but the reader's attention is drawn to the character and mental analysis of objects and images. The themes of his works are also new. This means that the works he creates are valuable because they are artistic and new ideas raise new issues. The events, characters, and destinies described by Togay Murad are very logical. Literary critic M. Kushjanov said, "As long as a writer creates images, characters, life events, he cannot remain a slave to his imagination. There are certain forces that determine the direction of his pen that go beyond the wishes of the writer, and the artist cannot ignore them. One of them is the logic of life. " Any work of art is written mainly to realize a certain truth. At the same time, it is his language that raises and lowers the level of the work. If the language is not effective, if the psyche and character of the characters do not fit into the logic of the character, then the image and psychology will not be well revealed in the play. As M. Gorky said, "Language is a tool for creating characters and landscapes in fiction." These ideas are well expressed in the works of Togay Murad, especially in his stories. The writer can say exactly what he wants to say. In the 70s of the twentieth century, he was able to express his views in his own words. Continuing the traditional program of Uzbek prose, the creation of works with a new perspective was the goal of Togay Murad. What is the breadth of the subject through the author's subtle psychologisms, the narrowness of the richness of the content with the narrowness of the events, the problem of the person in his stories, the fate of man, the generation, the future? was able to raise issues such as. He acknowledged the same in his stories of the 1960s and 1970s, and was able to critique and tell about the fate of man, his arguments, and his character. It should also be noted that private matters reveal the essence of general events. The experience of some word artists is inextricably linked to the need for the nation to be renewed at every stage of development, as well as to express itself aesthetically. When we look at Togay Murad's stories, we see that one of the most important features is the growing interest in the inner world and moral issues, which preserves the national identity in his creative research. "Ku-ku-ku!" The deputy



director in the story is an open-minded, humane person who lives in harmony with nature. In this story, there is a clash of kindness and cruelty. When the director goes on vacation, the deputy director acts as the general manager. He does a lot of good things. The guard builds a nest for the birds. Musicha brings her children to her room and takes care of them. For this, the director will be in trouble when he comes to work. Music children are thrown in the trash. In the play, the author describes his interaction with the director and his deputy as follows:

*"Yeah, there's a lot of news. We don't think about it. Look at that! Suddenly, the director's eyes widened and his pupils disappeared."*

*- This is a cultural park! It's not the birds that need to rest here, it's the people who need to rest. Cabbage mussels. What, is this a zoo?*

*-Commander, the birds are the people.*

*-Are you a leader or a pigeon october? Please write an application. I was so patient that he would come to his senses and give up his childhood. "*

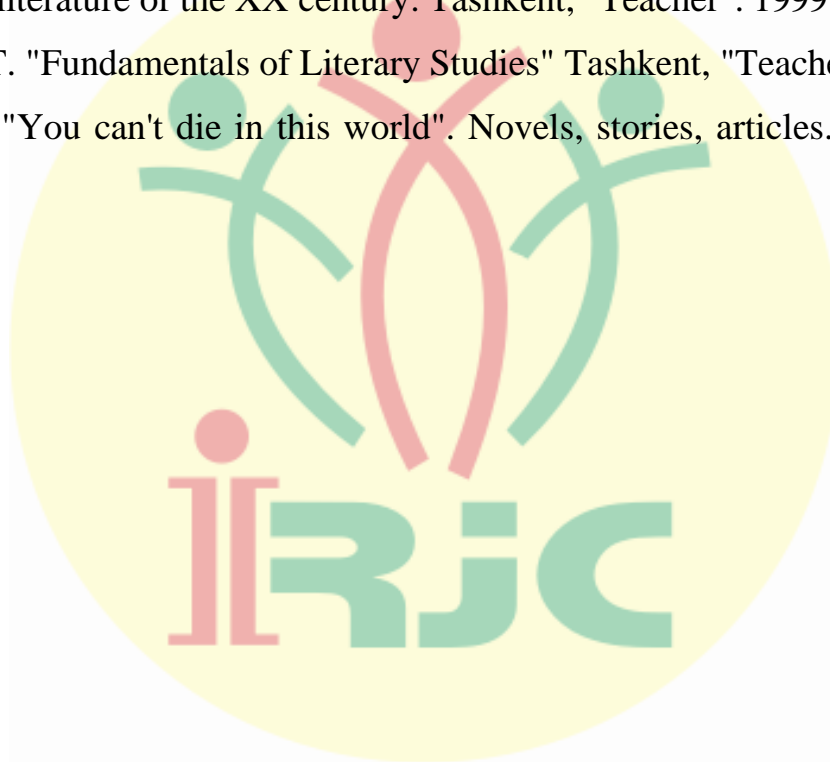
It is clear from the passage from the play that the author emphasizes the character of the director here. That is, he knows only leadership, he knows office, work is not about innovation, not about thinking of others. A truly selfless human being is sitting as a deputy. That's the decent thing to do, and it should end there. So, the author seems to be addressing the question of whether society needs a self-sacrificing, hard-working, mature person. It should be noted that Togay Muraddoes not give too much imagery in this story. It is unknown at this time what he will do after leaving the post. Here is another opinion of M. Kushjanov. "Every event can be included in a work of art. But an event alone cannot be the basis of an artistic plot. If the events themselves produce a work of art, then even the petty quarrels of life can be considered a work of art. "

In the two stories we have discussed above, the author uses the method of contrast imagery, which raises socio-ethical issues and warns the reader that the educational gap can lead to major social tragedies.

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**ON ONE BOUNDARY PROBLEM FOR A PARABOLIC-HYPERBOLIC EQUATION OF THE THIRD ORDER, WHEN THE CHARACTERISTIC OF THE FIRST ORDER OPERATOR IS PARALLEL TO THE YORDINATE AXIS**

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*Annotation:* In the present paper, one boundary value problem third is posed and studied for a-order parabolic-hyperbolic equation in a quadrangular domain with two lines of type change.

**I. Introduction.**

Many problems in physics, engineering, mechanics and other areas require the study of equations of mixed, composite and mixed-composite types.

Fundamental research into mixed equations of the second order of elliptic-hyperbolic type began to be studied by the Italian mathematician Tricomi in the 20s of the last century [1].

After that, many different problems for equations of these types began to be investigated. A review of theoretical and applied research is given in the works and books of A.V. Bitsadze [2, 3], L. Bers [4], M.M. Smirnov [5], and also in the books of M.S., T.D. Dzhuraeva [7].

Research into equations of elliptic-parabolic, parabolic-hyperbolic types began in the 1950s and 1960s. In 1959, I.M. Gel'fand [8] pointed out the need for joint consideration of equations in one part of the domain of parabolic, and the other part - of hyperbolic types. He gives an example related to the movement of gas in a channel surrounded by a porous medium: in the channel, the movement of gas is described by the wave equation, outside it - by the diffusion equation.

Then, in the 1970s and 1980s, they began to study various problems for equations of the third and higher orders of the parabolic-hyperbolic type. Such problems were studied mainly by T. D. Dzhuraev and his students (for example, see [9]-[13]).

## II. Formulation of the problem

Let us be given a quadrangular area  $G$  on the plane  $xOy$  with vertices at the points  $D(-1;0)$ ,  $C(2,0)$ ,  $B_0(1;1)$ ,  $A_0(0,1)$  and let the area  $G$  have the form  $G = G_1 \cup G_2 \cup G_3 \cup J_1 \cup J_2$ , where  $G_1$  – the rectangle with vertices at the points  $A(0;0)$ ,  $B(1;0)$ ,  $B_0(1,1)$ ,  $A_0(0,1)$ ;  $G_2$  – triangle with vertices at points  $A(0;0)$ ,  $D(-1;0)$ ,  $A_0(0,1)$ ;  $G_3$  – triangle with vertices at points  $B(1;0)$ ,  $B_0(1,1)$ ,  $C(2,0)$ ;  $J_1$  – open segment with vertices at points  $A(0;0)$ ,  $A_0(0,1)$ ;  $J_2$  – open segment with vertices at points  $B(1;0)$ ,  $B_0(1,1)$ .

In the area  $G$ , consider the equation

$$\left(b \frac{\partial}{\partial y} + c\right)(Lu) = 0 \quad (1)$$

$$\text{where } b, c \in R, Lu \equiv \begin{cases} u_{1xx} - u_{1y}, & (x, y) \in G_1, \\ u_{ixx} - u_{iyy}, & (x, y) \in G_i \ (i = 2, 3, 4). \end{cases}$$

For equation (1), the following problem is posed:

**Problem 1.** Find a function  $u(x, y)$  that 1) is continuous in  $\bar{G}$  and  $G \setminus J_1 \setminus J_2 \setminus J_3$  has continuous derivatives involved in equation (1), and  $u_x$ ,  $u_y$  and  $u_{yy}$  are continuous up to a part of the boundary of the region  $G$  specified in the boundary conditions; 2) satisfies equation (1) in the region  $G \setminus J_1 \setminus J_2 \setminus J_3$ ; 3) satisfies the following boundary conditions:

$$u(x, 0) = f_1(x), \quad 0 \leq x \leq 1, \quad (2)$$

$$u_y(x, 0) = f_2(x), \quad 0 \leq x \leq 1, \quad (3)$$

$$u(x, 0) = f_3(x), \quad -1 \leq x \leq 0, \quad (4)$$

$$u_y(x, 0) = f_4(x), \quad -1 \leq x \leq 0, \quad (5)$$

$$u_{yy}(x,0) = f_5(x), \quad -1 < x < 0, \quad (6)$$

$$u(x,0) = f_6(x), \quad 1 \leq x \leq 2, \quad (7)$$

$$u_y(x,0) = f_7(x), \quad 1 \leq x \leq 2, \quad (8)$$

$$u_{yy}(x,0) = f_8(x), \quad 1 < x < 2, \quad (9)$$

and 4 ) satisfies the following continuous gluing conditions:

$$u(+0, y) = u(-0, y) = \tau_1(y), \quad 0 \leq y \leq 1, \quad (10)$$

$$u_x(+0, y) = u_x(-0, y) = \nu_1(y), \quad 0 \leq y \leq 1, \quad (11)$$

$$u(1+0, y) = u(1-0, y) = \tau_2(y), \quad 0 \leq y \leq 1, \quad (12)$$

$$u_x(1+0, y) = u_x(1-0, y) = \nu_2(y), \quad 0 \leq y \leq 1. \quad (13)$$

Here  $f_i$  ( $i = \overline{1,8}$ ), are given sufficiently smooth functions, and  $\tau_1, \nu_1, \tau_2, \nu_2$  are unknown yet sufficiently smooth functions to be determined.

**Theorem.** If  $f_1 \in C^3[0,1]$ ,  $f_3 \in C^3[-1,0]$ ,  $f_6 \in C^3[1,2]$ ,  $f_2 \in C^2[0,1]$ ,  $f_4 \in C^2[-1,0]$ ,  $f_7 \in C^2[1,2]$ ,  $f_5 \in C^1[-1,0]$ ,  $f_8 \in C^1[1,2]$ , and the following matching conditions are satisfied:  $\tau_1(0) = f_1(0) = f_3(0)$ ,  $\tau_2(0) = f_1(1) = f_6(1)$ ,  $\nu_1(0) = f_2(0) = f_4(0)$ ,  $\nu_2(0) = f_2(1) = f_7(1)$ , then Problem 1 admits a unique solution .

To prove this theorem, we rewrite equation ( 1 ) in the form

$$u_{1xx} - u_{1y} = \omega_1(x)e^{-\frac{c}{b}y}, \quad (x, y) \in G_1, \quad (14)$$

$$u_{ixx} - u_{iyy} = \omega_i(x)e^{-\frac{c}{b}y}, \quad (x, y) \in G_i \quad (i = 2, 3), \quad (15)$$

where  $\omega_i(x)$  ( $i = 1, 2, 3$ ) are so far unknown sufficiently smooth functions.

First, we study Problem 1 in the domain  $G_2$ . Passing in the equation (15) ( $i = 2$ ) to the limit at  $y \rightarrow 0$ , due to (4) and (6) we find

$$\omega_2(x) = f_3''(x) - f_5(x), \quad -1 \leq x \leq 0.$$

Further, by the continuation method after long calculations and transformations, we arrive at the relation between the functions  $\tau_1(y)$  and  $\nu_1(y)$ :

$$v_1(y) = \tau_1'(y) + \beta_1(y), \quad 0 \leq y \leq 1 \quad (16)$$

where  $\beta_1(y)$  – known function.

Similarly, passing to the region  $G_3$ , at  $y \rightarrow 0$  from Eq. (15) ( $i=3$ ) we find function  $\omega_3(x)$ .

Using the continuation method, as in the area  $G_2$ , we obtain the relation between the functions  $\tau_2(y)$  and  $v_2(y)$ :

$$v_2(y) = -\tau_2'(y) + \beta_2(y), \quad 0 \leq y \leq 1 \quad (17)$$

where  $\beta_2(y)$  – known function .

Next, move on to the area  $G_1$ . Assuming in equation (14)  $y \rightarrow 0$ , due to (2) and (3), we find the function  $\omega_1(x)$ .

Now we write down the solution of equation (14) that satisfies conditions (2), (10), (12) (see [9]):

$$u_1(x, y) = \int_0^y \tau_1(\eta) G_\xi(x, y; 0, \eta) d\eta - \int_0^y \tau_2(\eta) G_\xi(x, y; 1, \eta) d\eta + \int_0^1 f_1(\xi) G(x, y; \xi, 0) d\xi - \int_0^y e^{-\frac{c}{b}\eta} d\eta \int_0^1 \omega_1(\xi) G(x, y; \xi, \eta) d\xi.$$

Differentiating this solution with respect to  $x$ , we get:

$$u_{1x}(x, y) = -\int_0^y \tau_1'(\eta) N(x, y; 0, \eta) d\eta + \int_0^y \tau_2'(\eta) N(x, y; 1, \eta) d\eta + \int_0^1 \tau_1'(\xi) N(x, y; \xi, 0) d\xi + \int_0^y e^{-\frac{c}{b}\eta} d\eta \int_0^1 \omega_1(\xi) N_\xi(x, y; \xi, \eta) d\xi, \quad (\text{eighteen})$$

where

$$\left. \begin{matrix} G(x, y; \xi, \eta) \\ N(x, y; \xi, \eta) \end{matrix} \right\} = \frac{1}{2\sqrt{\pi(y-\eta)}} \sum_{n=-\infty}^{+\infty} \left\{ \exp\left[-\frac{(x-\xi-2n)^2}{4(y-\eta)}\right] \mp \exp\left[-\frac{(x+\xi-2n)^2}{4(y-\eta)}\right] \right\}.$$

Green's functions of the first and second boundary value problems for Eq. (14).

Assuming in (18)  $x=0$  and  $x=1$  we obtain two relations between the unknown functions  $\tau_1(y)$ ,  $v_1(y)$ ,  $\tau_2(y)$  and  $v_2(y)$ .

Eliminating from these two relations and from (16), (17) the functions  $v_1(y)$  and  $v_2(y)$ , we arrive at a system of Volterra integral equations of the second kind with respect to  $\tau_1'(y)$  and  $\tau_2'(y)$ :

$$\tau_1'(y) + \int_0^y K_1(y, \eta) \tau_1'(\eta) d\eta + \int_0^y K_2(y, \eta) \tau_2'(\eta) d\eta = g_1(y), \quad (19)$$

$$\tau_2'(y) + \int_0^y K_3(y, \eta) \tau_2'(\eta) d\eta + \int_0^y K_4(y, \eta) \tau_1'(\eta) d\eta = g_2(y), \quad (20)$$

where  $K_1(y, \eta)$ ,  $K_2(y, \eta)$ ,  $K_3(y, \eta)$ ,  $K_4(y, \eta)$ ,  $g_1(y)$ ,  $g_2(y)$  – known functions,  $K_1(y, \eta)$  and  $K_3(y, \eta)$  have a weak singularity (with degree  $1/2$ ), while the functions  $K_2(y, \eta)$ ,  $K_4(y, \eta)$ ,  $g_1(y)$  and  $g_2(y)$  – are continuous functions.

Solving the system (19), (20), we find the functions  $\tau_1'(y)$  and  $\tau_2'(y)$ , and thus the functions  $v_1(y)$ ,  $v_2(y)$ ,  $u_2(x, y)$ ,  $u_3(x, y)$  and  $u_1(x, y)$ .

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**ON A BOUNDARY VALUE PROBLEM FOR A THIRD-ORDER PARABOLIC-HYPERBOLIC EQUATION IN A PENTAGONAL DOMAIN WITH THREE LINES OF TYPE CHANGE, WHOSE HYPERBOLIC PARTS ARE TRIANGLES**

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*Annotation: In the present paper, we pose and third study one boundary value problem for a-order parabolic-hyperbolic equation in a pentagonal domain with three lines of type change, the hyperbolic parts of which are triangles.*

### **I. Introduction**

Fundamental research into mixed equations of the second order of elliptic-hyperbolic type began to be studied by the Italian mathematician Tricomi in the 20s of the last century [1].

After this, many different problems for equations of these types began to be investigated. A review of theoretical and applied research is given in the works and books of A.V. Bitsadze [2, 3], L. Bers [4], M.M. Smirnov [5], and also in the books of M.S. Salakhitdinov [6], T.D. Dzhuraeva [7].

Research into equations of elliptic-parabolic, parabolic-hyperbolic types began in the 1950s and 1960s. Then, in the 1970s and 1980s, they began to study various problems for equations of the third and higher orders of the parabolic-hyperbolic type. Such problems were studied mainly by T.D. Dzhuraev and his students (for example, see [8]-[12]).

### **II. Formulation of the problem**

In the present work, one boundary value problem is posed and for the equation third-order parabolic-hyperbolic type of the form

$$\left( b \frac{\partial}{\partial y} + c \right) (Lu) = 0 \quad (1)$$

in the area of  $G$  the plane  $xOy$ , where  $G = G_1 \cup G_2 \cup G_3 \cup G_4 \cup J_1 \cup J_2 \cup J_3$ ,  $b, c \in R$ ,

$$Lu = \begin{cases} u_{1xx} - u_{1y}, & (x, y) \in G_1, \\ u_{ixx} - u_{iyy}, & (x, y) \in G_i \quad (i = 2, 3, 4), \end{cases} \quad u(x, y) = u_i(x, y), \quad (x, y) \in G_i \quad (i = \overline{1, 4}),$$

$G_1$  – rectangle with vertices at points  $A(0;0)$ ,  $B(1;0)$ ,  $B_0(1,1)$ ,  $A_0(0,1)$ ;  $G_2$  – triangle with vertices at points  $E(2,0)$ ,  $C(1/2, -3/2)$ ,  $D(-1,0)$ ;  $G_3$  – triangle with vertices at points  $A$ ,  $D$ ,  $A_0$ ;  $G_4$  – triangle with vertices at points  $E$ ,  $B$ ,  $B_0$ ;  $J_1$  – open segment with vertices at points  $E$ ,  $D$ ;  $J_2$  – open segment with vertices at points  $A$ ,  $A_0$ ;  $J_3$  – open segment with vertices at points  $B$ ,  $B_0$ .

Equation (1) is a special case of the equation

$$\left( a \frac{\partial}{\partial x} + b \frac{\partial}{\partial y} + c \right) (Lu) = 0$$

at  $a = 0$ . For equation (1), the following problem is posed:

**Task  $M_{obc}$ .** It is required to find a function  $u(x, y)$  that is 1) continuous in  $\bar{G}$  and  $G \setminus J_1 \setminus J_2 \setminus J_3$  has in the domain continuous derivatives involved in equation (1),  $u_x$  and  $u_y$  are continuous up to a part of the boundary of the region  $G$ , indicated in the boundary conditions; 2) satisfies equation (1) in the region  $G \setminus J_1 \setminus J_2 \setminus J_3$ ; 3) satisfies the boundary conditions

$$u|_{EC} = \psi_1(x), \quad 1/2 \leq x \leq 2; \quad (2) \quad u|_{DP} = \psi_2(x), \quad -1 \leq x \leq -1/2; \quad (3)$$

$$u|_{QC} = \psi_3(x), \quad 0 \leq x \leq 1/2; \quad (4) \quad \frac{\partial u}{\partial n}|_{EC} = \psi_4(x), \quad 1/2 \leq x \leq 2; \quad (5)$$

$$\frac{\partial u}{\partial n}|_{DC} = \psi_5(x), \quad -1 \leq x \leq 1/2; \quad (6)$$

and 4) satisfies the following bonding conditions:

$$u(x, +0) = u(x, -0) = T(x), \quad -1 \leq x \leq 2; \quad (7) \quad u_y(x, +0) = u_y(x, -0) = N(x), \quad -1 \leq x \leq 2; \quad (8)$$

$$u_{yy}(x, +0) = u_{yy}(x, -0) = M(x), \quad -1 < x < 2; \quad (9) \quad u(+0, y) = u(-0, y) = \tau_4(y), \quad 0 \leq y \leq 1; \quad (10)$$

$$u_x(+0, y) = u_x(-0, y) = \nu_4(y), \quad 0 \leq y \leq 1; \quad (11) \quad u(1-0, y) = u(1+0, y) = \tau_5(y), \quad 0 \leq y \leq 1; \quad (12)$$

$$u_x(1-0, y) = u_x(1+0, y) = v_5(y), \quad 0 \leq y \leq 1. \quad (13)$$

Here  $\psi_i (i = \overline{1,5})$  – given functions and , in addition, the notation

$$T(x) = \begin{cases} \tau_1(x), & \text{если } -1 \leq x \leq 0, \\ \tau_2(x), & \text{если } 0 \leq x \leq 1, \\ \tau_3(x), & \text{если } 1 \leq x \leq 2; \end{cases} \quad N(x) = \begin{cases} v_1(x), & \text{если } -1 \leq x \leq 0, \\ v_2(x), & \text{если } 0 \leq x \leq 1, \\ v_3(x), & \text{если } 1 \leq x \leq 2; \end{cases} \quad M(x) = \begin{cases} \mu_1(x), & \text{если } -1 \leq x \leq 0, \\ \mu_2(x), & \text{если } 0 \leq x \leq 1, \\ \mu_3(x), & \text{если } 1 \leq x \leq 2, \end{cases}$$

$\tau_i, v_i (i = \overline{1,5}), \mu_j (j = \overline{1,3})$  – are still unknown sufficiently smooth functions and ,  $n$  – the inner normal to the line  $x + y = -1$  or  $x - y = 2$ , and the points  $P$  and  $Q$  have coordinates  $P(-1/2, -1/2), Q(0, -1)$ .

### III. Problem research.

Here we give the idea of proving the following theorem.

**Theorem.** If  $\psi_1 \in C^3[1/2, 2], \psi_2 \in C^3[-1, -1/2], \psi_3 \in C^3[0, 1/2], \psi_4 \in C^2[1/2, 2], \psi_5 \in C^2[-1, 1/2]$ , and the matching conditions  $\psi_1(1/2) = \psi_3(1/2), \tau_2(-1) = \psi_2(-1), \tau_2(0) = \tau_1(0), \tau_2'(0) = \tau_1'(0), \tau_3(1) = \tau_1(1)$ , , are satisfied  $\psi_4'(1/2) = -\psi_5'(1/2)$ , then the problem  $M_{obc}$  admits a unique solution.

**Proof.** We will prove the theorem by the method of constructing a solution. To do this, we rewrite equation (1) in the form

$$u_{1xx} - u_{1y} = \omega_1(x) e^{\frac{c}{b}y}, \quad (x, y) \in G_1, \quad (14)$$

$$u_{ixx} - u_{iyy} = \omega_i(x) e^{\frac{c}{b}y}, \quad (x, y) \in G_i \quad (i = 2, 3, 4), \quad (15)$$

where  $\omega_i(x), i = \overline{1,4}$  – unknown yet sufficiently smooth functions to be determined .

Let us first consider the problem in the domain  $G_2$ . The solution of equation (15) with  $i = 2$ , satisfying conditions (7), (8) can be represented as

$$u_2(x, y) = \frac{1}{2} [T(x+y) + T(x-y)] + \frac{1}{2} \int_{x-y}^{x+y} N(t) dt - \frac{1}{2} \int_0^y e^{\frac{c}{b}\eta} d\eta \int_{x-y+\eta}^{x+y-\eta} \omega_2(\xi) d\xi. \quad (16)$$

Substituting (16) into conditions (5) and (6) after some calculations, we find

$$\omega_2(x) = -\sqrt{2}\psi'_4(x)e^{\frac{c}{b}(x-2)}, 1/2 \leq x \leq 2,$$

$$\omega_2(x) = \sqrt{2}\psi'_5(x)e^{-\frac{c}{b}(1+x)}, -1 \leq x \leq 1/2.$$

From these equalities it follows

$$\psi'_4(1/2) = -\psi'_5(1/2).$$

Further, substituting (16) into condition (2) after some calculations and simplifications, we obtain the first relation between the unknown traces of the solution on the type change line  $J_1$ :

$$T'(x) + N(x) = \alpha_1(x), -1 \leq x \leq 2, (17)$$

where  $\alpha_1(x)$  – is a known function.

In the interval  $0 \leq x \leq 1$ , relation (17) has the form

$$\tau'_1(x) + \nu_1(x) = \alpha_1(x), 0 \leq x \leq 1. (18)$$

in between  $-1 \leq x \leq 0$  -

$$\tau'_2(x) + \nu_2(x) = \alpha_1(x), -1 \leq x \leq 0, (19)$$

and in between  $1 \leq x \leq 2$  -

$$\tau'_3(x) + \nu_3(x) = \alpha_1(x), 1 \leq x \leq 2. (20)$$

Now substituting (16) into condition (3), we have

$$\tau'_2(x) - \nu_2(x) = \delta_1(x), -1 \leq x \leq 0, (21)$$

where  $\delta_1(x)$  – is a known function.

Solving system (19), (21), we find the functions  $\tau'_2(x)$ ,  $\nu_2(x)$ . Integrating  $\tau'_2(x)$  from  $-1$  to  $x$ , we determine the function  $\tau_2(x)$ .

Further, substituting (16) into condition (4), we have

$$\tau'_3(x) - \nu_3(x) = \delta_2(x), 1 \leq x \leq 2, (22)$$

where  $\delta_2(x)$  – is a known function.

Solving system (20), (22), we find the functions  $\tau'_3(x)$ ,  $v_3(x)$ . Integrating  $\tau'_3(x)$  from 2 to  $x$ , we determine the function  $\tau_3(x)$ .

Finally, we rewrite equation (1) in the form

$$bu_{1,xy} + cu_{1,xx} - bu_{1,yy} - cu_{1,y} = 0.$$

Passing in this equation and in equation (15) ( $i=2$ ) to the limit at  $y \rightarrow 0$ , we obtain the second and third relations between the unknown functions  $\tau_1(x)$ ,  $v_1(x)$  and  $\mu_1(x)$  on the type change line  $J_1$ . Eliminating the functions and  $\mu_1(x)$  from these two equations and from Eq. (18)  $v_1(x)$ , we arrive at an ordinary differential equation for  $\tau_1(x)$ . Solving the resulting equation under known three conditions, we find the function  $\tau_1(x)$ .

Thus, we have found the function  $u_2(x,y)$  in the domain  $G_2$  completely.

In the domains  $G_3$  and  $G_4$  by the continuation method, we obtain two relations between the unknown functions  $\tau_4(y)$ ,  $v_4(y)$  and  $\tau_5(y)$ ,  $v_5(y)$ .

Then, in the domain  $G_1$ , writing the solution of equation (14) that satisfies conditions (7) for  $0 \leq x \leq 1$ , (10), (12) and differentiating this solution with respect to  $x$  and tending  $x$  to zero and unity, after lengthy calculations we obtain a system of Volterra integral equations of the second kind with respect to  $\tau'_4(y)$  and  $\tau'_5(y)$ . Solving this system, we find the functions  $\tau'_4(y)$ ,  $\tau'_5(y)$  and thus the functions  $v_4(y)$ ,  $v_5(y)$ ,  $u_1(x,y)$ ,  $u_3(x,y)$ ,  $u_4(x,y)$ .

Thus, we have found a solution to the problem in a unique way.

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**PROCESS ANALYSIS OF ESTABLISHMENT WITH EQUIPMENT**

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**Abstract.** *The article analyzes the current state of construction waste management. The classification of technogenic waste according to the degree of toxicity is given, as well as the component composition of construction waste, as the most numerous of all stored industrial waste.*

**Keywords:** *construction waste, construction waste management, utilization, recycling, recyclable materials, environment.*

The construction industry forms an artificial environment for a comfortable and safe life and production activity of a person. Here, the external natural environment is considered as its negative impact on buildings and structures. However, in general, the anthropogenic impact on the environment turns out to be no less significant and has become the subject of consideration relatively recently. One of the strongest factors that adversely affects the natural environment is construction activity, which occupies almost the leading place among environmental pollutants. This happens at all stages of construction - from the extraction and production of building materials and structures to demolition and the process of handling construction waste. The aggressive impact of construction on the natural environment - and actually on a person as an integral part of nature - is difficult to overestimate.

Ecology-the science of human interaction with the environment arose at the beginning of the XX century, environmental change and environmental problems directly related to the increase in industrial production, the growth of which in Uzbekistan as a whole amounted to 6.5% in 2016-2020, according to the State Statistics Service. And the amount of industrial waste per person is about 1 ton per year.

Through the extraction of natural cheese and its further processing, the production receives the necessary product. In the course of these processes, man-made waste is generated, which significantly affects the components of the environment. Their number is related to the volume of production, methods of obtaining finished products and the use of innovative technologies.

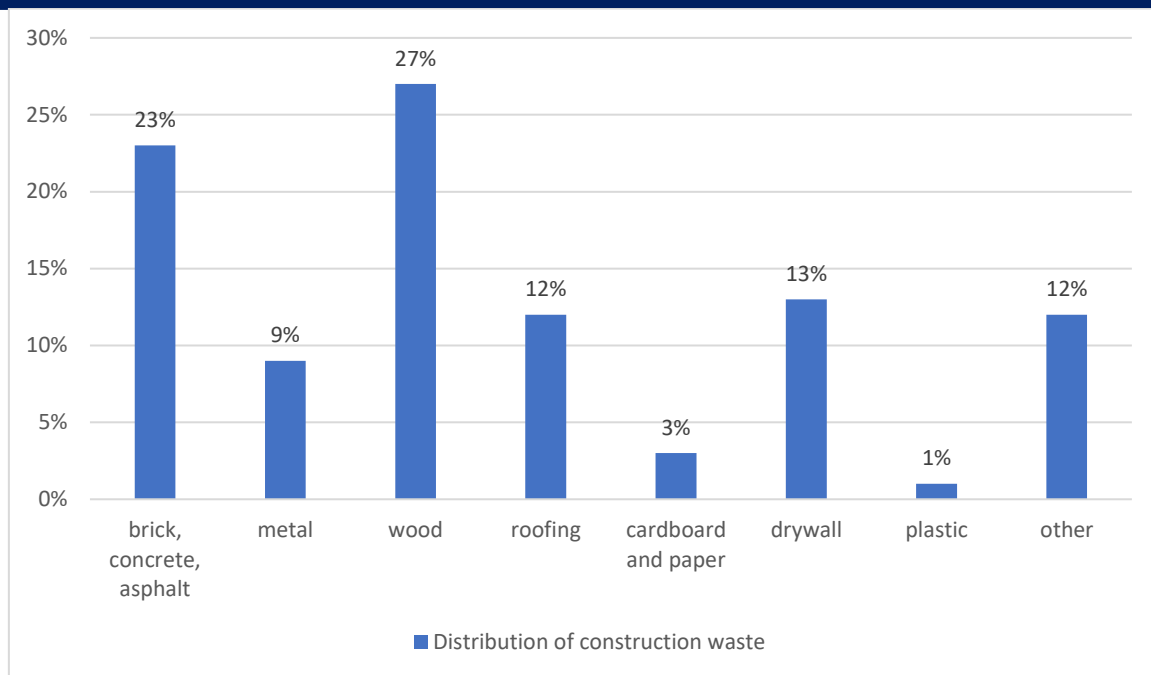
Technogenic waste has a negative impact on atmospheric air, soil, and water, and the main danger lies in their toxicity and a significant decomposition time in an aesthetic way. The following five classes of hazards are distinguished: I – extremely hazardous waste; II - highly hazardous waste; III - moderately hazardous waste; IV - low-hazardous waste; V-practical non-hazardous waste.

In general, in Uzbekistan, 60-80% of the stored waste belongs to construction, and in most cases have IV-V hazard classes. Any activity of the construction industry leads to the formation of a large number of different types of garbage, including concrete, rebar, brick, natural stone, various insulating materials, electrical wires, water and sewer pipes, wood, scrap metal, cement, glass, finishing materials and packaging materials (boxes, cans, films, pallets). Their percentage distribution for 2020 is shown in Figure 1.

Currently, only 5-10% of construction waste is recycled, the history of recycling is mainly scrap reinforced concrete and bricks, since their processing is one of the simplest and does not need complex production processes.

The construction industry in Uzbekistan is fearlessly growing and developing, along with it there is a growing need for building materials, a large amount of various types of raw materials, energy, water and other resources, the receipt of which is really poured into the natural environment.





**Figure 1. Distribution of construction waste**

With the growth of construction, the volumes of construction waste that appear at all stages of construction, reconstruction, demolition of buildings and armaments, as well as in the production of building materials, are undoubtedly growing.

To reduce the negative consequences of construction activities, in particular, the formation of new construction waste and demolition and dismantling waste, a program for their collection, disposal and depreciation should be developed.

The problems of recycling and recycling of construction routes are relevant not only in the republics, but also in all civilized countries.

For example, by increasing the resistance of the release of construction debris over the cost of its disposal, the countries of North America and Europe thereby motivated construction companies to use construction routes to obtain secondary cheese, rather than accumulate it at landfills. Materials from recycled waste are much cheaper, and much of their honor is returned to the construction industry.

In accordance with the legislation, the procedure for handling favorite industrial waste is carried out in strict compliance with the rules and can be carried out at the favorite stage of production, as well as look out at the subsequent image:

- sorting;

- Temporary power supply;
- Transportation;
- pressing and loading on large vehicles;
- processing or elimination of taps.

There are three main ways of handling construction waste:

- roasting is a method that has the most negative behavior with the release of toxic properties in the atmosphere;
- processing, or so-called processing, with the use of specialized equipment and innovative technologies;
- burial of the remaining unused honor in equipped landfills and landfills.

At the moment, burial is the most popular method of processing with construction waste. So this method of disposal leads to an increase in the amount of garbage, polluting natural resources, a decrease in the amount of agricultural land and survival territories. Unlike the other two types, recycling is considered to be a found ecological and economic method of disposal. Using modern equipment, various solid materials, such as crushed stone, brick, clay, can be crushed into fractions and used for the manufacture of concrete and drainage systems. Crushed old asphalt pavement is used for construction and major repairs of roads.

Roofing and insulation materials acquire a "new life" with the processing and further production of bitumen-polymer mastics and bitumen-polymer powders from them. Reinforcement, "extracted" during the breeding of reinforced concrete structures, is also widely used in construction in huge quantities.

The main means of the recycling method appear:

- ❖ reduction of the number of landfills of waste disposal;
- ❖ significant reduction of extracted natural resources;
- ❖ obtaining cheaper materials during recycling;
- ❖ reduction of costs during transportation of materials from remote sources of raw materials to the site of construction, reconstruction, as well as during transportation to the burial site.

Since then, the use of recycling has been limited by the following factors:

- since the process of accumulation of recyclable waste does not occur continuously, the operational industrial institution of recycling becomes more rational;
- the waste received during the dismantling of buildings and weapons is often heterogeneous;
- Secondary building materials accept lower quality;
- lack of evidence of the impact of secondary building materials on the environment;
- the absence of agreed technical conditions for waste recycling.

Due to the incompatibility of the legislative framework capable of coordinating relations in the field of construction waste management and the lack of regulation of the waste disposal process with the parties of state structures, the development of the processing industry in Uzbekistan appears to be a problem and requires outside attention. Today, in region, the Committee for Environmental Protection, Environmental Protection and Environmental Safety (dal - KPOOS) has on behalf of the state control over the operation and placement of construction holidays.

In conditions of dense residential development, the limiting factor of the widespread use of crushing plants is the increased level of forest from their operation, as well as the formation of a significant amount of saw.

Due to the lack of the necessary number of processing enterprises, construction waste is forced to be buried in landfills with limited placement and limited territory, which adversely affects the stability of the environment.

In order to solve environmental problems in regions, the administration should take this issue to a more global level: it is necessary to develop low-waste and non-waste technologies, carry out direct environmental protection measures, create conditions that motivate the enterprise to implement environmental management and establish the effectiveness of the regulatory framework.

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**FINANCING OF INVESTMENT ACTIVITIES IN UZBEKISTAN:  
STATUS AND PROSPECTS**

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***Abstract***

*Today, the presence of problems with the financing of investments makes it necessary to improve the financial system of investment activities in the country. Accordingly, the study presents proposals and recommendations on the feasibility of a modern system of financing investment activities in Uzbekistan, coverage of the economic mechanism of the state at the macroeconomic level, as well as improving the mechanism for financing investment activities.*

***Key words***

*Investment, finance, financing, investment activity, investment policy, economic mechanism, financial institutions.*

It is known that comprehensive measures are being taken in our country to further intensify the investment policy aimed at deep processing of local raw materials, modernization and organization of high-tech industries that produce finished products with high added value.

The system of financing investment activity in Uzbekistan includes: the infrastructure of financial and credit organizations and financial services; sources and methods of financing; directions and objects of financing, as well as goals, principles and conditions of financing.

Modern internal developments in the field of methods for evaluating the effectiveness of investments are based on principles widely used in world practice.

These include: lifelong project evaluation; comparison of conditions for comparing different projects (project options); assessment of return on investment in terms of cash flow for projects; taking into account the time factor; the principle of

positivity and maximum efficiency; choice of discount rate; taking into account the presence of different participants in the project and their incompatibility with their interests; taking into account the most important consequences of the project; comparison "with the project" and "without the project"; multi-stage assessment; taking into account the influence of inflation; taking into account the effects of uncertainty and risks; taking into account the need for working capital and others.

Today, Uzbekistan needs to develop a new mechanism for monitoring investment projects, where each ongoing project should be monitored, and its monitoring mechanism should include:

1. Translation of market prices into accounting prices;
2. Monetization of non-economic effects;
3. Introduction of additional indirect effects;
4. Update cost-benefit estimates;
5. Calculation of indicators of economic efficiency.

The placement of capital in any country by a foreign investor is highly dependent on the risk of the country, which to some extent exceeds that of developing countries.

Therefore, it is important for foreign investors to be aware of this level of risk or uncertainty. Because at any stage of its implementation, certain tools can be developed to evaluate the effectiveness of investment projects.

Even in developed countries such as Norway, the UK and Denmark, there are mechanisms for evaluating large investment projects at the national or sectoral level, despite the low level of risk in the country.

Full implementation of such a mechanism in Uzbekistan, including from the aforementioned position of a foreign investor, on the other hand, to understand the mechanism of complex foreign investment in terms of timing, scale, risks and other aspects of project implementation in the country; can be mutually beneficial.

In general, monitoring knows where the project will be at any stage in relation to the respective goals and results, and signals problems that may arise as a result. The introduction of such a monitoring mechanism will improve the investment climate in

Uzbekistan by further increasing the transparency, efficiency and sustainability of ongoing projects.

Based on the study, the following proposals can be systematized in order to improve the mechanism for financing investment activities in Uzbekistan:

1. It is necessary to develop cardinal measures to turn low-profit and unprofitable enterprises in the regions into economically active enterprises by accelerating their financial recovery or simplifying bankruptcy procedures, as well as to increase the activity of banks and credit organizations in financing investment activities.

2. Insufficient development of the investment infrastructure in assessing the effectiveness of investment projects and the cost of post-project maintenance in the formation of an investment program should stimulate the activities of banks, investment funds, insurance and leasing companies and effectively participate in the implementation of investment projects, inconsistency of investment proposals and feasibility studies of the project establishment of permanent assistance to local governments in the development of investment projects by commercial banks and other institutions.

The study revealed the following problems of financing investment activities in the country today: problems of infrastructure;

the problem of uniform placement of joint ventures across the regions of the country; insufficient credit collateral to finance investment projects;

commercial banks perform functions that are not related to financial institutions; the lack of development of modern market mechanisms for the active transfer of capital from one sector to another, including through the stock market, slows down this process;

in the secondary securities market of our country there are such problems as the lack of highly liquid securities in foreign currency and commercial securities of solvent issuers, as well as very weak integration of our national securities market into the world market and others.

Uzbekistan also has a unique experience in financing investment activities. However, the existing problems do not allow to show a sufficiently positive impact of investment activity on the economic development of the country.



3. Development of proposals for the consolidation of investment expenditures financed from the budgets of the budget system, including extra-budgetary funds, into the investment program and the state budget.

In conclusion, one of the conditions for attracting funds to finance the investment activities of enterprises is to increase the natural inflow of investments, taking into account the experience gained in the field of investment cooperation.

To do this, it is necessary to take the necessary measures to increase the attractiveness of the investment climate and the internal investment opportunities of enterprises.

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MAIN DIRECTIONS OF DEVELOPMENT OF THE DIGITAL ECONOMY  
IN THE NEW UZBEKISTAN

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**Abstract:** *This paper discusses the issues of digitalization of various spheres and sectors of the economy specified in the Digital Uzbekistan - 2030 program, such as the provision of public services, the widespread introduction of digital technologies in the real sector of the economy, healthcare and other areas, improving the technical infrastructure of e-government; personnel management, development of human capital and improvement of the system of training and retraining of personnel; digitalization and development of the information system, ensuring openness and transparency of state bodies and organizations and upcoming tasks in this area.*

**Keywords:** *Economy, public services, real sector, communication, e-government, digitalization, strategy, principles.*

Economic and social development of the country with the modernization of the economy, the acceleration of innovation processes and the market. It is important to increase production efficiency in the economy important. In all sectors of the economy, the main focus is on the rational and efficient use of material, labor and financial resources, inefficient should focus on eliminating costs and losses. Such the role of the accounting system in carrying out large-scale work is immeasurable. Because, account system basic information for efficient use of economic resources source. Due to the ongoing economic reforms in the country, the modernization of production and technical and technological re-equipment, a system of accounting with a separate direction and appearance has begun to take shape.

The accounting system of the Republic of Uzbekistan consists of operational (operational), statistical and accounting accounts. In today's era of continuous development of the world community, one of the key aspects in determining the development strategy of the country remains the transition of the economy to a fully digital system.

Our government is constantly taking measures in this direction. In his address to the Oliy Majlis on January 25, 2020, the President of the Republic of Uzbekistan highlighted the most important priorities and stressed the need to develop a "National Concept of Digital Economy", which provides for the modernization of all sectors of the economy on the basis of digital technologies. In this regard, the President also adopted a number of decrees and resolutions [2,3].

5624 of the President of the Republic of Uzbekistan dated January 10, 2019 In accordance with the Decree "On measures to further improve the activities of the National Agency for Project Management under the President of the Republic of Uzbekistan", the Center for e-Government and Digital Economy Project Management was established under the National Agency for Project Management under the President of the Republic of Uzbekistan.

The main activities of the Center are the development of "e-government" and the development of future strategic directions, a single approach, mechanism and stages of programs related to projects in the field of information and communication technologies in the framework of the "Digital Uzbekistan-2030" [4].

The term "digital economy" was first used in 1995 by Nicholas Negroponte, an American scientist and professor at the University of Massachusetts.

The term originated as a result of comparing the new economy with the old in the development of information and communication technologies.

The digital economy is not any other economy that has to be created from scratch. This means transforming the existing economy into a new system by creating new technologies, platforms and business models and introducing them into everyday life. Its symptoms are: high level of automation; electronic document exchange; electronic integration of accounting and management systems; electronic databases; Availability of CRM (customer interaction system); corporate networks [5]. "Digital economy", in other words, production key factors (supply of equipment, raw materials, production technology, storage, sale of inventories, sale of goods and services delivery, etc.) information about electronic numbers is a seemingly representative economic activity. So, the digital economy electronic, which is an integral part of production and management processes technology-assisted data exchange. With its help, production and management activities are analyzed in the traditional way, and based on its results, decisions are made to increase efficiency [6].

Global scientific and technological research, systemic reforms by governments, analysis and synthesis of behaviors related to the constant variability of consumer needs in large multinational companies, as well as the growing role of content in the liberalization of information exchange and other areas of digital society creates a wide range of opportunities for marketing activities in enterprises.

According to international experts, traditional marketing methods do not adequately meet the demands of today's changing market. The existence of these problems requires systematic research aimed at the introduction of innovative marketing technologies and methods in the world market of information and communication services.

As you know, paragraph 138 of the State Program "Year of Science, Education and Development of the Digital Economy" provided for the adoption of the Decree of the President of the Republic of Uzbekistan on the development of the program "Digital Uzbekistan - 2030" the real sector of the economy, health care, the state cadastre and other areas, issues of approving the program "Digital Uzbekistan - 2030"; improving the technical infrastructure of e-government; development of human capital and improvement of the system of training and retraining of personnel; digitalization of public services and development of the information ecosystem; ensuring openness and transparency of the activities of state bodies and organizations, increasing the level of electronic participation of the population; ensuring information security, protecting information resources and systems; appointment of a single competent authority in the field of digital economy and e-government, as well as issues of introducing the position of deputy head for digital technologies and e-government in the Government, ministries and departments, local public administration<sup>1</sup>.

The implementation of this paragraph is provided by the Decree of the President of the Republic of Uzbekistan dated October 5, 2020 No. PF-6079 "On approval of the Strategy" Digital Uzbekistan - 2030 "and measures for its effective implementation" and on its basis:

The Strategy "Digital Uzbekistan - 2030" and "Roadmap" for its implementation, as well as programs for digital transformation of regions and industries for 2020-2022 were approved. At the same time, as part of the digital

<sup>1</sup> Address of the President of the Republic of Uzbekistan Shavkat Mirziyoyev to the Oliy Majlis. December 28, 2018. - [www.uza.uz](http://www.uza.uz).

transformation of regions, spheres and industries in 2020-2022, it is planned to implement:

- The level of connection of settlements to the Internet, including ports of broadband access, will be increased to 2.5 million, from 78% to 95% due to the construction of 20,000 kilometers of fiber-optic lines and the development of mobile communication networks;
- Implementation of more than 400 information systems, electronic services and other software products in various areas of socio-economic development of regions;
- Training in the basics of computer programming will be organized for 587 thousand people, including 500 thousand young people within the framework of the "One Million Programmers" project;
- More than 280 information systems and software products for the automation of management, production and logistics processes will be implemented at enterprises of the real sector of the economy;
- In order to increase digital literacy and skills of governors, government officials and regional officials, training them in information technology and information security, appropriate higher educational institutions will be created, 12,000 of which will be trained in information technology.

Also, according to the "roadmap" for the implementation of the "Digital Uzbekistan-2030" strategy, the following projects are planned to be implemented in 2020-2022:

on the development of electronic government: from January 1, 2021, a personal account was formed as a pilot project to establish electronic interaction with government bodies and organizations when issuing an identity card to an individual within the framework of the Digital Tashkent comprehensive program; from July 1, 2021 on the Open Data Portal of the Republic of Uzbekistan, online placement of statistics on public procurement, registration of patents, medicines and medical devices, public transport, land use and other state statistics by state bodies and organizations; from August 1, 2021, individuals and legal entities will be able to pay all established state duties, fees, fines and other mandatory payments online using electronic payment systems;

on the development of the digital industry: from November 1, 2020, trainings on information technology, development and implementation of hardware and software, robotics, export of information services via the Internet, as well as data storage and processing are being held in Uzbekistan; by January 1, 2022, the digital transformation of commercial banks was completed by providing a wide range of online services, including the sale of remote loan products, the opening of deposits and accounts;

on the development of digital education: from January 1, 2021, a system was introduced that covers up to 50% of the cost of obtaining international IT certificates by citizens in the field of system management, database and cloud platform management, information security and other in-demand areas; from September 1, 2021, digital training centers for the population, especially youth and women, have been opened in each district and city on the basis of existing infrastructure facilities; by the end of 2023, more than 200 schools with in-depth study of computer science and information technology will be gradually opened in all districts and cities on the basis of existing educational institutions for the creative development of students and teaching the basics of programming and working with a computer;

on the development of digital infrastructure: by the end of 2022, each settlement will have access to the Internet with a data transfer rate of at least 10 Mbit / s; By January 1, 2022, all popular tourist destinations are provided with high-speed Internet.

In the years indicated by the Decree, it is planned to introduce more than 400 information systems, electronic services and other software products within the framework of digital transformation programs for regions and industries, including in various areas of socio-economic development of regions.

It should be noted that a number of proposals developed by the Development Strategy Center in paragraph 2.5 of the "Digital Uzbekistan - 2030" Strategy, adopted by the Presidential Decree "On approval of the "Digital Uzbekistan - 2030 Strategy", were also taken into account. In particular: the introduction and development of distance, online and virtual learning technologies in the field of information technology, the development of platforms for online courses; creation of mechanisms for public-private partnerships with the involvement of large IT enterprises in the

development of digital skills among the population; implementation of the "Million Programmers" project for the training of highly qualified specialists among the population; development and continuous improvement of the mechanism for raising the qualifications and competencies of civil servants in the field of information and communication technologies; development of mechanisms for assessing skills in the use of digital technologies, taking into account the following aspects: information literacy; computer literacy; communication literacy; formation of a positive attitude towards technological innovation; regular changes in the main curriculum of general education schools in order to improve the overall level of digital technology use by students; holding republican contests and events (contests, olympiads, etc.), contributing to the creation of ideas and new technologies; development of human capital, including the development of specialized education and the promotion of IT professions, improving the institutional environment for IT enterprises and reducing administrative barriers. In a word, this Decree plays an important role in ensuring the effectiveness of efforts in our country for the active development of the digital economy, the widespread introduction of modern information and communication technologies in all sectors and industries, especially in public administration, education, healthcare and agriculture.

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**THE ROLE OF BANKING AND ACCOUNTING IN THE DEVELOPMENT OF SMALL BUSINESS AND ENTREPRENEURSHIP**

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**Abstract.** *This article analyzes the role of banks in the development of small business and private entrepreneurship and the effective functioning of the accounting department. The main activities of small businesses and private entrepreneurship are closely linked with banks, which are engaged in the purchase of raw materials, production of goods, payment for services, wages, various categories of enterprises. , economic relations with companies and other legal entities, ie all types of payments for profits and income, transport, utilities through banks, respectively, loans and other settlements both through banks.*

**Keywords:** *small business, private entrepreneurship, accounting, auditing, banking, online banking system, raw materials, delivery, efficiency, development, economic growth*

As a result of the transition to a market economy, a new fiscal policy has been developed in the country and is being implemented in real life by the government. The beginning of every economic activity in the society develops and improves due to the close financial support of the state. In particular, special attention will be paid to increasing the role of banks in supporting small business and private entrepreneurship.

The main activities of small businesses and private entrepreneurship are closely linked with banks, which are engaged in the purchase of raw materials, manufactured goods, payment for services, wages, various categories of enterprises. , economic relations with firms and other legal entities, ie taxes on profits and income, transportation, all types of payments for utilities through banks, respectively, loans and other settlements both through banks.

It should be noted that before the independence of our country, the various economic relations with banks and banks were not very transparent. It is well known today that all the activities of small businesses and private enterprises, which are an important part of the global economy, are connected with banks. Therefore, in developed countries, such as the United States, the banking system is highly developed, and in the active economic activity of business, banks provide services to enterprises of all forms of ownership.

Today, there are 30 banks in the country, of which 3 are state-owned banks, 13 are joint-stock commercial banks, 9 are private banks, and 5 are banks with foreign capital.

The total current liquidity of the banking system is 10 times higher than the current liabilities of banks on external payments. In other words, strong protection of the banking system of the republic has been created. As a result of strengthening the banking system and increasing public confidence in it, the volume of deposits is growing significantly. Last year alone, the population's deposits increased 1.7 times.

Between 2017 and 2021, the income of the population increased more than 16 times. In recent years, the structure of banks' loan portfolios has changed dramatically. If in 2017, about 54% of the loan portfolio was formed due to external debt, in 2020, 84% of the total loan portfolio of our banks was formed from domestic sources.

In today's context, such a positive change is crucial for the future development of our economy.

It should be noted that foreign loans are often attracted for a long time, only to finance investment projects to modernize strategic sectors of the economy, to support small businesses and private entrepreneurship.

One of the important aspects of support of small business and private entrepreneurship by commercial banks is the measure of the President of the Republic of Uzbekistan dated November 10, 2018 No. 4051 to further expand the activities of the joint-stock commercial bank "Microcreditbank" to support business entities In accordance with the Decree "On measures":

- the maximum rate on preferential microcredits in the amount of 200 times the minimum wage for a period of up to 18 months to start a business from 5% to 3% per annum;

- 100 to 50 percent of the refinancing rate by the Central Bank on microcredits in the amount of 500 times the minimum wage for a period of up to 24 months to expand the activities of small businesses and replenish working capital;

- The maximum rate for preferential micro-leasing services for small businesses in the amount of 2,000 times the minimum wage for up to 3 years was reduced from 7% to 5% per annum.

The establishment of such significant incentives in lending leads to an increase in the demand for loans by the industry and, at the same time, the volume of loans provided to them from year to year.

The share of banks' loans for investment purposes in the total loan portfolio was about 70%, and the total volume of loans to the real sector of our economy in 2019 increased 14 times compared to 2000.

Over the past decade, domestic resources directed to lending to the real sector of the economy have increased more than 25 times. In 2019, the share of long-term loans in total bank loans was 78.3%.

From the above considerations, it is clear that the ongoing strengthening of the banking and financial sector of the country, the strengthening of financial support for economic reforms, provides a basis for comprehensive support of the real sector of the economy and sustainable economic growth. .

Banking operations consist of active and passive operations, and passive operations are aimed at mobilizing funds in a certain direction. Banks benefit from passive operations by mobilizing savings and temporarily idle funds. Active

operations are related to lending operations of various types and are classified according to the following elements:

- short-term, medium-term and long-term loans.
- Small, medium and large loans are issued to each client, taking into account their individual and financial capabilities;
- There are some types of loans that require a special guarantee and provide collateral.
- issuance of loans by type of government, commercial, international and other types.
- Issuance of loans to legal entities and individuals by type.

Loans for temporary use, consumption, debt repayment, export and import operations.

In today's market economy, small businesses and private entrepreneurs deal with a variety of banks. This process is more complex than the previous ones, as the previous processes were mainly characterized by the fact that the bank operated through enterprises. Due to the formation of entrepreneurial activity, banks mobilize their funds to carry out operations related to the activities of private property owners and small businesses.

The fact that entrepreneurs are given a lot of freedom in their transactions with banks is reflected in the fact that a private entrepreneur has the right to keep their funds in their accounts in various banks of Uzbekistan, to carry out credit and cash operations. Settlements can be made by transferring money in accordance with applicable laws and agreements in the relationship between banks and entrepreneurs. Banks guarantee the safekeeping of cash, securities and other important documents in the entrepreneur's account. Banks are required to carry out the following operations within 12-13 hours after the receipt of the order letter by the owner of the money in the transactions with entrepreneurs and customers.

Transfers to the account of property owners must be made within 4 working days in the city, 5 working days in the region, and 10 working days in the country. If the terms of this law are violated, the bank will pay a penalty to the customer at an

annual interest rate. The Bank carries out operations related to them at the request of customers. Banks notify entrepreneurs of changes in the rules and regulations introduced by the Central Bank of the Republic, in particular, changes in non-cash transactions on accounts. The bank pays the customer a penalty of 3% of the amount transferred for each day, as a culprit for late transfer, incorrect transfer of money. If the account is lost due to the fault of the bank, the customer will be fined 3% of the amount specified in the document for each day.

Lending operations between entrepreneurs and the bank are carried out on the basis of an agreement signed between the two parties. In order to successfully carry out operations, every entrepreneur must thoroughly study the laws of the Republic of Uzbekistan "On Banks and Banking".

It is well known that in a market economy, the life and economic activity of businesses are linked to foreign exchange transactions. Entrepreneurs have to conduct operations in both national and foreign currencies in foreign economic activity. In particular, foreign trade processes are directly related to foreign exchange transactions.

Currency transactions are carried out by comparing the exchange rates of the two countries at the exchange rate. In the international arena, the US dollar is accepted as the basis for currency quotes. Other currencies are pegged to the US dollar. The dollar will not last forever, it will fluctuate. This change can happen every day. Therefore, banks calculate the exchange rate at the time the bank starts or closes. There is a weekly press release on exchange rate fluctuations. This information is important in the economic activities of entrepreneurs. Credit, securities, and the purchase and sale of foreign currency for profit are the mainstays of foreign exchange transactions. In the process of doing business, private property owners can freely buy foreign currency, gaining the right to have a foreign currency account. Entrepreneurs also have the right to freely purchase currency to trade with foreign firms and entrepreneurs.

In general, the market economy creates legal opportunities for the movement of currencies of developed countries in the domestic market. Entrepreneurs will be able to effectively use their currency-related activities, purchase new equipment and modern technology in foreign currency, improve the quality of services in production and service enterprises, produce quality goods in the manufacturing sector and reap huge profits from its sale.

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**EXPERIENCE OF FOREIGN COUNTRIES OF FINANCING INNOVATIVE AND INVESTMENT ACTIVITIES OF ENTREPRENEURSHIP IN UZBEKISTAN**

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**Abstract:** *It is known that developed countries carry out international capital movements mainly by stimulating them at the national and international levels. State policy on capital loans, portfolio investments and other forms is carried out in order to remove all restrictions on their movement. In this regard, the paper discusses the importance and necessity of using foreign experience in financing investment activities in our country, and analyzes some aspects of investment and financial policies of different countries.*

**Keywords:** *Capital, government policy, investment, investment policy, investment activity, financial policy.*

In addition to the state guarantee of investments, the investment climate in Uzbekistan is provided by legislation that defines measures to protect the rights and interests of investors, especially foreign investors. The investment climate created in Uzbekistan, in addition to ensuring further economic development and a stable standard of living, will allow the country to compete for foreign capital.

The study of the best world practices in financing investment activities will play an important role in the further development of domestic practice in this area. In international statistics, there are different approaches to the inclusion of investments in the form of foreign direct investment.

The share of equity capital owned by them is used as an indicator of the right to control foreign investors.

This figure is 10 percent in the US, about 20 percent in France and the UK, 25 to 50 percent in Germany, and 49 percent in Uzbekistan [4]. The uneven distribution of investment is also characteristic of other groups. In developing countries, 3/5 is in Asia, 1/4 is in Latin America, and the rest is in Africa.

In the United States, local governments do not have sufficient capacity to regulate foreign investors.

One of the important mechanisms for attracting foreign investment in the United States is their overseas offices. They help attract investment in a particular state.

The program to encourage foreign investment in certain US states includes: tax incentives; allocation of loans and subsidies below market rates for the construction or modernization of an enterprise by a foreign investor; vocational training and employment assistance; improvement of the transport network and others.

In Japan, investment outflows are growing rapidly and it may well strengthen its position in the world in terms of the size of its overseas economy. Asian countries (with the exception of Japan) in the coming years will overtake Western Europe in attracting foreign direct investment.

According to the international advisory group Arthur Andersen, the most promising stimulus for investment abroad is not lower production costs, but greater access to foreign markets. In various sectors of the economy, the function of regulation is used by strengthening or weakening the processes of capital accumulation, expanding or reducing the effective demand of the population.

In many countries of the world, the regulatory function of taxes is effectively used to stimulate investment activity. Tax incentives are also widely applied to research and development costs.

In some countries, the tax credit is deducted from corporate income tax by deducting a certain percentage of the increase in the costs of research and development of these companies compared to the average annual rates for the previous year or base period (20% in the US 50% in France, 20% in Japan, Canada 100 percent or more).

The encouragement of this activity plays an important role in the state regulation of investment activity in foreign countries.

Deflation has a negative impact on the process of investment activity in the country, since the purchasing power of domestic consumers is low, so the implementation of created products and services will be slow, which will prolong the payback period of investments.

Germany is one of the countries in the world in terms of production and economic development. It accounts for 7-8% of global GDP and 27-28% of EU gross domestic product. The country has a single business environment for foreign and domestic investors, which means that both investors benefit from government economic support programs: grants, guarantees and benefits. State support for investment activities through taxes is one of the most common methods in the world.

Taxation of companies in this country consists of three components:

1. Corporations, i.e. limited liability companies (GmbH) and joint stock companies (AG), are subject to corporate income tax. The founders of corporations pay personal income tax.

2. The tax is added to the additional, corporate and individual income tax and is set at 5.5 percent of the income tax rate.

3. All commercial transactions are subject to commercial tax and are established by local governments.

In recent years, it has supported the investment activity of the economy by reducing the tax rate in order to increase the competitiveness of the economy [3]. International organizations also play an important role in financing investment activities. The "Voluntary Code" for Foreign Investment, developed under the Asia-Pacific Cooperation, sets out the following investment principles that may be used by the World Trade Organization in the future:

- transparency and non-discriminatory approach to donor countries;
- national treatment for foreign investors, as well as the compatibility of investment incentives with health, safety and environmental protection;
- minimization of restrictions on investment, limiting the growth of trade and capital investments;
- ensuring registration and conversion and the abolition of double taxation; removing barriers to capital outflow;
- observance by the foreign investor of the national legislation, administrative procedures and rules of the country;
- allow foreign specialists to leave the country and temporarily visit the country in connection with the implementation of an investment project, etc. [1].

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**SERVICES FOR SMALL BUSINESSES AND ENTREPRENEURS**

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**Abstract:** *this article provides an analysis of services in small business and private entrepreneurship, its importance, development and quality. The most common types of services in small business and private entrepreneurship include banking, auditing, accounting and logistics services. In order to use these services, first of all, the state must have a good infrastructure for production and services. In recent years, the infrastructure has been developing rapidly. This can be explained by a number of factors. In particular, the growth rate of production is ahead of the development of infrastructure, which also affects the development of the economy*

**Keywords:** *small business, private entrepreneurship, accounting, auditing, banking, logistics, online banking system, raw materials, delivery, efficiency, development, economic growth*

The effective operation and development of small businesses in the country largely depends on the conditions created for them. Among the conditions that create favourable conditions for the development of small business, it is necessary to single out infrastructure services.

As production expands in small businesses, their demand for a range of services will increase, including maintenance, logistics, product storage, processing and sales, communications and communications, consulting and information. This is because granting the status of a legal entity to small businesses is not the end of the story. Their full functioning can be imagined only through well-organized infrastructure units. Infrastructure is an integral part of the economic system, which creates the necessary conditions for the smooth operation of production.

The word "infrastructure" translates from Latin to mean "outside the structure." From an economic point of view, the following explanation is more in line with the essence of infrastructure: "a specific set of labour processes in the creation of goods and services that provide the exchange of activities in the process of human life and social production."

In recent years, the infrastructure has been developing rapidly. This can be explained by a number of factors. In particular, the growth rate of production is ahead of the development of infrastructure, which also affects the development of the economy.

Infrastructure is a very broad concept, which is, first of all, related to the creation of services that provide comprehensive services to the production process. The development of infrastructure units will greatly benefit small businesses, as such units will free them from the work associated with the provision of production services and allow them to focus their efforts on their core business.

The conditions created by the infrastructure can be categorized as follows:

- Logistics and sales of finished products, information collection and processing, accounting services that directly serve the production process. Technological, management consulting services, etc.;
- Conditions for the reproduction of the workforce to support the health, education and training of workers and employees, recreation.

Until now, infrastructure has been considered to be a combination of production and social infrastructure. With the advent of a market-based economic system, the scope of production infrastructure has expanded, and the terms "market infrastructure" and "institutional infrastructure" have come into use.

Market infrastructure includes industries that directly serve the production process. It includes freight transport, electricity, gas and water supply, warehousing, communications, information, logistics, transportation, storage and processing, maintenance, marketing and advertising, information services such as consulting, auditing, finance and credit, and investment.

Social infrastructure serves to create normal labour activity and reproduction of the labour force for workers and employees in the production process, as well as to meet the demand of entrepreneurs for various types of household services.

Institutional infrastructure includes activities that support and regulate the optimal macroeconomic ratios of economic development. It includes governmental and non-governmental governing bodies that regulate the economy, and others.

The formation of market infrastructure that regulates and supports small and medium-sized businesses is important. This is confirmed by the experience of highly developed countries. In the United States, for example, the Small and Medium Business Administration (SME) was established in 1953 and is responsible for supporting all small and medium-sized businesses (financial assistance, technical and consulting services, assistance in obtaining government orders, etc.).

The KBM consists of three phases, with headquarters in the U.S. capital, 10 regional offices, and more than 100 local offices. They have an extensive network across the country and work closely with local governments, colleges, universities, businesses and community organizations. Other agencies that support small and medium-sized businesses in the United States include the Department of the Interior, the Department of Housing and Urban Development, the National Science Foundation, the Farm Administration, and small business development centers and institutes. more than 2,700 federal agencies, such as the Chamber of Commerce.

In recent years, the process of active formation of market infrastructure has begun in the country. As a result of this process, brokerage offices, small wholesale and retail trade structures, leasing, consulting companies, information and consulting centers, engineering, auditing firms, insurance companies, transport and forwarding companies, information and advertising bureaus, which provide services to small businesses, and various other infrastructure systems operate.

The business school is a structure that trains, retrains and retrains entrepreneurs, heads of small businesses, specialists for small businesses, the unemployed, other citizens who want to start their own business, employees responsible for the development of small business.

The training centers are a structure that implements a large-scale program of support for small business and training for a market economy.

Business incubators are structures that place specially selected small businesses on their premises and provide them with consulting, training and office services.



A socio-practical center is a structure that is usually set up at employment centers to create new jobs by developing small businesses among the unemployed and the unemployed.

Techno park is a structure created to use the scientific potential and commercialize the developed technologies through the creation and development of small innovative enterprises in its territory.

The business center is a structure that provides services to entrepreneurs and business people.

Economic activity related to the provision of consulting services to their clients and the examination of technical projects by firms specializing in the provision of business services to the consulting industry.

An audit firm is an institution that conducts a comprehensive audit of the financial and economic activities of firms in different areas, identifying their market and business opportunities.

An insurance company is an organization that acts as an insurer, that is, an obligation to indemnify the insured in the event of an insured event.

As a result, the results of small business and private entrepreneurship as an important factor in creating new jobs in the country, increasing incomes and welfare of the population are becoming significant.

Infrastructure that serves small businesses still does not fully meet the growing needs and requirements of small businesses.

First, small business development is hampered by a lack of knowledge and experience of entrepreneurs, as well as imperfect information and consulting systems. In many cases, local entrepreneurs do not receive the necessary organizational and methodological assistance. Improving the functions of advisory centers, providing practical assistance to entrepreneurs, ie in the development of constituent documents, business plans, loan applications, organization of accounting and reporting, auditing and other consulting services is to facilitate.

Second, it is necessary to expand the access of small businesses to material and technical resources, raw materials and supplies, leasing, small wholesale trade and services.

Third, it is necessary to eliminate a number of problems in access to foreign markets, such as registration of export contracts and registration with the customs authorities, assistance in the sale of goods and services abroad.

Fourth, to expand the opportunities for small businesses to use raw materials, sell finished products, expand the system of small wholesale markets, fairs, logistics, rent, storage, transportation services at wholesale markets. It is necessary to improve trade mechanisms through the organization of trade.

It is well known that in a market economy, the lives and economic activities of businesses are linked to foreign exchange transactions. Entrepreneurs have to conduct operations in both national and foreign currencies in foreign economic activity. In particular, foreign trade processes are directly related to foreign exchange transactions.

Currency transactions are carried out by comparing the exchange rates of the two countries at the exchange rate. In the international arena, the US dollar is accepted as the basis for currency quotes. Other currencies are pegged to the US dollar. The dollar will not last forever, it will fluctuate. This change can happen every day. Therefore, banks calculate the exchange rate at the time the bank starts or closes. There is a weekly press release on exchange rate fluctuations. This information is important in the economic activities of entrepreneurs. Credit, securities, and the purchase and sale of foreign currency for profit are the mainstays of foreign exchange transactions. In the process of doing business, private property owners can freely buy foreign currency, gaining the right to have a foreign currency account. Entrepreneurs also have the right to freely purchase currency to trade with foreign firms and entrepreneurs.

In general, the market economy creates legal opportunities for the movement of currencies of developed countries in the domestic market. Entrepreneurs will be able to effectively use their currency-related activities, purchase new equipment and modern technology in foreign currency, improve the quality of services in production and service enterprises, produce quality goods in the manufacturing sector and reap huge profits from its sale.

It is impossible to do business without sufficient and accurate information. This information will be a set of information and messages necessary for the business. Information is a form of communication between producers, sellers and buyers.

Businesses mainly work with a variety of information, including statistical, financial, operational, organizational information, order information, accounting, marketing information, supply, personnel, information and other information. The information is further divided into internal and external, programmatic and normative information.

Internal information consists of internal materials of a small enterprise or trade organization and includes information on the activities of the enterprise, its technical and economic indicators, the amount of material and labor costs, cash flows, receivables and payables.

External information represents relationships with manufacturers and consumers, government agencies, banks, competitors, and other organizations. It consists of external messages about the terms of sale and purchase of goods.

Information on time of use is divided into operational, periodic and long-term, primary and secondary information on the degree of change.

In business, economic information plays a leading role because it reflects the relationships in the production of goods, the distribution of material wealth, exchange, and consumption.

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**IMMUNOLOGICAL FEATURES OF INFECTIOUS MONONUCLEOSIS OF EPSTEIN-BARR VIRAL ETIOLOGY IN CHILDREN**

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**Relevance.** One of the urgent problems of modern medicine is the high incidence of herpesvirus infections. [1,5,2] The variety of clinical manifestations, the characteristics of pathogens, the possibility of their spread by all known ways allowed the WHO Regional Office for Europe to classify herpes infections as a group of diseases that determine the future of infectious pathology.[3,4,6] Herpes viruses are quite widespread in the human population, they can affect almost all organs and systems of the body, causing latent, acute, chronic and slow forms of infection.

**The aim** of the study was to study the immunological features of infectious mononucleosis Epstein-Barr virus etiology in children.

**Materials and methods.** A retrospective analysis of a hospital cohort of patients (146 sick children in total) with a diagnosis of Epstein-Barr virus infection was carried out, including 52 children diagnosed with Epstein-Barr virus infectious mononucleosis were included in this study, who were treated at the Results of the study and their discussion. The study of the content of IL-1 $\alpha$ , IL-1 $\beta$ , IL-1Ra, IL-4, INF- $\gamma$  was carried out in children of patients with Epstein-Barr viral infectious mononucleosis, acute bacterial tonsillitis, acute viral hepatitis "B" and relatively healthy children.) , IL- $\beta$  (1.6 times) and INF- $\gamma$  (4.3 times).

**Conclusion.** A comparative study of cytokines in clinically similar groups of patients requiring a differential diagnostic search revealed significant differences in the level of indicators. At the height of the disease in the blood serum of sick children with Epstein-Barr virus infectious mononucleosis, an increase in the content of pro-inflammatory cytokines IL-1 $\alpha$  (1.7 times), IL- $\beta$  (1.6 times) and INF- $\gamma$  (4.3 times) is characteristic. times).Specialized Clinical Infectious Diseases Hospital of the Bukhara region for the period 2019-2021.

**Results of the study and their discussion.** The study of the content of IL-1 $\alpha$ , IL-1 $\beta$ , IL-1Ra, IL-4, INF- $\gamma$  was carried out in children of patients with Epstein-Barr viral

infectious mononucleosis, acute bacterial tonsillitis, acute viral hepatitis "B" and relatively healthy children.) , IL- $\beta$  (1.6 times) and INF- $\gamma$  (4.3 times).

**Conclusion.** A comparative study of cytokines in clinically similar groups of patients requiring a differential diagnostic search revealed significant differences in the level of indicators. At the height of the disease in the blood serum of sick children with Epstein-Barr virus infectious mononucleosis, an increase in the content of pro-inflammatory cytokines IL-1 $\alpha$  (1.7 times), IL- $\beta$  (1.6 times) and INF- $\gamma$  (4.3 times) is characteristic. times).

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## BENEFITS OF USING WEB-QUEST TECHNOLOGY IN ENGLISH LESSONS AS FOREIGN LANGUAGE

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**Annotation:** In the article were benefits of using web-quest technology in English lessons as foreign language analyzed.

**Key words:** web-quest, benefit, teaching, English, foreign language.

A webquest is an activity that requires learners to use the Internet in order to complete a task. Webquests can extend over an entire course, several classes or be integrated into a single lesson.

According to M.Renau "In 1995, Dodge and March presented WebQuests to the educational community. WebQuests allowed educators to see how the Internet could be used in classrooms for inquiry-based teaching and learning. When working with WebQuests, learners take newly-acquired information and transform the information into authentic learning".

Dodge states "...that WebQuests allow learners to have a structure to their learning that allows them to "act more skilled than they really are" and allows the "bar of what students can produce to be raised". Scaffolding learning makes learners work with new approaches with the help needed to succeed in these attempts."

In our opinion, WebQuests can help students to acquire, and transform knowledge using constructivist learning and high-level, critical thinking in the classroom. A WebQuest is developed around an authentic topic relevant for students' everyday life. We can find some papers describing the successful implementation of WebQuests in a particular classroom.

In the last years, the inclusion of WQ in our classrooms have been very successful, so numberless web pages have been formed in order to help teachers to create new ones or to reuse WQ from other teachers.

It is obvious that the implementation of WQ for teaching and learning a second language might be more complex than learning any other subject in the first language of the student. It is for this reason that a difference in the structure of WQ must be applied to make them a useful tool also in the area of language teaching in a L2 context.

A WebQuest for teaching and learning a second language is an inquiry oriented activity placed in a relevant thematic context, in which the development of the task implies using web resources and developing high order thinking processes in a collaborative environment. At the same time, it provides the students the opportunity



to learn and put into practice some linguistic skills, supported by a set of linguistic and procedural scaffolding.

Employing authentic web pages in a second language classroom can be motivating and not unduly daunting to learners since as Kienbaum, Russel and Welty (1986 cited in Chappelle) found, from an attitude survey, elementary and advanced level foreign language learners express a high degree of interest in authentic, current event, materials. Furthermore, as Guariento (2000) account makes plain, students are more motivated when studying with lessons based on the latest news and current events, than when using the relatively dated materials of coursebooks.

The concept of the webquest, as an effective instructional/learning strategy, also draws its strength from several decades of cognitive science research. In particular, Caine argued in favor of the natural acquisition of knowledge saying that knowledge is what results when „information felt“ meaning and „deep meaning“ come together. Drawing from this theory, we can claim that a further advantage for the implementation of Web quests, lies in their structure. A Web quest’s structure, models the cognitive and physical process the learner must go through to perceive and produce the new language. Thus, it is clear that Web quests, by modeling an implicit process through which new language and linguistic rules can be acquired, can assist learners to naturally internalize and automatically reproduce the process of learning.

Another key issue that Web quests address, is learners’ mindful engagement with instructional materials. While engaged in the Web quest students are active contributors, to their language learning, than passive recipients of knowledge, since they are cognitively involved in seeking answers, making generalizations and testing hypotheses that they have generated. In this way , knowledge is constructed by the learner in the sense that he has to relate new elements of knowledge to already existing cognitive structures.

Having discussed the benefits of web quests and authentic web pages in language learning, we will, in this part of the paper, suggest a course that uses the internet, and specifically Web quests, as a delivery medium, and on line newspapers, to facilitate and promote in depth, active learning. Newspaper articles have long been a staple item, in both reading and conversation classes because they are generally short, predictable in style, timely in content, and easy to find and use. One can hardly deny the usefulness of reading English newspapers in the process of learning. The only, and the most crucial, problem with them is the price. Therefore, electronic newspapers are a great chance for educators and learners, since they are easily accessible and virtually free. The issue of the use of on line newspapers has been taken up by many researches.

A possible explanation of the efficacy and positive attitudes towards web-based language instruction could be attributed to the provision of opportunities for students to read and write a variety of authentic text types and on various topics. Yet, future research should be conducted involving representative samples of different EFL populations and grade levels in order to determine to what extent the findings of the present study are generalizable as well as determine the effect of context-specific factors such as gender, linguistic composition, and levels of first and foreign language proficiency on the interface of technology and language achievement and dispositions.

### Conclusion

It is likely in the future, that computer technology will remain a key component of almost everything we do. As such, language teachers should keep themselves fully abreast of how computer technology can benefit language teaching and educational outcomes, more generally.

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## USING WEB-QUEST TECHNOLOGY IN ENGLISH LESSONS AS FOREIGN LANGUAGE

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**Annotation:** In the article were structures of using web-quest technology in English lessons as foreign language analyzed.

**Key words:** web-quest, benefit, teaching, English, foreign language, technology.

A webquest is an activity that requires learners to use the Internet in order to complete a task. Webquests can extend over an entire course, several classes or be integrated into a single lesson.

Defining a webquest Bernie Dodge of San Diego State University was one of the first people to attempt to define and structure this kind of learning activity. According to him, a webquest is *"an inquiry-oriented activity in which some or all of the information that learners interact with comes from resources on the Internet..."*

This definition has been refined over the years, and adapted for various different disciplines. Philip Benz (See Further reading) describes a webquest as follows: *"A "WebQuest" is a Constructivist approach to learning (...). Students not only collate and organize information they've found on the web, they orient their activities towards a specific goal they've been given, often associated with one or more roles modeled on adult professions."* Essentially, webquests are mini-projects in which a large percentage of the input and material is supplied by the Internet. Webquests can be teacher-made or learner-made, depending on the learning activity the teacher decides on.

Reasons for using webquests. There are many compelling reasons for using webquests in the classroom, including:

- They are an easy way for teachers to begin to incorporate the Internet into the language classroom, on both a short-term and long-term basis - no specialist technical knowledge is needed either to produce or use them.
- More often than not, they are group activities and as a result tend to lend themselves to communication and the sharing of knowledge - two principal goals of language teaching itself.
- They can be used simply as a linguistic tool, but can also be interdisciplinary, allowing for crossover into other departments and subject areas.
- They encourage critical thinking skills, including: comparing, classifying, inducing, deducing, analysing errors, constructing support, abstraction, analysing perspectives, etc. Learners are not able to simply regurgitate

information they find, but are guided towards a transformation of that information in order to achieve a given task.

- They can be both motivating and authentic tasks and encourage learners to view the activities they are doing as something 'real' or 'useful'. This inevitably leads to more effort, greater concentration and a real interest in task achievement.

Structure of a webquest: Webquests have now been around long enough for them to have a clearly defined structure. However, this structure - whilst being unofficially recognised as the definitive schema for these activities - should only really be taken as a basic guideline and you should design your webquests to suit the needs and learning styles of your students. There are usually four main sections to a webquest:

- The Introduction stage is normally used to introduce the overall theme of the webquest. It involves giving background information on the topic and, in the language learning context, often introduces key vocabulary and concepts which learners will need to understand in order to complete the tasks involved.
- The Task section of the webquest explains clearly and precisely what the learners will have to do as they work their way through the webquest. The task should obviously be highly motivating and intrinsically interesting for the learners, and should be firmly anchored in a real-life situation. This often involves the learners in a certain amount of role-play within a given scenario (e.g. you are the school social organiser and have to organise a trip for your class to an English-speaking country...)
- The Process stage of a webquest guides the learners through a set of activities and research tasks, using a set of predefined resources. These resources - in the case of a webquest - are predominately web-based, and are usually presented in clickable form within the task document (it's important to bear in mind that it's much easier to click on a link than to type it in with any degree of accuracy). In the case of a language-based webquest, the Process stage of the webquest may introduce (or recycle) lexical areas or grammatical points which are essential to the Task. The Process stage of the webquest will usually have one (or sometimes several) 'products' which the learners are expected to present at the end. These 'products' will often form the basis of the Evaluation stage.
- The Evaluation stage can involve learners in self-evaluation, comparing and contrasting what they have produced with other learners and giving feedback on what they feel they have learnt, achieved, etc. It will also involve teacher evaluation of the same, and good webquests will give guidance to the teacher for this particular part of the process.

Producing a webquest producing a webquest does not entail any detailed technical knowledge. Whilst all of the examples in the further reading are essentially web-based, it is extremely easy to produce a professional-looking and workable design using any modern word processor. The skillset for producing a webquest might be defined as follows:

- Research skills. It is essential to be able to search the Internet and quickly and accurately find resources. It is beyond the scope of this article to delve into the finer points of using search engines and subject guides, but a good reading of their respective help pages will dramatically improve the accuracy of any search.
- Analytical skills. It is also very important to be able to cast a critical eye over the resources you do find when searching. Make sure to visit any website you are considering using thoroughly before basing any activity around it.
- Word processing skills. You will also need to be able to use a word processor to combine text, images and weblinks into a finished document. This particular set of skills can be acquired in approximately ten minutes.

Before sitting down to plan a webquest, it is always worth searching around on the Internet to see if someone has produced something which might fit your needs. There are plenty of webquest 'repositories' on the Internet, so there is little point in reinventing the wheel. Use a search engine to have a good look round before you do the hard work yourself.

In the event that you have to design and produce your own webquest, Tom March (see further reading for more details) has produced a flow chart for the design process. Essentially, the following guidelines will get you started:

- Define the topic area and the 'end product' (Introduction and Task phases)
- Find web resources which are suitable content-wise and linguistically (Resources)
- Group the resources according to stages of the Task
- Structure the Process - tasks, resources, lexical areas, grammatical areas
- Design the Evaluation stages and concepts

Once these tasks have been performed, the webquest can be put together as a simple word-processed document (add images and links to all the resources learners will need) or as a webpage.

Implementing a webquest. Shorter webquests can be used to complement coursebook materials - over one or a small number of classes - whilst long-term webquests are perhaps more suited to longer courses. In breaking down a webquest for use over several class sessions, ensure that your learners are aware of what they are doing - of why they are doing it, and of the benefits to them. It's all too easy for them

not to spot the benefits and to consider regular visits to the computer lab as a waste of time. The self-evaluation proposed in the model above can go some way towards mitigating this situation. Suggested questions for learners to consider include:

- How effective was my contribution to the group work?
- What did I learn about the topics we researched?
- How did my English improve doing this project?
- What did I learn about using the Internet?

### Conclusion

However you decide to work with webquests, you should find that well-chosen and motivating topics, coupled with up-to-date websites and access to the wealth of material on the Internet will provide lively, interesting and learning-rich classes for you and your learners.

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**ABOUT A WAY TO EVALUATE STUDENTS 'INDEPENDENT LEARNING**

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**Annotation:** The method proposed as one of the solutions to the problem of assessing the independent learning of students proves to be one of the criteria of assessment that is actively used today. It has been shown that this method can be used in the assessment of independent study of theoretical mechanics.

**Keywords:** independent learning, static exact, static uncertain, general vector, general moment, invariant, velocity, acceleration, forced oscillating motion, force of inertia, principle, students, bank of questions.

Theoretical mechanics taught in higher education institutions helps students to form important features such as finding technical solutions, logical thinking, analysis of facts, generalization and division into organizers, concise description. The main task of professors and teachers working in this field is to present the subject to students in a more understandable, interesting and visual way, to create a methodological framework for the full mastery of independent educational topics by students. The use of Venn diagrams in organized lessons is presented in the works [1,4,8,13]. Practical solutions have been given in the study [3] to increase the visualization of lessons by applying the cluster method to the teaching process. Research [2,12] discusses ways to increase student engagement in the classroom. Studies on the application of the confusing logic chain method to the science of theoretical mechanics are presented in [6,9,10,11]. The results of theoretical and pedagogical research on the digitization of education are described in [14 - 17].

The method of "confusing logical chain" is used effectively in the study of cause-and-effect relationships of any event. When a student confuses information such as formulas, phrases, definitions, axioms, theorems in the process of studying independent learning topics, he learns to match the correct ones from them. Students will need to place them correctly, putting each answer in its place in order. For example, students of the Institute of Technology "Machinery and Equipment" study Theoretical Mechanics in the second semester of the first year. The topics of independent study are given below:

**Independent study topics**

1. Laws of friction in sliding. Friction angle. Friction cone. Equilibrium of bodies in terms of friction.
2. Static explicit and static indefinite issues. Equilibrium of a system consisting of several bodies.
3. Invariants of a system of forces in space.
4. The instantaneous center of accelerations of plane points
5. The effect of environmental resistance on the forced oscillating motion of a material point.

6. Shear and Coriolis inertial forces. The effect of coriolis inertial forces on terrestrial bodies.
7. Calculate the moments of inertia of bodies with respect to parallel axes. Moments of centrifugal inertia. Moments of inertia about an arbitrary axis passing through a given point of the body.
8. Determine the dynamic pressure exerted by a rigid body rotating on a fixed axis on the axis of rotation using the D'alambert principle.
9. Apply the principle of possible migration to the determination of coupling reactions.

Theoretical Mechanics is devoted to independent study "Laws of friction in sliding. Friction angle. Friction cone. Let us consider the application of the topic "Equilibrium of bodies in terms of friction" to check the independent study. In this case, students are offered a set of no more than 5-10 questions on the topic. The following is a table corresponding to the above topic:

Find compatibility in the following questions:

1	Show the formula for calculating the friction force in rolling	1	$F_{ish} = f \cdot N$
2	How the friction force is directed	2	$\vec{R} = \vec{N} + \vec{F}_{ish}$
3	How static problems are solved given the friction force	3	Equilibrium equations are solved by adding the formula for finding the friction force
4	Show the formula for calculating the friction force in sliding	4	$F_{ish} = \frac{\delta}{R} \cdot N$
5	Show the formula for the total reaction force	5	It is always in the opposite direction

**Correct answers** (4, 5,3,1,2).

This method should now also take into account their knowledge of independent study topics for intermediate control in the field of theoretical mechanics. Therefore, a variant of the bank of questions covering independent study is given below. In this case, the level of mastery of the studied topic is used to conduct an intermediate assessment of students' knowledge in a non-traditional way. The number of questions in a structured table is usually taken as 10-20.

Find compatibility in the questions:

1	The number of unknowns in a given problem is greater than the equilibrium equations. What kind of issue is this?	1	Static is a definite issue
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2	The connection is given in the plane. How many equilibrium equations are formed for them?	2	The system of forces consists of only one principal vector
3	Give a definition of a static exact issue	3	When an arbitrary system of forces in space is brought to a point, the given forces are exchanged for a head vector equal to the geometric sum and the head moment equal to the geometric sum of the added pair of moments
4	In the case under consideration, the number of equilibrium conditions is 6 and the number of unknowns is 5. What a matter	4	Static uncertainty
5	Show the formula for calculating the friction force in rolling?	5	To the geometric sum of the added pair moments
6	What is the main vector of the system of forces?	6	Always the opposite of action
7	How is the basic theorem of statics expressed?	7	If the number of unknowns in a given problem is equal to or less than the equilibrium equations
8	What is the velocity vector of the system of forces?	8	$F_{ish} = \frac{\delta}{R} \cdot N$
9	How is the friction force directed?	9	The geometric sum of all the forces acting on the system
10	What happens if the starting torque is zero?	10	At the point where the structure joins, it is divided into two parts, and for each part, 3 separate equations and a total of 6 equations are formed. Addition of 2 equations of reaction forces at the point of connection to it, a total of 8 equations

**Correct answers (4,10,7,1,8,9,3,5,6,2).**

The application of the proposed method now in the final assessment of students' knowledge on the topics allocated to the independent study of theoretical mechanics also gives positive results. In this case, materials are selected from a bank of questions covering topics of independent study of the subject. Given that the final control is usually designed to take at least a few hours, a spreadsheet consisting of 15-30 questions from all topics of independent study is recommended for students. An

increase in the number of questions usually allows a more accurate assessment of a student's level of knowledge.

Determine the compatibility in the questions:

1	How are the problems solved considering the friction force?	1	A point on a solid body whose acceleration is zero at a given moment
2	What is the difference between static explicit and implicit issues?	2	Equilibrium equations are formed by adding the forces of inertia to the series of reaction forces.
3	How are the reaction forces of a solid body found?	3	Giving a possible shift to the reaction force to be found, the problem is solved by zeroing the work done
4	What is the definition of the instantaneous center of acceleration?	4	The equation of equilibrium is solved by adding the formula of friction force to the series
5	Show the differential equation of forced oscillating motion?	5	$J_{xy} = \sum m_k x_k y_k, \quad J_{yz} = \sum m_k y_k z_k, \quad J_{zx} = \sum m_k z_k x_k$
6	Show the law of forced oscillating motion under the influence of ambient resistance?	6	$I_z = I_{cz} + m \cdot d^2$
7	Show the formula for the moment of inertia of centrifugal force?	7	$\ddot{x} + 2b\dot{x} + k^2 x = P_0 \sin(pt + \delta)$
8	Find the form of the Huygens-Steiner theorem formula?	8	$x = ae^{-bt} \sin(\sqrt{k^2 - b^2} \cdot t + \alpha) + \frac{P_0 \sin(pt + \delta + \beta)}{\sqrt{(k^2 - p^2)^2 + 4b^2 p^2}}$
9	How is dynamic pressure found?	9	If the number of unknowns in the problem is equal to or less than the number of equilibrium equations, it is

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			called a statically definite problem, otherwise it is called a statically uncertain problem.
10	Explain the D'alambert principle?	10	$\vec{a}_B = \vec{a}_A + \vec{a}_{AB}$
11	What is a possible move?	11	Any infinitely small migration that satisfies the connections made to the system
12	How is the principle of possible migration expressed?	12	Vibrational motion when the frequency of free oscillation is equal to the frequency of forced oscillation
13	How are the basic reaction forces found using the principle of possible displacement?	13	The structure is divided into two parts, the balance of each of which is checked separately
14	What is a resonance phenomenon?	14	In order for an ideal, non-releasing stationary system to be in equilibrium, the sum of the active forces applied to it in any possible displacement of the system must be zero and sufficient.
15	By which formula is the acceleration of an arbitrary point on a body in plane parallel motion found?		The active forces acting on the system, if we add the reaction forces at any time to the number of contact reaction forces, their sum is zero.

**Correct answers** (4,9,13,1,7,8,5,6,2,15,11,14,3,12,10).

The final conclusion is that as a result of the use of the method of "confusing logic" in the assessment of students' knowledge of the subjects allocated to independent study of theoretical mechanics, students can independently organize the topics they study, divide them into components, compare with other topics, understand new information. skills are formed. The use of this method in the assessment of students' knowledge on the topics of independent study allows students to systematically study the knowledge of science, to organize what they have learned, to divide it into parts, to distinguish them from each other. As a result of applying this method, the level of knowledge of students will increase significantly. Expands the teacher's ability to objectively determine the level of knowledge of students, to conduct intermediate and final assessments.

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**THE CONCEPT OF SHAPING THE COMPETITIVENESS OF SMALL BUSINESSES AND ITS ESSENCE**

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**Annotation:** This article provides insights and comments on the concept of shaping the competitiveness of small businesses and its essence

In recent years, competitiveness has become a topic of interest among scientists, businesses and government agencies among enterprises. In this regard, Porter emphasizes that there are four levels of competitiveness, firm, industry and nation, and also considers competitiveness from the point of view of region and region. emphasizes. In addition, it is advisable to keep in mind corporate competitiveness in terms of price, quality of service, gross profit and ability to plan and achieve business goals compared to industrial competitors.

Competitiveness for industry refers to the ability to maintain or increase market share in terms of low cost or product characteristics compared to similar industries in different countries. There is also national competitiveness in practice, which is the competitiveness of the national economy to achieve and maintain high growth based on sustainable policies and institutions.

The concept of competitiveness refers to aspects such as competitive advantage, price competition, strategic management and other historical and socio-cultural aspects. Competitiveness can also be seen as an independent variable, an intermediate variable, or a completely dependent variable, depending on the approach of the research, and may consist of different dissimilar factors depending on the area of activity. In particular, the competitiveness of small and medium-sized hotels in the hotel industry can be seen in their competitiveness with competitors in terms of price, quality of service, gross profit, planning and achieving business goals.

The organizational structure of small business entities differs in capital capacity, labor, technology, ability to respond to the environment, management style and, most importantly, in fashion that competes with other enterprises. Therefore, competitiveness studies focused solely on large corporations may not apply directly to small businesses. The competitiveness of enterprises is seen as the degree of interaction between customer satisfaction groups and shareholder value through continuous improvement of service quality, capacity utilization, implementation or ability to respond through financial strength.

Research on the factors affecting the competitiveness of small businesses, which play an important role in the country's economy, has increased significantly in recent years. As Robinson points out, assessing the competitiveness of small businesses should be considered in a broader collaboration or in a constantly changing business environment, taking into account its ability to access capital resources as well as its internal capabilities. It is important to note that internal resources play a more important role than external factors in achieving a competitive advantage.

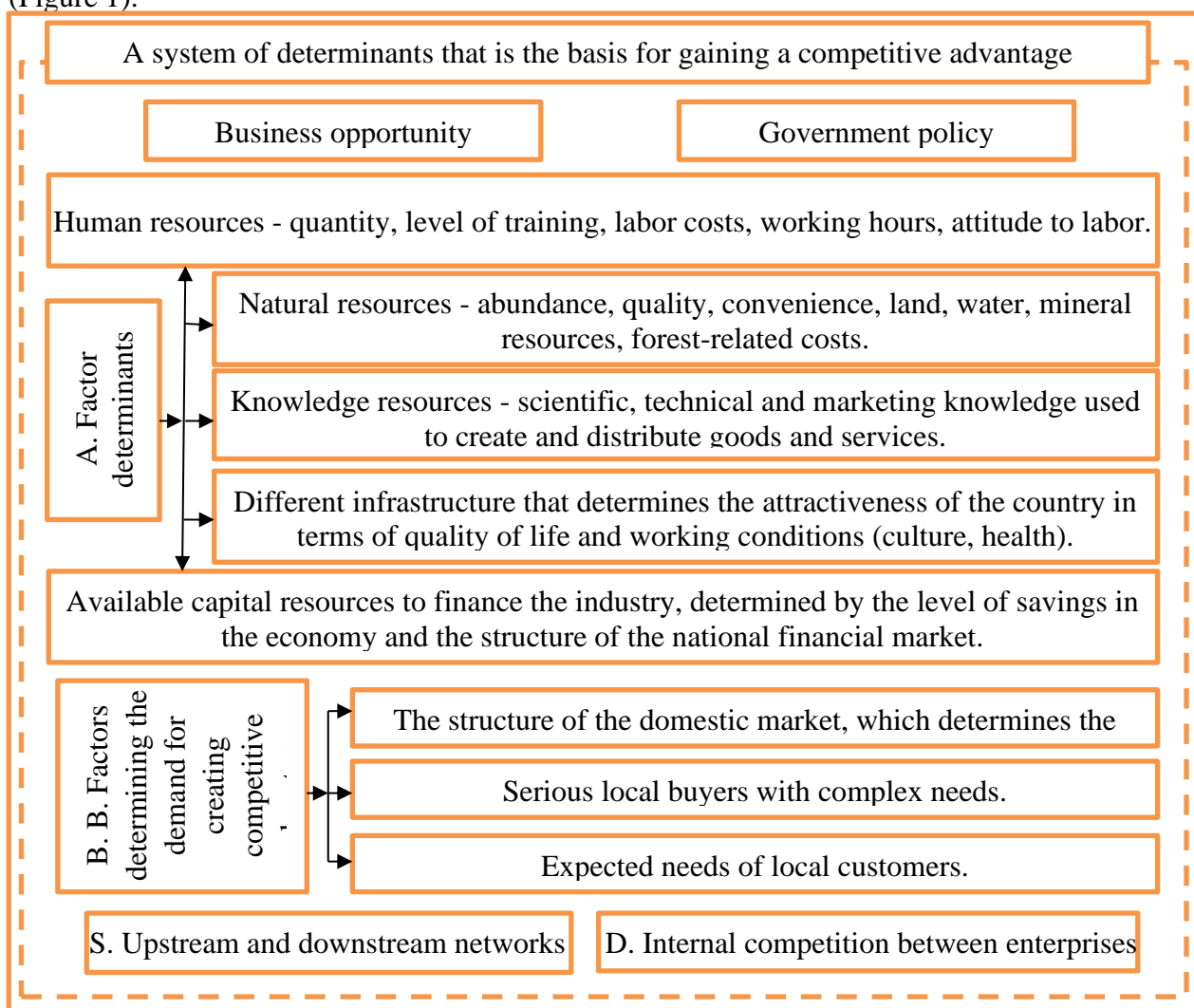
Based on the scope of the topic, based on data reliability and experience, this study is based more on Porter's theory of enterprise competitiveness and competitive advantage. To develop conceptual and empirical research on enterprise competitiveness, many studies have been conducted

in terms of Porter’s theory of competitiveness and competitive advantage. In developing his theory, Porter begins with the following ideas:

- the nature of competition and sources of competitive advantage are very different between industries and even between the same industry segments, and this can affect the acquisition of competitive advantage within a particular industry sector in a particular country;

- The globalization of competition and the emergence of transnational companies does not eliminate the impact of a particular country's competitive advantage, but may offer different competitive advantages for the company, whether it is a country of origin or a host country.

In this regard, Schumpeter notes that "competitiveness is dynamic." Innovation plays a leading role in this constant change and identifies companies that invest to stay in the market. Based on these principles, Porter relies on a system of determinants called “diamonds”. Based on Porter’s theories, it is possible to express a system of determinants that is the basis for gaining a competitive advantage (Figure 1).



**Figure 1. A mechanism to ensure that small businesses have a competitive advantage**

As shown in Figure 1, we explain the system of determinants that are the basis for small businesses to have a competitive advantage as follows. In the figure A) factor determinants - whether the country is provided with factors; B) factors determining demand - the characteristics of the domestic market; C) upstream and downstream networks; D) strategy and structure of small business entities and competition between them - internal competition; These four factors are significantly influenced by two other factors: opportunity and government policy. All of these determinants are interconnected. According to Porter, the countries where “the national diamond is most useful” are succeeding. No matter how complex and dynamic the country’s economic environment is, some businesses will fail if they do not adequately capitalize on the requirements of this environment.

A. Factor determinants represent the starting point required to enter competition. Classical economic theory defines labor, land, and capital as factors of production. Porter’s theory suggests that even factor supply is undoubtedly important, an important element of a country’s competitiveness is the creation of new factors and the improvement of existing ones. A competitive advantage must be created, it will not be inherited. In general, it is advisable to divide the factors of production into the following categories:

1) human resources - quantity, level of training, labor costs, working hours, attitude to work;  
 2) natural resources - abundance, quality, convenience, land, water, mineral resources, forestry costs;

3) knowledge resources - the provision of scientific, technical and marketing knowledge used for the creation and distribution of goods and services. This knowledge is located in universities, research institutes, information systems, data banks, commercial associations, etc .;

4) capital resources - the level and value of capital available to finance industry, determined by the level of savings in the economy and the structure of the national financial market, capital markets vary from country to country, even though we are involved in globalization;

5) Infrastructure - includes not only transport systems, postal, communication, payment systems and systems used for money transfers, but also various infrastructure elements that determine the attractiveness of the country in terms of quality of life and working conditions (culture, health).

Given the current conditions in which the mobility of factors of production is constantly increasing, direct access to them is less important, especially in increasing their economic and financial efficiency in their distribution and use. There are two categories of factors of production in this regard:

a) Primary factors (including natural resources, climate, geographical location, skilled or unskilled labor) occur in all countries, but in different proportions.

b) advanced factors (modern informatics infrastructure, highly skilled workforce, competitive research institutes). Many of these factors are created with significant investments in a timely manner. At present, these factors are also the most important for achieving a competitive advantage. However, it should be noted that often advanced factors are based on underlying factors. As another classification of factors of production, the factors are divided according to their specificity:

-generalized factors (transport and communication system, banking system, educated and motivated labor) can be applied in many industries that exist in many countries;

- Specialized factors located in a limited number of economic sectors (highly skilled labor, special infrastructure). Their creation implies large investments with a high level of risk, starting from

the presence of generalized factors. They are rare, but critical to creating and maintaining different forms of competitive advantage.

B. B. Demand-determining factors play an important role in creating competitive advantages. They mix domestic demand and influence the achievement of competitive advantage. If domestic demand is so strong, countries will gain a competitive advantage if they force companies to innovate faster than foreign competitors in order to stay in the market. There are three characteristics that affect the competitive advantage of domestic demand:

- The structure of the domestic market, which determines the level of product quality;
- Serious local buyers with complex needs;
- Expected needs of local buyers. In a large country with a large domestic market, development is encouraged and investment can be made to produce goods on a large scale, while in a small country with a shrinking domestic market, there is only one chance to achieve a large-scale economy. being international. The domestic market can develop competitive advantages by internationalizing domestic demand and bringing national products to the international market. When there are foreigners among the buyers, their needs are heavy whether they are occasional buyers (tourists or businessmen) or regular buyers, this situation forces national enterprises to improve their goods. The bottom line is that the domestic market can determine to have a competitive advantage based on its characteristics. But its effect depends on other determinants of the "diamond".

C. Upstream and downstream networks are another crucial factor in achieving a competitive advantage if they have a strong position in the international market. If it has a more concentrated and specialized horizontal and vertical industry, it can be a competitive country where more information, innovation can lead, but the determinants of demand are the growth of international productivity among sectors of the economy and consequently a competitive advantage. depending on.

D. The strategy and structure of small businesses, the competition between them is the fourth decisive factor in the diamond determinant, which affects the international competitiveness of the country with the organization and management of the company, the proposed goals and strategies applied. Of course, there are differences between countries in terms of education level, goals, work style, and managers' approaches. Goals and strategies depend on the form of ownership, the motivation of the owners, and the motivation of the managers. In order to have a competitive advantage, it is important to coordinate the goals of small business owners with the goals of shareholders, managers.

Individual motivation of employees is important in improving professional training to gain and maintain competitive advantages. Achieving and maintaining competitive advantages is closely linked to the presence of real and strong competition in the domestic market, which encourages small businesses to open new markets to promote new products in the market and stimulate growth. Domestic competition is at least as important as international competition, as the presence of many competing companies is convenient because national companies are as strong as foreign competitors.

The adoption of certain normative documents by the government that encourage the establishment of new enterprises will determine the growth of competition and thus help maintain a competitive advantage. As mentioned above, these four determinants of the "diamond" evolve closely with two other factors: opportunity and government policy. Opportunity - Porter points out that in the evolution of many industries with competitive advantages, wars, major changes in international financial markets, changes in the cost of factors of production have played a significant role.

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Government policy can influence the achievement of competitive advantage, as this is the most important decisive factor. This is due to the fact that the government can influence the local market through subsidies, investments in education, regulation of the internal market, creation of competitive infrastructure to reduce the cost of access to factors. The state is also an important buyer for some industries such as defense industry, aeronautics, telecommunications. It is important to approach the system of conditions of competition with the consistent action of the state in order to create or improve national competitive advantages.

Experience has shown that small business entities that have only a functional “diamond”, some elements of which are mutually positive, have a long-term national competitive advantage, which in turn helps to achieve international competitiveness. It should be noted that no country is competitive in all areas. This, in turn, means that it is impossible to achieve competitiveness among enterprises in all areas. Only small businesses that have overcome the first strong internal struggle can create international competitiveness.

National economies go through several stages of development, which reflect both the country’s sources of dominance in international competition and the nature and size of successful industries. Based on the above considerations, we can cite four stages in the development of competitive advantages in the evolution of the economy:

- factor supply-based advantage stage;
- stage of investment-based benefits;
- stage of advantages based on innovations;

- stage of advantages based on national wealth. In the first stage, factor-based supply advantages, internationally successful industries believe that their advantages depend almost exclusively on key factors of production. At this stage, the country's economy becomes very sensitive to world economic cycles and changes in exchange rates, which determine demand and relative prices.

The advantage of national competition in the next stage of investment-based growth is based on the desire and ability of the country and its enterprises to invest in large areas. In the third phase of innovation-based growth, the country’s competitive advantages come not only from adapting and improving new technologies and production methods, but also from creating new ones.

These stages of competitive economic growth include the continuous improvement of competitive advantages and are associated with the steady growth of economic well-being. In contrast to these stages, the stage of economic growth based on national wealth is the stage that eventually leads to the recession. A wealth-based economy that has been realized in the past cannot sustain itself because the motivation of investors, managers, and individuals shifts sustainable investment and innovation in other directions. Goals are social goals that take precedence over other goals, including those that support economic development. In this regard, Fota Constantin notes that "countries, as a rule, cross these stages one by one, but it is not excluded that some stages will be suppressed or further extended."

Gaining a competitive advantage equally predicts the risk of losing it. Porter argued that if the “national diamond” does not encourage innovation and investment in a market-driven direction and the industry does not properly understand demand, national dominance will be lost. Studies show that some changes that occur at the national level lead to the loss of competitive advantage. Including:

- Unexpected damage of factor determinants and non-compliance of domestic needs with world demand;
- Lack of broader and more complex needs of domestic buyers than foreign buyers;
- technological change due to certain factors or supporting industries, such as lack of human capital and inefficient or non-existent infrastructure;
- Limited investment rates and loss of flexibility of enterprises in achieving the set goals;
- high concentration in the domestic market, reduction of competition as a result of government intervention to protect non-competitive competitors;
- deterioration of the competitive environment and the emergence of unpredictable situations that have a profound effect on political and economic stability (in which case there is an opportunity for other competitors). Like any other theory, even the theory of competitive superiority has its proponents and opponents. This, in turn, leads to shortcomings in the theory of competitive advantage.

Critics of this theory list that the concept of competitive advantage is not sufficiently substantiated and is associated with confusion between enterprises and the nation. In this regard, it can be argued that the theory of competitive advantage emerges at once, in which case the model of comparative advantage does not correspond to economic reality and has negative consequences for countries lagging behind in economic competition. Thus, while classical theory is closely linked to the existence of factors of production, many critics argue that the theory of comparative advantage is related to the underdevelopment of many resource-rich countries.

However, research suggests that the presence of factors of production in Porter's theory provides the basis for new industrial and trade policies. Competitive superiority allows enterprises and small businesses to find the best solutions to the problems they face and to move forward on the path of economic development and wealth, taking into account the current conditions of regionalization and globalization.

It should be noted that the concept of competitiveness has been developed at three levels across the enterprise, industry and the country, and it is the basis for the development of many small businesses. It is advisable to apply the theory of competitiveness and competitive advantage to study the factors that contribute to the competitiveness of enterprises. In this sense, we believe that it is appropriate to include a leadership factor in Porter's "diamond" determinant system, which is important in increasing the competitiveness of small businesses. Therefore, in the context of the Republic of Uzbekistan, it is necessary to conduct research to form a comprehensive view of the leadership factors affecting the competitiveness of small businesses. Managers of small businesses play an important role in shaping business goals, strategies and decisions. In this regard, Clarke, Asree et al., "Leadership skills are recognized as key factors in business success".

The leadership process means creating social influence to ensure the voluntary participation of subordinates in the implementation of the organization's vision, goals, and mission. Leadership is a combination of knowledge, skills, experience, behavior and attitudes to turn organizations or enterprises into a single body to ensure successful competition in the market. As for small businesses, managers play an important role in increasing competitiveness and employee income, creating jobs, and mobilizing social resources to invest in business development.

However, the leaders of most small businesses, even those with higher education, do not have in-depth knowledge in economics, business administration, business law and other important areas.

On these limitations, Chawla et al argue that “businesses’ perspectives, goals, strategies, and ability to deal with risks have a significant impact ”. It should be noted that due to its small size, small businesses are particularly vulnerable to an unfavorable business environment and competition. In fact, it is possible to cite small businesses that have been suspended or bankrupted in the country every year (in particular, 10.6% of newly established enterprises in 2020 were liquidated enterprises).

In this regard, one of the main reasons is the weakness of human resource management, especially the low leadership skills of the management team and managers, which leads to the need to develop it. Insufficient attention to this aspect leads to difficulties in small business development. As the CEO of an enterprise, the head of a small business entity must carry out leadership activities that are comprehensive and practical. In addition, it must directly carry out the production process and business operations, as well as take the lead in human resource management.

In order to effectively fulfill their role, it is desirable for a small business leader to have strong leadership skills, sufficient knowledge and skills, attitude and qualities to effectively manage not only himself but also the team and the whole organization. This serves to ensure the competitiveness of the small business, to achieve the ultimate goal, which is to maintain and develop the position of the enterprise in the market and to obtain a legitimate income for stakeholders and the leader himself.

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