MODERN METHODS OF TEACHING SUBJECTS IN FOREIGN LANGUAGES IN HIGHER EDUCATION IN THE CONDITIONS OF PANDEMIC

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Abstract: Methodological approaches to studying the process of distance learning of students in foreign language in higher education institutions in the conditions of COVID-19 pandemic and further are evolving along with the changes that occur in the education system and in the world space. Therefore, the systematization of theoretical, methodological, and practical factors on which the modern methodology of distance learning is based makes it possible to form new opportunities for the education system in the direction of its modernization. One of the constituent parts is communicative competence, that is, the ability to perceive and reproduce information in a foreign language in accordance with the conditions of verbal communication. The purpose of the study is to characterize modern interactive methods of distance learning for the organization and management of educational and cognitive activities of students when they study specialized disciplines in a foreign language. The method of gamification and reflection based on the Kolb cycle is proposed as a conceptual and methodological basis.

Keywords: Foreign language, Gamification, Kolb cycle, Motivation, On-line learning, Reflection.

1 Introduction

Modern society is developing under the influence of globalization processes, which determine the emergence of new requirements for a subject in any field of activity, including higher education. On March 11, 2020, WHO Director General Dr. Tedros, at a press briefing on COVID-19, characterized its spread as a pandemic. [16] The outbreak of the coronavirus has led to the massive use of distance learning technologies in many countries around the world. Thus, the pandemic contributed to the active use of distance learning technologies, including in teaching academic disciplines in a foreign language.

At the same time, surveys conducted during the pandemic showed that many teachers and students rate the quality of distance education as lower [12]. One of the disadvantages of distance learning is the lack of direct visual contact and direct interaction of the teacher with the students. This leads to the inability to control the behavior of students during classes, online exams (for example, they can read textbooks while answering, use gadgets, etc.), and this negates the value of knowledge control means [7]. In such conditions, it is imperative to create students' interest in mastering the subject, to ensure their involvement. Training is impossible without live communication, but it can be more effective if to diversify communication tools, optimize the means of delivery and processing of educational information. Infocommunication technologies help to optimize the learning process, freeing teachers from routine operations for the development and maintenance of educational materials, simplifying the control procedure, etc. The active use of constantly updated technologies in distance learning makes it possible to rationalize the teaching and learning processes, improve monitoring tools, diagnostics of educational activities.

A special place in distance self-learning (which is significant part in on-line education) is occupied by the ability for reflective comprehension and the search for new knowledge. The ability to reflect is the most important component of the educational process and can be achieved through the use of a special system of active teaching methods and means of interaction [1, 2, 4]. Interactivity in distance learning is considered from two sides: the interaction of participants in the pedagogical process, on the one hand, and interactivity as a didactic property of the teaching aids used, on the other [15]. Since the main emphasis in distance learning is placed on the independent cognitive activity of students individually or in small groups of cooperation, preference is given to interactive feedback.

In order to preserve and develop human nature in the virtual educational space, it is necessary for virtual reality to acquire increasingly more humanistic features. According to practitioners, in the distance learning process, it is advisable to rely on reflection the thought-activity, sensually experienced process of the subject of education's awareness of his activity [1, 3, 7]. It should be noted that the most vulnerable aspect of the activity of a teacher of university disciplines in a foreign language is the feedback from the target audience [8].

Discussion of the problems of a lecture or a seminar, students' questions to the teacher should not only be a mandatory component of the educational process in a foreign language, but also are an indicator of how students understand foreign language information, show professional interest, and are able to evaluate the proposed material. Thus, the question of effective methods of teaching disciplines in a foreign language in higher educational institutions in the context of a pandemic (that is, mainly in a distance format) is of particular relevance.

2 Materials and Methods

The methodological and theoretical premises of the research are the following: concepts of technologization of the content of education (Bespalko V.P.), modern psychological approaches to the semantic sphere as the basis of personal and spiritual formation of a person (L.S.Vygotsky, A.N. Leontyev, I.V. Abakumova), psychological and pedagogical theories that consider the personal and semantic characteristics of students as a pedagogical factor and the possibility of its use in the educational process, psychological and pedagogical theories of individualization and differentiation of learning, an activity-based approach to the development of motivation in the learning process (A.N. Leont'ev, S. Rubinstein), theoretical substantiation of the orientation of the lesson on the formation of the procedural side of motivation, theoretical substantiation of the conditions for the subjective state of internal (cognitive) motivation and reflection.

At the same time, the following features of adult education are distinguished [31]:

- Thoughtful goal-setting;
- Past training experience;
- Availability of professional and life experience, knowledge, abilities, skills that can be used in the learning process;
- Subjective assessment of what the student is taught;
- Active participation in the educational process;
- Striving for independence, self-realization, self-management;
- The need to believe in the competence of the teacher.

In this regard, the learning process should be organized in the form of a joint activity of students and a teacher, the so-called "active learning", the main component of which is the involvement of participants in the educational process in various types of active cognitive activity. Studies conducted in the United States in the 1980s (National Training Laboratories in Bethel, Maine) regarding the effectiveness (average percentage of knowledge acquisition) of various methods of teaching adults ("Learning Pyramid") showed that people remember 5% of the lecture they listened to, 10% of the read text material, 20% of listened to audio material, 30% of viewed video materials, 50% of material when teaching is conducted in discussion groups, 75% when performing practical actions, 90% when teaching others, imitating real activities or immediately applying knowledge [10].

3 Results

The history of the formation and development of human learning processes has proven that learning should be continuous and adaptive [25]. If the contingent of trainees is composed of adults, training should be carried out taking into account their age and socio-psychological characteristics. This is what the science of andragogy is aimed at a branch of pedagogical science that reveals the theoretical and practical problems of teaching, upbringing and education of an adult throughout his life. As a negative phenomenon in teaching mature individuals, it should be noted that the processes of perception, memorization, thinking in an adult are not as productive as in a child or adolescent. In this regard, the methodology, approaches, methods of teaching are of paramount importance, for example, the use of a set of techniques and methods aimed at facilitating the memorization of as many information as possible, facts through the formation of artificial associations [26].

One of the effective methods is online seminar. Various studies have determined the methods and techniques prevailing in the work of the seminar: discussion, case study, role/business games, imitation of the situation "listener - lecturer/teacher", brainstorm, a group of brief discussion ("buzz-group"), extracurricular reading and performing analytical tasks based on it, Internet search on the instructions of the teacher. One of the most important technological methods of teaching in a foreign language is a multimedia presentation [28]. To increase the effectiveness of online learning, one can use the gamification method, because in virtual teams of players in any multiplayer online games, there is always a very high level of player interaction, despite the fact that they are not personally acquainted in real life.

Control methods in online learning, of course, must correspond to the specifics of educational activities. Assessment of educational achievements during the seminar can be informal at the stage of current control, semi-formal at midterm control, and formal at the final stage of educational activity.

Thus, it is possible to form an integrated subject-language environment, in which successful specialized training will be combined with the improvement of foreign language skills.

In this environment, it is highly advisable to use active learning methods, since the goal of the educational process is to form readiness to participate in professionally oriented communication activities.

When teaching takes place in the native language, the lecturer feels more confident, students have time to make the notes they need, and, accordingly, they have much more materials on their hands than in the case of studying a discipline in English, where the student often concentrates on the language itself and not on the subject. Learning in a foreign language makes students nervous, because often they do not have enough experience in expressing complex ideas in a foreign language, and they need language support during the lecture. In addition, if a student starts outlining a lecture in English, he is distracted from the course content. Teachers themselves may experience discomfort, since the level of proficiency in a foreign scientific language always differs from the native one. It is also much more difficult to find study materials for students.

As a rule, if the subject is taught in English, it is called EMI (English Medium Instruction) this is a method of using English for teaching academic disciplines in countries and regions where English is not the national language. The use of EMI has a number of advantages for both students and the university as a whole. Thus, students get access to international educational programs, become more competitive in the labor market. For universities, in turn, the use of EMI increases the quotation in world rankings, helps to attract foreign students, and also brings economic benefits.

However, teaching in the EMI format presents a number of challenges. Often, the level of proficiency in the language of both students and teachers is not high enough for the learning process to be carried out at the necessary level. In addition, students are often unhappy that they have to study a subject in English, when it can be studied in their native language. It should also be borne in mind that preparation for classes on both sides will take much more time. Moreover, of course, the translation of educational material into English also takes a long time.

Nevertheless, interconnected teaching, for example, engineering disciplines and a foreign language is built within the framework of an activity-oriented and personality-oriented approach; the selection of educational material and the style of communication in the classroom corresponds to the principle of integrativity [10].

When introducing such training, at the first stage, teachers improve their foreign language professional communicative competence, develop methods and styles of teaching, accumulate educational and methodological materials, and create educational and methodological complexes. At the second stage, as teachers gain experience, much attention is paid to the actual professional aspects, traditional types of classes are complemented by creative assignments, seminars, conferences [9].

The experience of implementing such projects shows that teaching and learning in a foreign language is a powerful motivating factor in learning English, both for students and teachers, and can significantly increase the status of a foreign language in a non-linguistic university [14]. At the same time, the introduction of distance educational technologies into the system of secondary vocational education allows students to acquire not only ICT competence the ability to use information resources of the Internet in professional activities, to search, analyze and evaluate information but also to form their ability to think critically, to take weighted, informed decisions, to form professional communication skills. However, as noted above, learning with the use of distance learning technologies presupposes that students have an increased level of motivation, as well as a desire to independently increase the level of competence.

At the same time, the introduction of innovative technologies of distance learning based on a reflective approach gives an excellent result [30-32].

It is no coincidence that after the first wave of the pandemic, the overwhelming majority of the world's leading universities announced plans to introduce blended learning, when classic face-to-face classes are complemented by work on an online platform. This decision is caused not only by the need to prepare for a possible continuation of the pandemic, but also by objective reasons: according to a survey conducted in the United States, 81% of students believe that the use of auxiliary digital tools significantly improves their academic performance [16].

To implement distance learning, the teacher must have excellent skills in active teaching methods and help students form their own learning styles online, master the capabilities of the online learning platform and the necessary software, overcome the difficulties and barriers of electronic communication. To effectively manage an online course, teachers need to use tools to stimulate students to master the course, develop discipline and skills in meeting deadlines for completing assignments, assess student work in a timely manner, and provide prompt feedback.

The content and method of teaching turn out to be organically interconnected: if the content "feeds" the development of the personality, its semantic structures, then the methods should include, trigger the formation of meaning and development. However, while the content component in teaching in recent years has become increasingly more meaningful, focused on the development of the semantic sphere of students, the teaching methods are still mostly either of representative nature or cognitively oriented.

Interpersonal dialogue, didactic support, internal differentiation, introjection become the initiating moment of the formation of meaning among students, provided that they are oriented towards the motivational and semantic characteristics of students, when what is learned from "meaning for others" will become "meaning for oneself" (AN Leont'ev), that triggers "Stream of consciousness", when there is a transition from potential to actualized and the level of semantic saturation of the educational context and the priorities of its value-semantic centralizations are determined [24, 25, 31].

The acquisition of such a meaning is possible when using the gamification method in the educational process.

The problem of using gaming technologies in the educational process in pedagogical theory and practice is not new. L.S. Vygotsky, A.N. Leontiev, D.B. Elkonin, and other famous teachers investigated this issue.

The place and role of game technology in the educational process, the combination of elements of the game and the educational process largely depend on the teacher's understanding of the functions of pedagogical games. The function of the game is its varied utility. In existing practice, there are various types of games: business, certification, organizational and activity, innovative, reflexive games to relieve stress and form innovative thinking, search and approbation, and others. For educational games, as a rule, multivariance and alternative solutions are characteristic, of which the most rational choice must be made [5, 33, 34].

The game itself is a very flexible form of learning. It involves imitation of situations corresponding to the implementation of real actions within the framework of the proposed model. As a result, we get a stronger assimilation of knowledge by students. In addition, unlike traditional forms of learning, play contains a very important component – entertainment. The challenge is to engage and motivate the learner at the outset. Often, fear of the complexity of the discipline blocks the ability to perceive information, reducing them to a minimum, which is especially critical in the context of online learning in a foreign language: the complexity of the academic discipline and lack of confidence in sufficient knowledge of a foreign language can have a "synergistic" effect that critically reduces the motivation to study [21, 27].

It is necessary to create an environment that will allow the students to relieve emotional stress and to show their abilities to the maximum. Gaming technologies can solve this problem as well. All people, regardless of age, love to play. Since childhood, the term "play" has been associated with positive emotions in people. In addition, the player knows in advance that in the game one can make a mistake, lose, but then he can try again and succeed. Consequently, play eliminates the fear of making a mistake as such, while in reality this very fear is the main obstacle to activity. The process of assimilating new knowledge is easy and imperceptible for the student. Further, the learning process stimulates itself – the better a person understands a particular subject area, the more interesting it seems to him. Thus, the game, as a teaching method, is able to involve in the educational process, increase motivation to study the discipline and, consequently, to attend classroom lessons (including on-line), as a natural and accessible source of knowledge.

In addition to the main tasks within the educational process acquiring professional competencies and increasing motivation to study the game is also an excellent way to form and master related competencies: organizational, communicative and personal, such as: leadership qualities, teamwork skills, communication skills, etc., and as in many popular today multiplayer online role-playing games (MMORPG) with an interface in English and often multinational teams of players, helps to improve the competence in knowledge of a foreign language. Experience in multiplayer online role-playing games can be a good basis for building online courses in various disciplines in a foreign language. The trend towards the use of games in e-learning is partly due to the growing popularity of sophisticated, well-executed games for the PlayStation, PC, and mobile devices [20].

Of course, it is one thing to play games for fun or to satisfy the competitive spirit, and quite another is to do it in a learning context. However, even with the most superficial observation, it becomes obvious that there is a connection between play, learning, and memorization.

Moreover, the same game can perform several functions [11, 19, 20]:

- Teaching function – the development of general educational skills and abilities, such as memory, attention, perception of information of various modality;
- Entertainment function – creating a favorable atmosphere in the classroom, turning them from a boring event into an exciting adventure;
- Communicative function – uniting student groups, establishing emotional contacts;
- Relaxation function removal of emotional tension caused by stress on the nervous system during intensive training;
- Psychotechnical function – the formation of skills for preparing the physiological state of the players for more effective activity, restructuring of the psyche to assimilate large amounts of information.

Gamification in education focuses on using the core desires of students in order to be more involved in the process and achieve strong performance and high results. Participants prefer excitement, story, play, which means this is a natural way of acquiring skills. Increased student engagement allows to gradually increase the difficulty of tasks. This is comparable to a computer game, where the first levels are easy, and with each subsequent level, the difficulty increases.

In addition to the main tasks within the educational process acquiring professional competencies and increasing motivation to study the game is also an excellent way to form and master related competencies: organizational, communicative and personal, such as: leadership qualities, teamwork skills, communication skills, etc. The gameplay involves interaction with other participants in the game. Any human-to-human interaction can be defined as communication. Oftentimes, in a game, communication is a means of achieving game goals. That is, the success of communication largely determines the win/loss, which motivates the participants to improve their communication skills. Communication in the game can be both interpersonal and group in nature. Accordingly, the improvement of communication skills can occur in both directions. Both skills are very valuable for the formation of students' skills that are useful both for the chosen specialty and for improving knowledge of a foreign language and communicative language competence.

Thus, gamification, when creating an e-course script, allows not to be limited to the presentation of theoretical content in an interactive format, but to make the course "live" and ensure the highest level of assimilation and acceptance of the material by the user. However, in order for the gamification of the learning process to be effective, so that students consolidate the acquired knowledge and skills and understand their current level of assimilation, strive to acquire new knowledge, reflection is necessary in the learning process.

4 Discussion

Reflexive teaching technology, like any pedagogical technology, is "a set of psychological and pedagogical attitudes that determine a special set and arrangement of forms, methods, techniques of teaching, educational means; it is an organizational and methodological toolkit of the pedagogical process" [6]. These constituents are an integral part of the subject of the subjective model of learning and initiate the disclosure, crystallization of the meaning of students in relation to the comprehended educational content. The latter is not self-

valuable for the student until his personal meaning is revealed for the cognizing subject.

The technology of the educational activity itself should be rethought based on the mechanisms of meaning formation inherent in this process. A special section of semantic didactics is the theory of directed translation of meanings in teaching, semantic communication in the educational process.

Semantic communications, an essential component of pedagogical communication, should be understood as an intention – the teacher's actual intention to enter into communication with a student as a value interaction with the aim of reflexive-semantic going beyond the limits of existing knowledge into a new context of consideration and it involves the active inclusion of the information received, meaningful, interpreted and included in the system of life experience of the student [1]. Meanings cannot be taught, but they can be initiated in the educational process. Semantic communications in the educational process should be considered as a system of influence on the personality, causing changes in semantic dynamics, through which any changes in the semantic sphere of the subjects of learning are carried out. This is the procedural component of the group semantic context, focused on the development, first of all, of the semantic, value sphere of students, making possible “meaningful generalization” in the educational process, allows building a model of meaningful learning, which forms a meaningful orientation, guiding a person to the search for certain higher meanings, a meaningful life strategy of a person.

Semantic communications of directed translation of meanings in the educational process should be considered not as a separate methodological technique or a method that solves a particular subject problem, but as something procedurally integral, reproduced in other didactic conditions and, most importantly, giving a stable desired result. By the nature of the impact, semantic communications in the educational process are purposeful or facilitating (supporting) in nature; by the scale of changes, they are close ones influencing specific actions through the generation or change of motives, personal meanings or semantic attitudes, middle and long-range ones the formation or change of the learner’s semantic orientations; in orientation to oneself (egocentration), to others (group-centeredness), to the values of society (prosocial centralizations), but all of them, applied in the educational process, are reduced to the choice and actualization of values, the needs of a student, as well as his self-categorization, and design the life world in accordance with personal meanings, meaning-forming motives, meaning attitudes.

To develop a technological scheme for translating the meaning in teaching as a model of the holistic technology of the process of actualizing the personal meanings of students, a stage is required for dividing them into separate functional elements (or levels) and designating hierarchical connections between them.

Reflexive technologies as a special group of pedagogical technologies perform the function of initiating disclosure, “crystallization of meaning” in relation to the content, which, although it is their bearer, is not self-valuable until the meaning is “revealed” for the learner. The technology itself also does not carry a meaning, it only allows creating, or, on the contrary, complicating the conditions under which a student can reveal for himself one or another semantic fragment of the content, singulate the meaning and transform it in further educational activity, reflecting it through the verbalization of the main semantic centralizations. Reflexive technologies should act in the educational process in the role of a semantic-search initiation, an “internal impulse” leading along the path of meaningful disclosure of the world comprehended by the learner. Teaching in a foreign language facilitates this process, since the student's reflection in this case also occurs in relation to his skills in a foreign language.

At the same time, experience shows that the classical “waterfall” model, when constructing the structure of the course, does not fully provide the proper level of reflection [21]. A course based on this logic will not always be effective and interesting. Therefore, it is advisable to build a course scenario according to a learning model widely known among trainers the Kolb Cycle. This model differs from the traditional presentation of educational material. According to Kolb's model, the training of an adult must necessarily include four stages [20]:

1) Getting specific experience;
2) Analysis of this experience;
3) Theoretical substantiation of the knowledge gained;
4) Testing of new concepts in practice.

The last stage forms a new experience, and the cycle develops again, forming a kind of spiral, thus providing a continuous process of reflection, since without it, the transition between the stages of the cycle is impossible. Kolb's method involves a path from the student's practical experience to theory, and not vice versa, as is customary in traditional teaching.

The development of Kolb's model was the cycle of the Swedish specialist in the field of education, Klas Mellander. He presented it as follows [20]:

- Motivation – sensitivity and psychological readiness;
- Information – existing data and facts are converted into information;
- Processing – the information received is converted into understanding and experience;
- Conclusions – a kind of transformation of understanding and experience into knowledge;
- Application – gaining skills and approaches from knowledge;
- Feedback – improvement as well as further reflection.

5 Conclusion

Kolb's experimental learning theory offered a new perspective that differs from traditional cognitive and behavioral theories. It demonstrates the influence primarily of experience, not mental processes, on learning. The theory has gained widespread prominence and popularity, especially in the fields of adult education and organizational management, although it has been criticized. With the passage of time, experimental learning has become increasingly more embedded in educational systems in universities and schools, which allows linking theory and practice and is an important condition for effective learning.

Reflexive educational technologies change the target settings of self-realization and creative development of students through the actualization of reflexive activity. The central point of such a model of reflectively-oriented education is the co-creativity of all participants in the educational process, in which conditions are created for the self-disclosure, self-expression of each subject. The alienation from the information saturation of the educational process is overcome, it is transferred to the personal level. The very mechanism of reflection and its implementation in the educational process as a component of pedagogical technology directly initiates the semantic self-centering of the student. This means awareness of the methods of activity, the discovery of its semantic features, the identification of educational increments and their personal value by the student himself. Reflection becomes a source of inner experience, a way of self-knowledge, and a necessary tool in a situation of educational choice and personal preference of students.

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