Abstract

The urgency of the study problem is caused by the need to recognize the value of vitageneous experience in professional pedagogical education of foreign students and its insufficient degree of development. This requires a search for ways to attract life experience as one of the sources of education. The aim of the study is the scientific basis and development of technological tools for vitageneous education in the cognitive interest development among foreign students. It was suggested that the systematic inclusion of vitageneous experience in the process of education stimulates the cognitive interest development among foreign students. The study conducted on the basis of Federal State Budgetary Educational Institution of Higher Education "Astrakhan State University" from 2014 to 2018 covered 704 foreign students. The level of the cognitive interest development, academic performance and the results of research activities were chosen as the performance criteria of the use of vitageneous experience. The methods of observation, polling, monitoring academic progress and analysis of students' research papers were used. As a result, there is a positive trend in the results even among students with a low level of cognitive interest. The use of vitageneous learning technologies allows us to comprehensively influence the set of motivational trends among foreign students and stimulate their cognitive interest. The methodological materials contained in the study can be used in the system of advanced training of educators.
1. Introduction

The urgency of the study problem is caused by the need to find practical ways to implement student's vitageneous experience into education.

Therefore, currently, it is necessary to pay close attention to the study of various parameters of personality development which change in the process of vitageneous education.

Education on the basis of vitageneous (life) experience is presented as a theory of vitageneous education which has generalized features: actualization and engaging as the source of the entire spectrum of personal and universal human experience; understanding of education as a process of attracting and constructive transformation of vitageneous experience into a new quality; recognition of the inherent value of the vitageneous experience of an adult as the basis for his or her further self-education, professional and personal self-development (Belkin & Svinina, 2007).

Pedagogical conditions for the use of vitageneous experience as a mean of cultivating interest in teaching profession are the following: providing a wide range of information about teaching activities; implementing vitageneous information into the compositional structure of educational situations; observing an age approach; transition of vitageneous information into vitageneous experience; implementing a holographic approach to learning (Belkin & Vozzhenikova, 2004); implementing feedback and comprehensive advice; vitageneous experience is a source of knowledge, and students are vitageno-carriers in the process of cultivating interest in teaching profession (Kachalov, 1998).

On the one hand, educational technologies should simulate the process of living event lines among students in order to gain life experience. On the other hand, vitageneous education is based on the pedagogical technology of vitageneous learning, a person’s nurturing based on his/her life experience.

Methods and approaches for building the content of vitageneous education are grouped around the following theoretical positions:

Position 1. In vitageneous education the student is a carrier of onto- and phylogenetic experience which is one of the main sources (resources) of education.

Position 2. In vitageneous education the process of education is the source for the formation of mechanisms, the acquisition of new forms of vitageneous experience.

Position 3. Vitageneous experience of a person, a certain group of people, society as a whole is the basis for designing the content, forms, methods of vitageneous education (Belkin & Verbitskaya, 2007).

2. Problem Statement

The professional standard of a teacher in the Russian Federation establishes requirements for the level of education, qualifications and experience of teaching staff. The personal-variable component implies the use of variable pedagogy of learning that is individualized depending on the type of thinking and psychological characteristics of the student.

A modern teacher should be able to discover the value aspect of academic knowledge and information and ensure that students understand and experience it. The important aspect of professional activity is actualized in the framework of this study in item 17 of the section called "Development": "The ability to form and develop universal learning activities, patterns and values of social behavior, behavioral..."
skills in the world of virtual reality and social networks, multicultural communication skills and tolerance, key competences (Ministry of Labour of the Russian Federation, 2013, p. 13)

In order for the above-mentioned personal and professional indicators to be formed among foreign students, it is necessary to organize an educational process that will be characterized by expanding the field of their cognitive activity using vitageneous learning technologies.

Cognitive interest is the basis of students’ professional interest and is understood as a stable, selective attitude of an individual towards cognitive activity, towards its process, methods and results due to its personal significance and emotional appeal (Shchukina, 1988).

Various aspects of the problem of vitageneous education were developed by national and foreign researchers: the development of motivation to master a profession during the period of study at the university (Komusova, 1983), the effect of motivation and intelligence on the level of students' learning activity, the formation of students in the process of studying at the university (Yakunin, 1994), the motivational component of psychological readiness to choose a profession in early adolescence, psychological preparation of students for future professional activities in the process of studying at the university (Shishigina, 1993) and etc.

The essential characteristics of cognitive interest are orientation and cognitive motivation (selective attitude), activity and cognitive independence (personal significance). The criteria are the depth and sustainability of interests. The development of adequate educational motives of modern students is an integral part of the formation of individual readiness for professional self-realization and self-actualization in a limited and unstable labor market and this meets the requirements of the competence approach (Tokar, Shpakovskaya, Stepanova, Bazhenova, & Churilov, 2015).

This is also confirmed by modern requirements for the results of mastering the main professional educational program, where there are such general competencies that should allow future specialists to design the trajectories of their professional growth and personal development; carry out education, nurturing and development taking into account social, age-related, psychophysical and individual features including the special educational needs of students; readiness for psychological and pedagogical support of the educational process.

Vitageneous education determines the change in the attitude of subjects to the surrounding phenomena and objects, affects their value setting. In this regard, it is advisable to assume that if students are offered specific vitageneous tasks that can help find promising solutions, deviate from the usual standard solutions and their scientific basis with subsequent approbation, they will develop a professional and cognitive interest.

Based on this, there was made an assumption that the purposeful, systematic inclusion of vitageneous experience in the educational process stimulates the development of students’ cognitive interest.

3. Research Questions

- To analyze the theoretical base of the cognitive interest development.
- To formulate the cognitive interest development’ program for foreign students using vitageneous learning technologies.
4. Purpose of the Study

The aim of the study is to actualize the problem of implementing the vitageneous experience of foreign students and future teachers into educational process, identifying its effect on cognitive interest.

5. Research Methods

A multidimensional-holographic approach to vitageneous information was used as a conceptual basis for the selection of methods and techniques:

- each event or action of a person must be viewed from different points of view (from the point of view of society, an inner circle, a person himself or herself);
- the presentation of vitageneous information should be carried out in different ways (visual, verbal, technical);
- the form of presenting information should be emotionally rich and artistic (if possible);
- when interpreting an event or a person’s action, it is necessary to use different approaches (socio-centrist, anthropocentric, etc.) (Belkin & Vozzhenikova, 2004).

5.1. Materials and methods

To conduct an empirical study, the following methods and techniques were chosen: theoretical (analysis; synthesis; specification; generalization; analogy method; modelling); empirical (the study of educational and methodological documentation, analysis of students’ research works, pedagogical observation); diagnostic (questioning; interviewing; testing); methods of graphic image of the results.

"Studying the motives of students' learning activities” methodology of Rean and Yakunin (as cited in Yakunin, 1994) included the following scales: educational motives — communicative motives, motives of avoidance, prestige and creative self-realization, as well as professional, educational-cognitive and social motives. When processing the test results, the average indicator for each scale of the questionnaire was calculated. Monitoring of academic performance was used as a result of the instrumental effectiveness of vitageneous information in the educational process.

The choice of methods and techniques for each stage of classes was carried out taking into account the specifics of the course, the time of practical classes and the cognitive abilities of students. The students' reaction, their activity and working capacity, the level of interest in the tasks and the content of the lesson were monitored. Their effectiveness was evaluated as well. According to the results of the observations, the analysis of the effectiveness of ways of enhancing cognitive activity was conducted. It was made with the help of vitageneous learning on indicators of the cognitive interest development, students’ research works and their performance. Also, a comparative analysis of students’ performance was conducted according to the monitoring of the success of different groups of previous years.
5.2. Experimental research base

An empirical study was conducted on the basis of the Department of Pedagogics and Continuing Professional Education of Federal State Budgetary Educational Institution of Higher Education "Astrakhan State University". The work was carried out from 2014 to 2018 during the pedagogy courses. The sample size is 704 students (the first-year students). There are 234 boys and 470 girls. The age range was 17-21 years old.

5.3. Stages of the study

At the first stage of the study a theoretical analysis of the problem allowed to determine that the effectiveness of students’ learning is determined by cognitive interest. The analysis and selection of methods involving the use of vitageneous experience were carried out.

A program for the cognitive interest development among foreign students as an integral quality of the future teacher during the pedagogy courses was developed. The goal of the program was the development of positive social experience through the organization of practice-oriented activities, during which the student finds the answer to the solution of a pedagogical problem or task that arises during his/her learning of professional competencies.

It is represented by five interrelated components: a conceptual and methodological basis (approaches and principles which activities for the development of cognitive interest are built on); a target component (goals and objectives of the use of vitageneous education); a content component (content of the formation activity specified in the elements, structural and content blocks and the program); a procedural component (methods and techniques, forms of organization); an effective and evaluative component: planned results of the program.

To enhance the cognitive interest of foreign students, vitageneous learning technologies were selected.

The second stage covering the academic year assumed the implementation of the developed program and the conduct of diagnostic procedures.

The third stage included the analysis of the empirical research results.

6. Findings

6.1. Ascertaining stage

The ascertaining stage of the empirical study included a procedure for the input diagnosis of the cognitive interest development of foreign students in three levels of its development: superficial, situational, steady. An open, direct interest in new facts, in entertaining phenomena appearing in the information that students receive can be considered as a superficial level of the cognitive interest development. The situational level is the interest in the knowledge of the essential properties of objects and phenomena that constitute their deeper and often invisible internal connection. The steady level of the cognitive interest development is the interest in identifying patterns, in establishing general principles of phenomena (Ilyin, 2001).

The results of the input diagnostics of the cognitive interest development of foreign students showed that at the beginning of the year the situational (538 people, 76.42%) and superficial (127 people,
18.04%) levels prevail among the first-year foreign students. 5.54% (39 people) had a steady level of the cognitive interest development (Fig. 1).

![Figure 01. The results of the input diagnostics of the level of the cognitive interest development among foreign students](image)

In addition, a questionnaire was conducted during which the sources that constitute the main content of students' vitageneous information were specified.

The results of the questionnaire showed that the first place among the sources of vitageneous information of foreign students from Turkmenistan is social, business, everyday communication, the second place goes to other activities. Literature and art are in the third place. The Internet, mass media are the least demanded, which is explained by the way of life and cultural and historical features of the country's education system (Fig. 2).

![Figure 02. The results of the input diagnostics of the level of the cognitive interest development among foreign students](image)
6.2. Formative stage

During the implementation of the developed program within the classes the main techniques of vitageneous education were used (Belkin & Verbitskaya, 2007):

1. Retrospective analysis of life experience. The essence of its use is to encourage students to answer the question "What would happen if ...". Then there is a description of the scientific, every day or professional situation. Belkin & Vozzhenikova (2004) believes that such an autobiographical life description is useful to offer students in cases where they confirm or deny the educational value of the information obtained in the teacher’s presentation in the facts of their own or someone else's biography. When using this technique almost always there is a discrepancy between vitageneous and educational knowledge. The degree of such a discrepancy can vary from mismatch to rejection, denial, and mutual exclusion.

2. The starting actualization of life experience which consists in determining the baggage of knowledge at the level of ordinary consciousness, determining their quantitative and qualitative deficit.

3. Advanced projection of teaching suggesting an orientation to the zone of proximal development.

4. Additional construction of an unfinished educational model. It lies in the fact that the teacher offers students to finish a "piece of work" (of a scientific, literary, moral and ethical nature) that has been already begun and they should do that on the basis of their personal life experience.

5. Time, spatial and content synchronization of the material. Didactic information is disclosed to the student in the relationship between the individual facts and the processes of the phenomenon under study.

6. Vitageneous analogies. The material is illustrated by students from their life experience.

7. Vitagenous spiritualization of objects of animate and inanimate nature which consists in "humanizing" the objects and phenomena under study attributing human qualities and motives to them.

8. Creative modeling of ideal objects. The mental transformation of reality in accordance with the expectations, interests, ideas and beliefs; the task sounds like "if I were ... (the Minister of Education, school director, etc.)”.

As grounds for the selection of vitageneous information, the following items were taken into account:

- social significance;
- the content of patterns of human behavior in difficult life situations related to overcoming difficulties;
- the connection between socially approved ways of achieving goals and results;
- promoting awareness and understanding of the causes of their own failures;
- positive impact on the emotional sphere, the need to instill an optimistic perspective, self-reliance, increase the level of aspirations;
- motivation for action, constructing and designing character.
The greatest effect was obtained from the use of the vitageneous experience of the second-year students who had passed the internship in the "press conference" mode. The students were invited to interactive lectures and seminars. The individual aspect of phylogenetic experience was taken into account, and particular contradictory life pedagogical situations were included into the topics provided by the work program of the course.

Thus, the involvement of the student in the emotional situations of communication as close as possible to the conditions of his/her future professional activity activate him/her so that their professional cognitive interest is realized when the questions of opponents require a spontaneous reaction.

The reaction of foreign students was manifested in the interest in the materials of the lesson, in surprise and desire to do practical work. Individual students had a wary attitude towards information. Besides, practical exercises showed the relevance of the topic, its importance, revealed the role of professional knowledge, skills and experience of a teacher in solving specific professional problems, gave examples from teaching practice, from teacher's experience, paradoxical facts. Methods from the group of responsibility and commitment formation were used: demonstration of examples of success, practical achievements of colleagues. The most frequently used methods of enhancing students' cognitive activity are: modelling the behavior of a teacher and his/her tactics in a problem situation, solving situational problems in small groups, role-playing games. The compatibility of the methods, their integration into each other helped achieve positive learning outcomes even among students with a low level of the cognitive interest development. The reaction of students: participation in the discussion, showing the desire to be convincing, learning evidence-based criticism.

In the course of work, the students interacted in pairs, groups of three people and in teams of 4-5 people.

Permutation of working places varied during classes, zones of group communication were created depending on the number of groups and the number of students in each group (three, four, seven, etc.).

The students were asked to unite in groups as they wished. The advantages of this approach are in taking into account the interpersonal affections of students; but there are some difficulties: sometimes there was a friendly but conniving atmosphere inside the group, when the interest in communication displaced the process of solving the learning task. In organizing the discussion the attention was paid to developing communication and collaboration skills.

The results of the formative stage of the empirical study showed that the students were interested in any techniques and methods of vitageneous education providing their proper organisation and creative application.

In the course of monitoring the joint learning activities of students we came to the conclusion that it is optimal when there are up to 15 people in a group. In a small group (4-5 people) it is more difficult to create the right atmosphere, but it is easier to manage in terms of communication. In a large group (15 people) it is more difficult to establish contact between group members.

The use of vitageneous learning technologies allowed students to achieve success in self-education and interaction; include self-control mechanisms and self-regulation of the process of assimilation of information; take into account the psychophysical characteristics of students, to ensure the creative, exploratory nature of many tasks during the course of classes. Vitageneous information used in practice
6.3. Control stage

The results of the study showed that traditional teaching methods lead to the formation of mainly external motives of educational activity for students, but if problem-based instruction is mainly used, it rather effectively influences the formation of educational-cognitive motives among students. The results of the study led to the following conclusions.

The methods of presenting educational material that are commonly used in high school lead to an uncontrollable (random) formation of learning and cognitive motives among students (Kodjaspirova & Pletneva, 2008). The use of technologies of vitageneous education creates conditions for the purposeful development of cognitive interest.

The connection between the formation of cognitive interest and vitageneous learning is explained by the fact that this way of organizing the educational process determines the process of active, creative thinking of foreign students aimed at mastering the general ways of solving problem tasks.

For purposeful management of the development of cognitive interest, the main content of educational material should be presented as a system of problem-solving tasks of different nature, and the learning process itself should be designed as a process for solving these problems, and the goal of all stages of the problem solving process should be clear to students.

The role of vitageneous learning in the formation of cognitive interests is that they are actualized and strengthened.

This is confirmed by the results of the survey conducted at the final stage of the study.

When the respondents were asked about the impact of the use of life experience on learning activities, they answered that it introduced diversity into the learning process (74.86%), allowed to play various roles (64.06%), made it possible to communicate with the other students in the group (86.5%), and it also allowed to understand how to behave in specific situations (56.5%).

Among the difficulties that the students encountered in the process of learning activities were the lack of vocabulary 698 (99.147%), the inability to express their point of view in the form of a dialogical speech 596 (86.659%).

When the respondents were asked about how learning activities influenced the use of life experience, they answered that it introduced diversity into the learning process (74.86%) allowed to play various roles (64.06%), gave the opportunity to communicate with other students in the group (86.5%), and also made it possible to understand how to behave in specific situations (56.5%). This indicates that various forms of interaction aroused the interest of foreign students in their proximity to real pedagogical situations.

Among the difficulties that the students encountered in the process of learning activities were lack of vocabulary 698 (99.147%), inability to express their point of view in the form of a dialogical speech 596 (86.659%).

In the last paragraph of the questionnaire, it was proposed to choose those forms of work the implementation of which caused the most interest. As a result, the proposed forms of work were ranked in
the following order: analysis of the specific situation 436 (25.42%), role-playing game 101 (14.35%), mutual learning 89 (12.64%), project 78 (11.08%).

Most of the respondents would like to continue to take part in various forms of interaction, many of them (653 - 92.75%) would prefer to participate in this form of work at least once a week. These data indicate an increased motivation to the study of pedagogical courses in the process of interaction in the classroom.

This is confirmed by the data of the analysis of the effectiveness of activation methods in terms of the academic progress of students. Student performance on the basis of classes in 2017-2018 was 4.1 points which is 0.2 and 1.02 points higher than in 2015-2016 and 2014-2015 respectively. This goes in comparison with the performance indicators of the previous two years (2015-2016 and 2014-2015) at which methods and techniques for enhancing cognitive interest using the vitagenous experience were not applied with such density and not that much.

In the course of the empirical study we established a direct relationship between the use of vitageneous education technologies and the positive dynamics of the cognitive interest development. The use of vitageneous learning led to a change in the motivation and level of the cognitive interest development, i.e. the hypothesis that vitageneous learning acts as a mean of forming the cognitive interest of motives was confirmed.

Analyzing the data, we saw that 6.11% of foreign students are motivated to achieve success. This fact is confirmed by the results of re-diagnosis by the method of Rean and Yakunin (Yakunin, 1994): 82.24% of the examinees are motivated to acquire deep and lasting knowledge, to receive a diploma, and to obtain intellectual satisfaction.

It proves that the students made an adequate choice of profession and are satisfied with it. Their cognitive sphere is activated and is at a high stage of development.

To sum it up, the following conclusion can be made: one of the ways to develop the cognitive interest of foreign students is a wider application of vitageneous education technologies in the educational process.

We established that switching to the methods of vitageneous learning, three or four classes are required. The attention was focused on both positive and negative patterns of interaction.

One of the criteria for effectiveness was the quality and quantity of educational products created both individually and collectively.

As the students became involved in various forms of problem solving based on vitageneous learning, they gained the experience and culture of collaborative search for solutions.

1. They improved their ability to raise questions, see different aspects of the problem being solved, understand the implications of the questions asked by others.

2. They began to develop an orientation not only to take into account the opinions of others, but also to find points of contact between the opinions of participants, to enter into a single semantic field arising in polylogue. The hypothesis is confirmed by the results of the final diagnosis (Fig. 3).
In the course of generalizing the pedagogical experience, the hypothesis was proved: if we build the educational process on the pedagogical course during classes systematically using vitageneous learning technologies, this will allow students to form a cognitive interest, which will increase the quality of education.

The initial diagnosis of foreign students showed consistently superficial and situational levels of cognitive interest. In the course of work, the systematic use of vitageneous education technologies increased it.

7. Conclusion

The review of psychological and pedagogical theories of the problems of vitageneous education led to the conclusion that all the works currently available, when considered separately, can explain only some phenomena of the influence of the student’s vitageneous experience on the development of professional and educational interest, to answer only a small part of questions arising in this field of study. Only the integration of all works with a deep analysis is able to give a more or less complete picture. However, such a rapprochement is seriously hampered due to differences in research methods, terminology and due to the lack of firmly established facts (Gazimzyanova, Gareeva, & Gilazhieva, 2016).

However, it is worth noting that there is a problem with today's educational reality: the teaching community of higher education is concerned about the poor quality of training of foreign students. There is a need for a deep theoretical and methodological development of the problem of the influence of intercultural communication on the development of professional and educational interest (Udalova & Zhukova, 2014; Parks, 2018; Tarasova, 2017; Vershinina, Kurbanov, & Panich, 2016). It was also noted that differences in motivation and value orientations can be observed among foreign students depending on the course, faculty, specialty.

Practice shows that the choice of students of a particular specialty is often random. For example, only about 62% of applicants enter ASU with an apparent interest in this or that specialty. The annual
survey of students shows that about 18% would not repeat their choice if they again faced such a need. The same picture is typical in general for other universities (Perraton, 2017). All this testifies to the urgency and relevance of the problem.

The cognitive interest development of foreign students has its own specifics. At the second stage the complexity was not so much in the unwillingness of students to understand their feelings, as in inability to express their feelings. Therefore, we selected questions in advance to help us understand and adequately express our attitude to what is happening.

The effectiveness of using vitageneous experience of the second-year interns invited to interactive lectures and seminars for freshmen is also confirmed by different studies on the problem of mutual learning (Mustafa, 2017; Ansuategui & Miravet, 2017).

The individual aspect of phylogenetic experience was taken into account, and specific contradictory life pedagogical situations were included into the topics provided for the work program of the course.

Student’s questions addressed to an academic audience expressing a desire to obtain a deeper understanding of the subject of their interest, operating with acquired knowledge and skills and striving to share new, fresh information from various sources outside of training with others contribute not only to the successful development of educational material but also the establishment of a comfortable psychological climate in the classroom, the creation of a situation of success, the formation of a positive motivation to learn, the growth of interest in the profession, the growth of consciousness, the development of creativity and independence.

Therefore, the work on the introduction of vitageneous learning technologies into the educational process is required to be conducted in the system teaching foreign students to reflect on life, especially professional experience as a habitual activity.

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