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## ETHNO PEDAGOGICAL TECHNOLOGIES IN REGIONAL EDUCATION ENVIRONMENT

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#### Abstract

This work is devoted to the problem of developing ethno pedagogical technologies. Ethno pedagogy is a separate branch of pedagogical science that studies the natural methods and traditions of education. The main problem of modern ethno pedagogy is the fragmentation of ethno pedagogical knowledge. The development of ethno pedagogical technologies makes it possible to systematize ethno pedagogical knowledge, consider their place in the pedagogical process, determine the conditions under which the ethno pedagogical process becomes effective. The place occupied by ethno pedagogical technologies in the regional educational space is considered. Regional educational space is an environment necessary for the implementation of ethno-pedagogical technologies. The components of ethno pedagogical technology are presented, the combination of which ensures the successful implementation of ethno pedagogical technology. The methodological component, including approaches to the consideration of the features of ethno-pedagogical technologies, is considered. The use of synergistic, systemic, competence and technological and other approaches provides a comprehensive consideration of the problem under study. The presented components of ethno pedagogical technology are considered in detail, taking into account the peculiarities of the regional educational space. The development of ethno pedagogical technologies allows the use of ethno pedagogical knowledge systematically, reasonably, taking into account the specifics of the regional educational space.

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Keywords: Ethno pedagogics, technology, methodology, regional education.



## 1. Introduction

Any technology used in educational practice as a project of actions of the training process participants is based on some theoretical basis. The range of educational technologies offered today is very wide: collective learning methods, technologies of personality-oriented education, sign-context learning technologies, gaming technologies, active teaching methods, education with a topographical projection method, problem-based learning, information technology training, programmed learning, modular, integrative technologies, developing training, project method, open form technology, ethno cultural technologies, distance learning, etc. (Lebeaume, 2011).

Ethno pedagogy is a branch of pedagogical science that is developing actively today. The use of ideas, methods, means, traditions and techniques of ethno pedagogy must be based on scientific approaches corresponding to the current stage of scientific knowledge development. Ethno pedagogy has always been defined as a science that systematizes, analyzes and generalizes the educational experience of certain ethnic groups, their pedagogical foundations and traditions in the field of training and education. Ethnos are very different, they have their own original pedagogical system based on history, ethnography, traditions of family, national heroes and ideals. "Ethno pedagogics represents the scientific knowledge containing the information on practical education and formation experience of ethnic groups, about moral, ethical and aesthetic views on value of a family, a tribe, a national character, a nation" (Arsaliev, 2016, p.11). Ethno pedagogical technologies are developed and realized on the base of national education principals. They have methodological base (Arsaliev, 2014, 2016). National experience and education traditions represent the object of ethno pedagogics studies. Ethno pedagogics is an independent science. It has self-supporting methodology, methods, models, systems, and practical applications. Modern educational environment is multicultural, multinational and it becomes more and more complex. The potential of ethno pedagogics in international problems solution is not used sufficiently. Ethno pedagogic technologies would help to use this potential effectively.

## 2. Problem Statement

Ethno pedagogical system is the basis of the regional educational environment, since it allows the implementation of the education in view of the regional ethno cultural space specifics. Therefore, consideration of the regional ethno pedagogical system and the conditions of its functioning will help to identify its potential more effectively. The main problem is that ethno pedagogical knowledge is fragmentary today. It is necessary to develop the theoretical foundations of ethno pedagogics, methodology and technologies. This will make the ethno pedagogical experience replicable. This will make the ethno pedagogical experience of the use of ethno-pedagogical knowledge, expand the range of regional teachers who use ethno-pedagogical elements in educational process.

## 3. Research Questions

The main research questions considered in the article are connected with the solution of the global problem of increasing the efficiency of the regional educational space functioning. What are the factors affecting its successful functioning? What role does ethnos, its culture, traditions, customs, and pedagogical

principles play in this? How does all this influence on the successful personality development in modern conditions? What place does ethno pedagogical knowledge occupy in regional education system?

## 4. Purpose of the Study

We are focused on examination of the regional education system from the standpoint of a systemic approach, on identification of factors affecting its successful functioning, on substantiation of the principles of the regional educational system functioning and on clarifying the role of the ethno-pedagogical system as a component of the regional educational space, its role in improving its effectiveness.

#### 5. Research Methods

In pedagogical theory and educational practice of the whole variety of methodological tools, the category approach is used to highlight the basis for understanding something, designating an aspect of consideration, analyzing a phenomenon, determining initial scientific positions in modeling and designing an object. In education, the approach is often considered as the leading scientific idea underlying the organization of the educational process.

In our study, we have used synergetic, systematic, competence-based and technological approaches. In accordance with the system approach, all the phenomena we study are considered as systems consisting of certain components and connections between them. For example, we consider teacher's professional culture as a system of competences, pedagogical system etc. We present ethno pedagogic technology as a system of operations (actions) etc. Competence approach involves the consideration of knowledge, skills and abilities possessed by the individual as competencies that make up the competences system of an individual (Cohen-Scali, 2012; Wuttke & Seifried, 2017). Synergetic approach means the consideration of objects as self-sustaining nonlinear systems. Synergetics represents a new scientific direction focused on investigation of self-organization processes (Knyazeva, 2007; Knyazeva & Tourobov, 2000). We would like to underline that synergetics has special methodological value for ethno pedagogics. The terms of sysnergetics have their own contents in ethno pedagogics. Synergetics in education science represents a methodology tool allowing to study processes of education and mass (collective) interactions of objects, elements and subsystems ("Synergetics", 2000). Technological approach means that all actions and operations of teacher are presented as a set, a sequence of operations (Lebeaume, 2011; Loveland, 2012). The technological approach in education will be understood in this context as the way of designing and applying technologies for solving various kinds of pedagogical problems. Ethno pedagogical technology represents ethno pedagogical process, its base, principles, ideas, operations, contents etc.

#### 6. Findings

Ethno pedagogical technology is realized in *regional educational system* (Fig. 1). It is a combination of some components. The main component of the regional educational system is ethnos. Ethnos is the foundation on which the regional education system is built, since the basis of the regionalism is formed by traditions, customs, foundations, culture of a particular region (Arsaliev, 2017).

The most important component of the regional educational system is the educational institutions of the region that form the educational environment in which the personality in the region is formed, developed and improved.

The hierarchy of objectives of the regional education system is a component that provides the objectives of the educational system in a particular region.

The personality component of the regional education system contains everybody related to the human factor in the education system, all participants in the education process.

Information and technological support of the regional education system includes two main components - information and technology. Information includes all information, the entire information environment sometimes called "information field". This is knowledge and skills formation base. Information in the modern world is a factor determining the success of the society development. The success of its full-fledged functioning as a member of society depends on how confidently a person feels in the modern information environment.

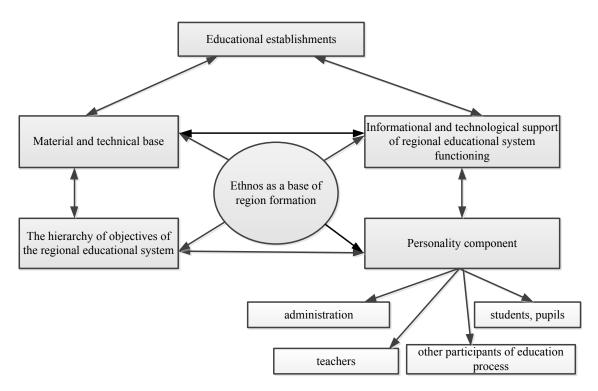


Figure 01. Components of regional education system

The competence of the individual in collecting, processing, analyzing, and using information determines its adequacy to the modern world. In this regard, the technology of interaction of the individual and information constitutes one of the most complex problems of our time. In the education process, the information is of particular importance, when there is a formation and development of an individual, the construction of values and personal meanings system.

The technology component contains technologies of interaction with this educational and noneducational information, educational technologies, communication technologies in the educational process, and ethno-pedagogical technologies. In our opinion, a separate component of the system is the material and technical base that ensures all the processes occurring in the regional education system. Moreover, the material and technical base must ensure the effectiveness of these processes.

In our opinion, the design of the ethno pedagogical process includes three processes, presented in Fig.02.

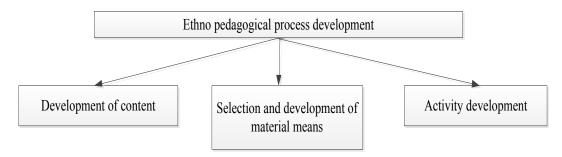


Figure 02. Components of ethno pedagogical process development (teacher's actions)

The process of constructing content is the selection, systematization, analysis, formation of the information component of the ethno-pedagogical process, as well as consideration of the content of ethno cultural competences. Ethno cultural competences mastering is defined as the goal of the ethno-pedagogical process. The process of selecting and constructing material means selecting the means for ethno-pedagogical process implementation: tutorials, literature, visualization, equipment, etc. The construction of an activity involves the development of algorithms, which are a sequence of operations that will be carried out by various participants in the ethno-pedagogical process.

To develop a model of ethno pedagogical technology, we will take as the basis the universal model of pedagogical technology (Arsaliev, 2017), which allows us to trace not only the sequence of operations in its development and implementation, but also identify the links between its structural components. The structure of the proposed model of ethno pedagogical technology is shown in Fig.3.

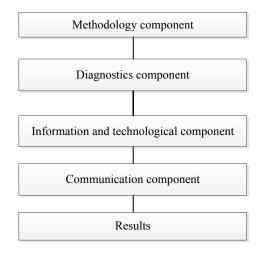


Figure 03. Model of ethno pedagogical technology

Let us consider its components in detail.

The composition of the *methodological component*, the structure of which is shown in Figure 4, includes: the purpose of training and education, formulated with regard to the social order of society in the state educational standard and the need for the successful organization of student's personality; hierarchy of scientific methods of ethno pedagogical technology development; ethno-pedagogical tasks that need to be addressed during the implementation of the technology; pedagogical principles and pedagogical conditions of implementation. First we determine the approaches to the organization of the educational process the teacher will be guided by in the development and implementation of ethno-pedagogical technology.

In the development of the methodological component of ethno pedagogical technologies, as a fundamental one, we will accept the concept of four levels of methodological analysis existing in modern science, and propose the following approaches in accordance with the four levels of analysis:

- ideological level philosophical and axiological forms of humanitarian knowledge about the emergence, formation and development of historical subjects of different scales (individuals, ethnic groups, nations, peoples), genetic and evolutionary approaches;
  - general scientific level systemic, integral, synergistic, logic and historical approaches;
- specifically scientific level personally oriented, cultural, anthropological, activity-oriented and sense-centered approaches;
  - technological level technological, communicative and task approaches.

This hierarchy of approaches used at various levels in the development of ethno-pedagogical technologies will make it possible to present this system of scientific views in a comprehensive manner. Let us briefly dwell on the specifics of the approaches indicated at different levels and their refraction in ethnic pedagogy.

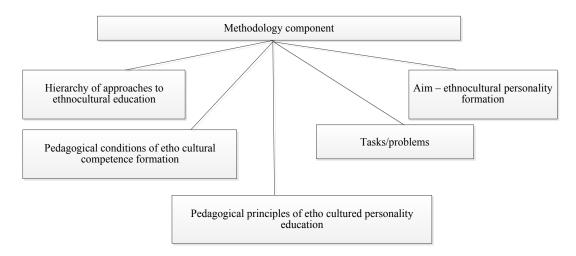


Figure 04. Structure of methodology component of ethno pedagogical technology

In accordance with the genetic approach, social phenomena and processes are studied on the basis of their origin and development analysis. Turning to the ethno pedagogical processes, we note that the genetic approach to the study of ethnopedagogical phenomena allows one:

 to analyze the conditions of origin of certain ethnic characteristics of the educational systems of various nations (Ahtarieva, 2017);

- to analyze the conditions of origin of certain ethnopedagogical phenomena and processes;
- to predict their subsequent development;
- to identify the moments of change of one level of formation of ethnocultural competence by another (qualitatively different);
- to explore the mechanism of the emergence of already established qualities and characteristics of the ethno-pedagogical process and its subjects.

In accordance with the evolutionary approach (Lozovskij & Lozovskij 2006), the ethno-pedagogical space is regarded as a developing social system, its functioning is an integral part of the global evolutionary process. Its development occurs in accordance with the general universal development algorithms, which are based on self-organization.

Focusing on the need to consider the ethnocultural space as a system that has some special structure and laws of functioning, the systems approach reflects the interconnection and interdependence of phenomena and processes of the surrounding reality. Using a systematic approach (Sklyarov, 2013) in relation to the development of methodological foundations of ethno pedagogics means:

- development of a system of methodological bases for the ethnopedagogical process and its information technology support;
- consideration of the system-forming factors of the ethno-pedagogical development of the student's personality development;
- consideration of the ethnocultural competence of the student and teacher as a system, as well as an element of an integral system of human personality characteristics (Orsini-Jones & Lee, 2018; Stefanenko & Kupavskaya, 2010; Wirth, et al., 2017);
- design of a holistic ethno-pedagogical process in education and modeling of ethno-pedagogical technologies;
- development of a system for evaluating the effectiveness of ethnopedagogical technologies in the educational process.

Without taking into account the history of the development of ethno pedagogical ideas (Volkov, 1999), it is impossible to understand the current state of the theory deeply, much less determine the trends of its further development. In this regard, we use a logical-historical approach, when the disclosure of the problem being studied combines both a historical approach (the historical development of ethnopedagogical phenomena, processes, ideas, theories) and a logical approach (the current state of phenomena, processes, as well as ideas and theories, their interrelationships). Moreover, the logical aspect prevails in the logical-historical approach.

The integrated approach focuses on the "all-level, all-sector" view of human consciousness and behavior, covering the entire spectrum of levels in the intentional, cultural, and social aspects of human beings (Small, 2016). All these parts are united by a holistic integral vision. The main provisions of the implementation of the integral approach in ethno pedagogical processes are that:

mastering ethno cultural phenomena is considered as one of the stages of self-improvement of a
personality, movement towards a "perfect self", towards a personality with a high level of
formation of ethno cultural competence;

- the methodological basis of ethnopedagogy implies the integration of four levels of analysis philosophical, general scientific, concrete scientific and methodical, the integration of approaches at each level;
- consideration and analysis of ethnocultural phenomena are carried out from the standpoint of representatives of different cultures; any ethnic group is considered as an integral part of world civilization;
- awareness of the need for possession of a high level of ethnoculture ensures success in the further growth and development of the personality, consciousness at all stages of the implementation of ethno-pedagogical technologies; the formation of an ethnocultural personality is realized on the basis of an independent awareness of the importance of ethnoculture for self-development;
- the cultures interaction of in educational process the student's native culture and the culture of other ethnic groups (Small, 2016); training and education in the framework of the concept of dialogue of cultures contributes to the formation, development and implementation of the individual in a multicultural space;
- in the information technology support of ethno pedagogical processes, the optimal use of all methods and forms, all channels of information perception is implied (Pisarenko & Bondarev, 2016; Pisarenko & Arsaliev, 2016);
- formed ethno cultural competence is considered as a complex, multi-level, multidimensional integral phenomenon that is included in the system of personal qualities of a person;
- an ethno cultural phenomena study is provided as an integral part of the world cultural process.

In accordance with the synergistic approach, we consider the subjects of the educational process as self-organizing, complex, open and non-linear systems interconnected and interacting with each other (Budanov, 2009; Knyazeva, 2007). The emergence of any new methodology of understanding or structuring scientific knowledge is almost always applied by every science to itself. At present, the outcome of the promotion of synergistic methodology in the field of education has become ideas, the starting point of which is the synergy of the education process, and pedagogical synergy refers to the field of pedagogical knowledge, whose worldview is reflected in the theory, principles and laws of self-organization of pedagogical systems ("Synergetics", 2000).

Taking into account the peculiarities of social cognition and its subject, the principles, approaches and methods discussed above should be specified. At this level of methodological analysis in ethnopedagogy, we suggest using personality-oriented, activity-oriented, sense-centered, cultural and anthropological approaches. Methods, approaches and methods of scientific knowledge are concretized at the methodological level, which is represented by technological, task and communicative approaches and such methods as descriptive, statistical, historical, sociological, comparative, analytical.

The purpose of the implementation of the projected technology, as a rule, is formulated as "the formation of ethnocultural competence and the development of the personality of the student". Then, specific tasks to realize the purposes are determined, the pedagogical conditions for the implementation of this technology, the pedagogical principles of training and education of an ethnocultural personality are analyzed. The above is the theoretical basis of the future technology, its methodology, which allows the teacher to compare the goals of methods and means.

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The diagnostic component of the ethnopedagogical technology contains: diagnostics of the initial level of the formation of ethnocultural competence, as well as the diagnosis of the personal characteristics of the students in order to optimize the educational and educational process. The first type of diagnosis is necessary for the organization of the ethnopedagogical process, the second type of diagnosis is needed for the optimal construction of the ethnopedagogical process in terms of the choice of means and methods of teaching. This includes the diagnosis of the types of personality of the students, and the diagnosis of leading perception modalities, the diagnosis of the level of formation of ethnocultural competence, etc. As a result of diagnostics, the teacher receives information about the contingent of learners, which further allows him to proceed to the development and adjustment of ethno-pedagogical technology.

Information technology component contains:

- informational component or ethnocultural content of training and education, which is an
  informational component of ethnopedagogical technologies; a set and description of ethnocultural
  competences (formed personality traits), the formation, improvement and development of which will be
  carried out during the implementation of ethno-pedagogical technology;
- a technological component containing everything related to the procedural part of ethnopedagogical technologies: forms of organizing the ethno-pedagogical process of the educational process; methods for the formation of ethnocultural competence; control methods (mutual control; testing); means of ethnopedagogization of education and training (material and ideal; artificial and natural; simple and complex; dynamic and static; flat, three-dimensional, mixed, virtual; visual, audio, audiovisual; paper, magneto-optical, electronic, laser; traditional, modern, and perspective); algorithms of the procedural part of ethnopedagogical technologies, reproducing the sequence of actions in the ethnopedagogical process.

Next, the information technology component of the ethnopedagogical technology is developed, which includes the information component - the content of training and education - and the technological component represented by the means of training and education, procedural algorithms, forms of organization and methods of training and education and control methods. In fact, this component shows the ethno-pedagogical technology as a process in its operational part.

The content of training and education includes not only educational and educational information, but also its forms, strategies of presentation, storage, processing and reproduction. The systematic use of both components in their interrelation and interaction, taking into account technical and human resources, allows the teacher to organize active informational interaction with students in order to ensure the achievement of didactic and educational goals. Modern domestic and foreign didactics consider the content of training and education not as static, but as a constantly changing and developing category related to the process of training and education. The content of training and education is all that is involved in the activities of the teacher, the learning activity of the student, educational and educational material and the process of its assimilation (Burton, Nandi & Platt, 2010).

The information component should be considered in the context of the task of fully and adequately providing the learner and teacher with educational, educational and other kind of auxiliary information that contributes to the achievement of the stated pedagogical goals and ensures the achievement of a guaranteed pedagogical result. All the information needed by the teacher and the student, both in the process of individual activities and in the process of their interaction, is provided with the help of learning tools. This

is the integration of these two components of the information technology support of the educational process. In fact, the information component is educational information on the discipline under study, a constantly evolving knowledge base in a particular subject area, that is, training content, as well as information necessary for educational purposes and personal development. It is on what goal is set that the definition of the content of training and education depends.

By definition of V.I. Zagvyazinsky, the form is "the way of organizing a process or object, which determines its internal structure and external relations" (Zagvyazinsky, 2008, p. 69). Forms of education regulate the relationship between the individual and collective components in training, the degree of activity of trainees in teaching and learning activities and the nature of its leadership by the teacher.

The communication component reflects the system and principles of interaction between the subjects of the ethno-pedagogical process on the principles of equality and cooperation, mutual support and assistance.

The final diagnostic component allows the teacher to determine the degree of achievement of the result of the implementation of ethno-pedagogical technology - the formation of the whole personality of the student, owning a certain level of formation of ethno-cultural competence, sufficient for self-realization and full functioning in a multicultural society. The result of poly ethnic education is the formation of students' ethno cultural competence, ethno cultural competence as an integrative personality trait, manifested in objective perceptions, knowledge of ethnic cultures, skills, skills and behaviors that promote effective inter-ethnic understanding and interaction, is formed in the course of multiethnic education, one of the conditions for implementation which is a multi-ethnic educational environment (Jiménez, 2016).

Thus, in accordance with this model, when developing ethno pedagogical technology, the teacher has absolutely clear guidelines that must be followed.

Ethnopedagogization of the educational process is not always amenable to formalization, as we tried to do. The fact is that many elements of ethnopedagogization are realized in the course of training in certain disciplines, many academic subjects are of ethnopedagogical nature, moreover, it is almost impossible to separate the educational and educational processes. This creative teacher will implement ethnopedagogization all the time, using all available means and methods, every moment of the lesson and extra-curricular communication with the student.

In its pure form, it is possible to talk about ethnopedagogical technology only when we are dealing with the organization of an ethno-pedagogical event, with the formation of some component of ethnocultural competence. It is impossible to bring under the technology that many educational and ethnocultural aspects of the moments and situations that the teacher can use in the educational process, very often such situations arise spontaneously, then the effectiveness of using them in the interests of forming an ethnoculturally competent person depends on the teacher. However, in our opinion, the teacher is simply obliged to strive to give ethnopedagogization to a systematic, strategically and tactically correct character.

Any technology used in educational practice, as a project of actions of subjects of the educational environment (theoretical information about how to achieve an educational goal) is based on a certain theoretical basis (approach, concept, method), and when describing such a system, the principles of its construction are revealed. Let us formulate the principles underlying the ethnopedagogical technologies

taking into account the needs of a developing personality, the specifics of the social environment, the polyethnicity of society, the tasks of education, which are fundamental, in our opinion, are:

- cultural studies, the observance of which implies that the result of personality-oriented education is, first of all, a person of culture who harmoniously combines human morality, national and individual identity in his personal image (Jiménez, 2010);
- the principle of nationality, the development of a child as an individual, ascending from his native ethnic culture to the world through an all-Russian in a system of holistic, vertical, continuous education, starting from preschool age (Manyeruke & Cakici, 2017);
- the principle of nature conformity; taking into account in the ethno pedagogical process of the age and individual characteristics of the child, the holistic development of the personality, the expansion of its outlook, the formation of a world view, the development of self-awareness;
- the principle of competence orientation, according to which the implementation of ethnopedagogical technology is aimed at the formation of competence - the basic characteristics of the person, reflecting the person's achievements in the development of relationships with other people. Ethno cultural competence is considered in the structure of general social competence, which is one of the indicators of readiness for successful life in society (Kuzmina & Danilova, 2016; Lukjanenko, 2010).

The technological approach to the development of education is associated with the development of an applied field of theoretical knowledge that describes the laws and rules for constructing procedures for transforming teacher interaction with objects of various natures (educational and scientific information, curricula and textbooks, visual and technical means, experimental equipment, etc.) and subjects of the educational process. The subject side of the transformative interaction can be the content of education, the methods of training and education, the forms of organization of the educational process and the person himself - a pupil or student, the teacher himself.

When selecting, developing and applying technologies, teachers should rely on the regularities of the age, mental and personal development of children, adolescents, young people or adults (Lipsett-Rivera, 2018).

The peculiarity of the technological approach is also manifested in the fact that it provides not only descriptive or theoretical, but also a constructive, prescriptive scheme of the process being organized.

In line with this, the technology used to effectively solve educational, in our case, ethnopedagogical tasks is theoretical information that is converted into prescriptive information for the subject about specific substantive and procedural actions that must be carried out in order to ensure the proper (planned and desired) effect. In this case, the technology is considered as a scientifically based method of activity of the subjects for obtaining high quality educational results.

Thus, the development of the system methodology of the modern ethnopedagogical process, the analysis of the basics of the ethnopedagogical process from the standpoint of the technological approach, as well as the attempt to formalize the ethnopedagogical process in the form of technology make it possible to maximize the educational experience of many peoples, allows us to single out the most rational, the most objective and valuable for educational theory and practice.

## 7. Conclusion

The use of the technological approach in ethnopedagogy is aimed at developing a student's national tolerant self-awareness based on their culture and language environment; assistance in mastering the achievements of world culture, a system of universal values to form in the mind of each student a single picture of the world, aiming at improving the world, transferring to it an adequate world level of general and professional culture, which makes it possible to integrate it into the system of national and world cultures. The technological approach to the development of the foundations of the ethnopedagogical process will allow the formation of an ethnocultural personality, striving for continuous self-improvement, which is characterized by a socially positive attitude to the world, nature and society, representatives of other nationalities.

Modern educational technologies are a necessary toolkit of the teacher. They have a great potential for improving professional skills and achieving the goals that society sets for the education system - to prepare a person for life in a multi-ethnic space, for intercultural communication, for creativity in practical and intellectual activities. The implementation of these provisions will allow overcoming the crisis of the modern education system caused by the discrepancy in the pace of development of global, technological, ethnic, cultural and educational processes during the transition to an information society.

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