

PEDAGOGICAL ELITE FORMATION

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Abstract. *From the axiological and activity approaches position, the article introduces the features of the pedagogical elite formation through the cultural codes, which are responsible for the modern competitive personality education, generating its composite identity in the new didactic plane, contributiong to the development of the subject's cognitive flexibility in the educational ecosystem and*

to the deployment of one's leadership abilities in coping with the modernity systemic challenges. The choice of the given research thematic field is determined by the necessity for the reflection on the pedagogical education state in the Russian Federation as the mechanism for the disciplinary matrix design that serves as the basis for the elite training and education that caters to the needs of modern society, economics and social sphere. The authors turn to the modern education new paradigm as a platform for the individual's socio-cultural development, forming on the basis of pedagogical models and technologies, methodological principles, didactic methods, educational ideas designed by the modern pedagogical science and practice.

The pedagogical elite is aimed to actualize the education practice-oriented nature; to identify the mechanisms for the modern education diversification and modernization; to evaluate the measure of the educational organizations responsibility for the results and quality of the subject's education; to expand the range of the trainees' education, taking into account the involvement of the best domestic and foreign pedagogical samples and models of education.

Keywords: *pedagogical elite, strategic audit, epistemic potential, methodological optics, intellectual systems management.*

Introduction. In accordance with the definition presented in the National Political Encyclopedia, the elite is the highest privileged stratum performing the functions of science and culture development [16].

We understand the education as “a soft power”, which increases the Russian education priority in the global educational space; as a factor in the accumulation of human resources, having invaluable meaning for ensuring national security; the Russian education global competition; the society infrastructure support and improvement; the modern educational design new standards development.

In the Message of the Russian Federation President V.V. Putin to the Federal Assembly from February 20, 2019, the attention is paid to the education content change, which mission is to invest in the human capital [14]. The degree of the society and its pedagogical elite development, which can make changes in the education system and bridge the gap between pedagogical theory and practice, depends on the education mobility, on its readiness to overcome the modernity challenges.

With a certain degree of convention, all existing challenges of the modernity, afflicting the education, can be divided into three groups: system calls; challenges of higher, school and secondary vocational education; challenges of preschool education.

The research methodology is based on a systematic approach to the study of such a phenomenon as the pedagogical elite formation

- 1) in the format of the personality sociogenesis: A. G. Asmolov, L. I. Bozhovich, P. N. Ermakov;
- 2) from the pedagogical view point: V. A. Slastenin, I. F. Isaev, E. N. Shiyanov;
- 3) within the framework of social discourse A.V. Mudrik, R.A. Litvak, V.S. Torokhtij;
- 4) from the position of the intelligent systems management, based on the knowledge integration V. A. Vittykh, I. A. Minakov, A. Mindell, and others, which allows
 - to identify the problems of learning, intelligence, perception, consciousness, presentation and knowledge acquisition by a subject [23, p. 112];
 - to reveal the human brain functional asymmetry, the brain mechanisms of the education modern subject complex behaviors [17, p. 39];
 - to identify the language specifics as the means of cognition and communication [4, p. 108];
 - to reveal the mechanisms of the modern education diversification and modernization [1];
 - to determine the degree of the innovative product's influence on the educational strategy implementation [22, p. 60];
 - to evaluate the educational organizations responsibility measure for the results and quality of the subject's education [19, p. 6];
 - to expand the range of the learners' training taking into account the involvement of the best domestic and foreign practices based on the subject's life experience formation [12, p. 46];
 - to specify the modernity challenges, in accordance with which it is necessary to build up the modern education practice, determining the pedagogical elite preparation.

In the list of modernity system calls, defining the education development landscape and the pedagogical elite formation, the leading position is occupied by the resources, which number does not correspond to the country scale today, so the education system needs flexibility and non-linearity in their formation and use for knowledge updating.

Conceptual approaches. The pedagogical elite preparation process is negatively affected by the tendency to reduce the education quality; therefore today a complex of measures is necessary to improve the social displacement mechanism and to increase the teachers' competitiveness. The important stage in the pedagogical elite preparation is the level of professional community development. This challenge is inseparably linked with the following one, which characterizes the teachers' current labor market, where the

science coexists with the business, and the subject is forced to develop the selective mechanisms that allow him to exist without any conflict in the society [2].

The education will help to overcome the challenges and to create the conditions for the pedagogical elite "cultivation". Currently, we can observe the modern education new paradigm existence - education 3.0; design of the new type education disciplinary matrix that meets the modern society requirements (FSES, ECERS); the emergence of new pedagogical models, methodological principles, didactic methods developed by the modern pedagogical science and practice. This urgently requires the educational science strategic audit, which focus changes under its epistemic potential influence. [20, p. 96]. This circumstance provokes the new trends emergence in the education and technology in training:

1. World's transformation (global education + World skills) determine the emergence of the (pre) schoolchildren training new competencies;
2. Original concepts of the artificial learning environment design;
3. Effective interaction of the educational process subjects;
4. Development of the new educational platforms and technologies (STEAM-technologies) [8, p. 27].

I. Considering the national education stages, we'll place the pedagogical elite, working with the children of preschool age, in the first position. It is known that the brain neuroplasticity is the strongest during the first five years of life; therefore the education of preschool children is so important in this period.

Under the leadership of the development Director of the Federal State Educational Standards (from October 17, 2013 No. 1155) Academician A.G. Asmolov, a new system of coordinates was proposed - this is the way to the education separation at nursery schools as an independent element of the basic education - Federal State Educational Standard for Pre-school Education; pedagogical support and maintenance of informational accelerators of the XXI century; appeal to appreciate a child.

Preschool teachers have to work in difficult conditions, they must solve paradoxical tasks and find a way out of difficult situations characterized by "known uncertainty": who are they - our children of today? The change of disposition "child-adult" led to dramatic consequences: there was a lag of parents and preschool teachers from children. This phenomenon has been defined the most prominently since the zero years. The observed changes aspects in the education of preschoolchildren are expressed in the tempo, consistency, non-linearity of new material learning, as well as in the preschool teacher's functions changes (from psychological and pedagogical knowledge and information and communication technologies to the motivation formation for learning).

In conditions when the spontaneous change in the responsibility areas contributes to the familiar functions erosion, the pedagogical staff needs cognitive flexibility,

the “drift strategy” developing skills. The information exponential growth contributes to the fact that the modern world began to change faster than the education system that prepares for life in it. This contradiction must be overcome by the teaching staff, starting from nursery school.

So, the nursery school field, where the gamified technologies are used, built on the interdisciplinary approach, is the first step in the elite education.||||||| TTTT

II. The next stage of the future pedagogical elite preparation begins at secondary school. The education at modern school is a combination of three types of cults:

1. Postfigurative culture, i.e. a combination of physical, spiritual and mental qualities of a person and ancestors' cult. This type of culture combines the education traditions as a mechanism for the experience translation;

2. Configurative culture is the cult of contemporaries, i.e. the learning process is the relationship of two equal partners: the trainee learns from the teacher, and the teacher, in his turn, learns from the trainee;

3. Prefigurative culture: the cult of the future, i.e. a modern teacher does not have an accurate internal program for teaching children and adolescents, because the teacher has not acquired the experience for living in the "new world" [21, p. 16].

Why is not the prefigurative culture formed? There are several reasons.

1. Changing the worldview: from Ptolemy's geocentrism, the humanity turned to Copernican heliocentricity;

2. The education evolution: from the urocentrism of Ya. A. Komensky the world in the era of uncertainty turned to the personocentrism of L. S. Vygotsky. The technique, proposed by Ya. A. Komensky, was transparent, linear: checking homework, explaining the new material, the next task. Today, the situation has been changed: the modern teacher must learn from his students, and for this it is necessary to create schools for cross training.

In the digitalization era, cross training is especially actual because the school must teach children how to work with text. The teacher has experience, and the trainee has a wide range of versatile knowledge: the scientists note the presence of clip thinking; thought processes flexibility, sufficiently strong neural connections of the brain by the modern student;

3. The Russian education transformation. At modern secondary school, the education process is

- education subject's activity in extremely uncertain conditions (diversity, opportunities, motivation);
- subject's independence in achieving the goal;
- expanding the range of interpersonal communication [10, p. 73].

Based on these provisions, we can formulate the future school tasks, capable of upbringing the pedagogical elite:

1) Transition from the education as knowledge translation (knowledge, skills, abilities) to the education as opportunities industry (motives, actions, meanings);

2) Giving the additional motivation to the education cycle. From motivation to readiness for change, the school moves to the competence of updating competences;

3) Changing the educational paradigm: today, it is necessary to move from mastering the universal actions to the semantic meta-subject understanding (meanings, multitasks, the world of networks, digital socialization, the phenomena of “other adulting”, etc.);

4) Formation of the key competencies. From the individual valuable development invariance, the modern education should move on to the education variable practice. This is a process in which there are metacognition, development, generating learning, the formation of the key competencies "4K": communication, critical thinking, cooperation, creativity, that will bring the educational elite education training to a new level [3, p. 130].

By updating the education content and its mastering, the new pedagogical elite will be able to provide the global competition for the Russian education. We'll consider the factors affecting the education content modernization at school:

- interdisciplinary communication;
- new didactics;
- blended learning;
- new competences;
- inclusion;
- employment.

These factors also demonstrate “reference points”, that contribute to updating the education content, which is necessary for the domestic school due to the pedagogical stability emerging risks while creating the modern digital educational environment [7, p. 156].

Formed at nursery school, the competences are permanently increased at secondary school. The competencies increment occurs due to the students' inclusion to scientific experiments, laboratories classes, and project work, where not only a real product is created, but also the education subject's personal qualities are revealed. The school educational system accumulates a significant amount of data, which is a powerful tool for the learning process transformation, the used approaches rethinking and adapting the existing experience for improving the efficiency of the school educational system.

The duality higher education system requires its reflection in two aspects: Bachelor's programme and Master's programme.

I. The system of the higher pedagogical education, which forms the elite at the undergraduate level, transmits the qualitatively new knowledge, pushes the

consciousness boundaries, expands the subject's professionalization possibilities by creating an individual trajectory; forming the network competence; expanding the digital competence; training the network culture.

In order to achieve the maximum synergetic effect in the practice of the higher education, the following initiatives are implemented:

- a) Integrated programs, interlinked curricula between teacher colleges and universities are introduced;
- b) The boundaries of new didactics - "webinar" - are expanded;
- c) Cascade training is practiced;
- d) General cultural, general professional, media and other competencies of trainees are increased [6, p. 73];
- e) Region available resources are used;
- f) Digital didactics is introduced;
- g) Early professionalization is introduced: soft skills, world skills, junior skills, baby skills;
- h) Regional Innovation Sites (RIPs) are created;
- i) Programs for pedagogical personnel qualifications are certified (state assignment, programs audit, roadmap creation, etc.).

The next important point in the modern higher education development is the determination of the students' contingent. Today's students will work with the generation Z. This means that it is necessary:

- to create an artificial learning environment;
- to expand the range of social networks use;
- to introduce the artificial intelligence into the educational process [13, p. 14];
- to apply a new type of information presentation - distant;
- to extent the mobile e-education;
- to use the additional virtual reality;
- to apply the machine learning, etc. [11, p. 40].

Among the new knowledge, skills and abilities, that the modern education subject is mastering, such competencies as the following ones are prominently marked:

- 1) network competence – personality's ability to exist in the digital environment;
- 2) digital competence – subject's responsibility for online behavior;
- 3) emotional intelligence development (improving the thinking efficiency with the help of emotions; perception and expression of emotions; emotions management);
- 4) network culture (freelancers, new management style, coaching, personal self-realization).

These characteristics of modern pedagogical elite education fit well into the education new paradigm, for which the typical elements are:

- socially constructed education (with vertical and horizontal data exchange protocols);
- continuing education;
- adaptive education;
- personalized education throughout the person's life, necessary for his successful, productive and responsible activities.

The current situation aims the pedagogical community to create an educational ecosystem. The ecosystem is a set of efforts for the interaction of the state, society, business, science in order to increase intensively the human capital and its reasonable, humane, economical usage.

For the ecosystem non-conflict functioning, the quantum's network expands; the program material customization is carried out; the automation and robotization are introduced; the subject's cognitive flexibility is developed; the cooperation with other universities is expanded.

The achievement of these goals is impossible without the personality's culture formation, its spirituality; without the artificial environment creation.

II. Master's programs in the field of "Pedagogical education" offer the opportunity to the students to promote their knowledge higher than at the university level. For the students, this is a chance to start the specialization in one of the education subdisciplines.

We'll consider the Master's program "Educational Management" as an example, aimed at preparing the pedagogical education elite. The mission of this program is to prepare graduates to adapt to global and internal problems and changes in educational practice. To fulfill this mission, the master's program implements the following initiatives in the educational process:

- preparing a future high-level specialist through the training complexity, as well as through the combination of the education traditional and innovative fields [18, p. 26];
- academic architecture support characterized by respect for students, society, environment and profession;
- training the graduates, demanded by the labor market, and the possibility of their continuous intellectual and professional development;
- promoting the regional economic prosperity.

Results. The authors found that the modern education, which is responsible for the pedagogical elite training, needs to be reflected as the cognitive practices synthesis, since it serves as the cultural transmission, i.e. it provides the subject with the strategic and operational success in life in conditions of constantly changing audience, professional standards, convergent technologies, inclusive culture [9, p. 63].

Today the education is the subject's independence in achieving the goal; building your own trajectory of the educational and cognitive activity and development, promoting the subject's self-education. The pedagogical elite education performs the theoretical (educational content choice) and practical mission (the formation and enhancement of the education subject's general cultural level).

The educational content choice is one of the most important issues in the modern pedagogy. The degree of responsibility for the educational content selection is indicated by the serious quality control. Taking into account the different scale of knowledge and its growth, the teacher pushes the conceptual boundaries of the theories interpretability with the help of the cognitive vector. At the same time, the educational process subject should not allow the possibility of indoctrination and social exclusion due to the education content false choice.

In practical terms, the mission of the Master's program "Educational Management" is implemented in the following provisions:

- flexible interdisciplinary educational program;
- digital competencies formation;
- individual educational trajectories creation;
- student's motivation to work in the field of education;
- intellectual and general cultural level development;
- readiness to act in non-standard situations, to bear social and ethical responsibility for the decisions made;
- professional and personal self-education;
- designing a further educational route and professional career;
- practice-oriented training of the future graduate, demanded by the modern labor market.

According to the results of the competition program "Leaders of Russia", the graduate of the master's program "Educational Management" in 2019 was among the winners from the Rostov region.

Conclusion. Summarizing the above mentioned information, we can note the following:

1. In accordance with the contemporary challenges, facing the Russian education, it is necessary to expand the future pedagogical elite preparation based on the subject's vitagenic experience development, taking into account the best domestic pedagogical models and educational models involvement;

2. All educational levels of the pedagogical elite, starting from the preschool education, should "flush" through the common cultural competencies. Such a "mutating" system of competences will allow assessing the level of the educational organizations responsibility for the results and the quality of the

subject's education, developing the algorithmic thinking of the students, turning the learning process into the decision-making process, which is necessary for the educational elite to implement NPM (new public management);

3. The pedagogical elite modern education develops and diversifies all the processes associated with the transfer to the learner of the values and meanings accumulated by generations; therefore, the goals of the pedagogical elite preparation are:

- formation of flexible human resources as one of the leading educational resources;
- mechanisms development for the individual educational strategies implementation for all categories of citizens;
- bridging the gap between the technological power and the level of the social subject's spirituality;
- education infrastructure development;
- ensuring an effective system of the education subject's socialization and self-realization;

4. Today the elite education appears in such a cultural field, when the subject is the integrity of thinking and activity, when the education policy is built in accordance with the challenges of modern times, when the pedagogical elite is preparing in the system of national education, which is able to overcome successfully these challenges.

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