Abstract

The article studies and analyses the problem of spiritual and moral development of individual in the network educational paradigm, the emergence of which is the result of an entry into the era of the fourth industrial revolution, i.e. the digital era, the era of the information society and nanotechnology, the era of emergence of new cultural models and changes in the cultural paradigm. According to the authors, task-oriented and consistent design of the spiritual and moral development of an individual in the network space and time continuum can resist ideologemes in education, withstand “traditions” of the action-based pedagogy and be aimed at development of a person. Such design can be multivariate and alternative and be based on a synthesis of liberal and natural science knowledge, rational thinking and cultural context. Using the model of network interaction, KalmSU named after B.B. Gorodovikov jointly with the School League (St. Petersburg) in the framework of the federal educational program “School League of ROSNANO” have developed a conceptual approach, organizational and methodological support of the process of design of spiritual and moral development of an individual in the network educational paradigm. The principles of learning in the framework of this program are humanist-based education; student-based learning technologies; critical thinking technologies; traditional and virtual educational space; mutual training of network members; awareness of results of local research, the object of which is deliberately limited from the point of view of the territory, chronology, problems and research works.

Keywords: Spiritual, moral, development, network, innovation, education.
1. Introduction

The development of modern society depends on each person, his or her civic position, life philosophy, moral priorities, moral standards and spiritual values. Education is recognized as a key component in the process of reviving, preserving and developing the spiritual culture and identity of an individual. It should be noted that the moral and spiritual development has indeed become one of the most important trends in modern education (Darzhinova & Pitkieva, 2014).

At the same time, an analysis of pedagogical practice shows that in many cases educational institutions, even those that have qualified staff, as well as educational and methodological resources cannot implement the conditions for the spiritual, moral and cultural development of an individual. A survey of 515 teachers of Kalmykiya’s schools showed that many of them face difficulties in providing spiritual and moral assistance to students. Besides, psychological and pedagogical support of this process does not always meet the requirements of modern innovative trends in the development of society for several reasons.

Not so long ago, parents and children lived in the same cultural environment sharing the same values. Today, the situation is quite different and even ordinary values of life have changed within one generation. Unfortunately, the problems associated with the entrenchment of life skills in the conditions of the emergence of new cultural models, changes in the cultural paradigm in education have not been adequately addressed (Epstein, 2009). At the same time, along with the system-based approach of providing knowledge, new information technologies have become widely spread, leading to the transition of society to network mechanisms of cognition of the surrounding reality (Castells, 2010; Held, McGrew, Goldblatt, & Perraton, 1999).

The entry into the era of the fourth industrial revolution, i.e. the digital era, the era of the information society and nanotechnology (Castells, 2000) and the emergence of new cultural models and changes in the cultural paradigm destroys the evolution of the individual’s spiritual and moral thinking that has developed in society (Barakoska & Jovkovska, 2014; Trommsdorff, & Chen, 2015; Anglin, 1991).

A distinctive feature of both spiritual and moral development of an individual in the new environment is education, which is built in the network educational space, where wide communication prevails and enormous opportunities aimed at the development of an individual predominate. Network activity develops new behavioral models of people and participating institutions at various levels in the field of education; unites the market of educational services and the market of academic and research staff. In modern conditions, such activity has a significant impact on the entire educational system, becoming the most important cultural phenomenon.

Now, in his life activity an individual relies on the information obtained both from the educational field and from the electronic media. Moreover, the latter often has a much greater impact, since it is chosen independently. Such electronic information space that generates various behaviors and thinking patterns has a significant impact on the individual (Jones, 2005). So, it can be argued that, along with the traditional and liberal paradigms in the field of education, a network educational paradigm has emerged (Egorova, & Lopatukhina, 2017).

In this regard, changes in the personal, behavioral and cognitive development of a modern person under the influence of electronic media (Berulava & Berulava, 2010) require new approaches, as well as
organizational and methodological support for the process of designing the spiritual and moral development of an individual.

2. **Problem Statement**

At present, there are practical prerequisites for solving the indicated issues. These include the implementation of various online educational programs. Unfortunately, these processes have not received proper theoretical understanding and justification. As a result, a contradiction arises between the need for the effective methods of spiritual and moral development under new conditions and insufficient elaboration of organizational and methodological support for the process of designing the spiritual and moral development of an individual in a network educational paradigm. In fact, the substantive possibilities of network activities in education are not fully utilized, which indicates the existence of a problem resulted in the lack of sufficiently developed conceptual approach and organizational and methodological support for the process of designing the spiritual and moral development of an individual in the network educational paradigm.

3. **Research Questions**

In the process of this study, it was assumed that the task-oriented and consistent design of the spiritual and moral development of an individual in the network space and time continuum can resist the ideologemes in education, withstand the “traditions” of the action-based pedagogy and be aimed at the development of a person as a carrier of human nature, spirit, but not an organ-man and market subject.

Basing on the program developed by KalmSU named after B.B. Gorodovikov jointly with the School League (St. Petersburg) in the framework of the federal educational program School League of ROSNANO the following issues have been studied:

- 1) mechanisms contributing to the implementation of the network interaction model;
- 2) situation- and event-based context of spiritual and moral development of an individual in the network educational paradigm;
- 3) forms, methods and approaches that contribute to the spiritual and moral development of an individual in the network educational paradigm;
- 4) principles of learning in network education.

Consideration of these issues made it possible to state a conceptual approach, as well as organizational and methodological support of such process.

4. **Purpose of the Study**

The purpose of the study is to develop a conceptual approach, as well as organizational and methodological support of the process of designing the spiritual and moral development of a person in a network educational paradigm.
5. Research Methods

When designing the situation- and event-based context of spiritual and moral development in the network educational paradigm, we relied on the network method, which corresponds to the spirit of modern post-industrial society. This method was borrowed from the economics and was widely used in the pedagogical science. According to Yu.A. Konarzhevsky, it reveals the possibilities of time, hidden in the range of events; allows you to see the planned process in the field of parallel implementations; significantly increases the efficiency of management activities of leaders of an educational institution, providing an opportunity to keep your mind in crucial moments of the educational process (Konarzhevsky, 1986).

The competence-based approach corresponds to the network educational paradigm (Yakusheva, 2016), which defines the essence of the spiritual and moral development of an individual, taking into account its professional interests. After all, the narrow field of study of the 19th and 20th centuries is gradually becoming a thing of the past, and specialists with not only professional intersubject knowledge, but also with key metasubjective competencies such as communication, cooperation, creative thinking and critical thinking are becoming increasingly in demand in the labor market. These competencies are also important in terms of the spiritual and moral development of an individual, which implies students' comprehension of the surrounding world, their inner “I” and the formation of a conscious understanding of their purpose in life through the search for answers to eternal questions: What is the purpose of living? What is truth, good and love?

Different situations (life, social, personal, psychological, etc.) may generate internal collisions, impulses to change, self-awareness of a person in a new system of relations, gaining new experience and meaning (factor). The emerging experiences are specific building features of spiritual and moral development of an individual. Inherently, this is an individual approach that may help solve the problem of “personification” of knowledge existing in education, turning objectively significant values into personal meanings of an individual (Selevko, 2002).

The network educational paradigm fully corresponds to the project-based approach, when the network activity aimed at the spiritual and moral development of an individual is subdivided into separate completed cycles (projects), implemented by us within the framework of the unified All-Russian network educational program School League ROSNANO: Business competition game Journalist, Kalmyk State University (past, present and future); Vacation schools Agrograd. Kalmykiya and Nanograd. Kalmykia; Network creative laboratory of critical thinking; Scientific lecture hall; Discussion club Round table; Museum conference; Museum laboratory, etc.

The use of various methods and approaches makes it possible to form and develop various aspects of personality, its intellectual abilities, spiritual and moral consciousness, which will finally result in flexible adjustment to constantly changing life situations.

6. Findings

To solve this problem, we have developed methodological foundations of spiritual and moral development of the individual in the network educational paradigm. In our opinion, such development
should be multidimensional, alternative and should be based on a synthesis of liberal and natural science knowledge, rational thinking and cultural context.

In fact, we are talking about the interrelated formation and development of various aspects of personality, which can flexibly adapt to ever-changing life situations; a personality with well-developed intellect, high moral principles, values and responsibilities.

The subject of research in the designated methodological field was the model of network interaction of KalmSU named after B.B. Gorodovikov jointly with the School League (St. Petersburg) in the framework of the federal educational program School League ROSNANO, which is aimed at the development of modern Russian education, first of all - natural science. This model has been implemented since September 2012 on the basis of an agreement between the Kalmyk University and School League (St. Petersburg). The University Museum was an operator of this agreement.

The strategic center at the regional level is Kalmyk State University named after B.B. Gorodovikov and at the federal level it is the School League (St. Petersburg).

The model encompasses the following mechanisms:

- regional network of educational organizations of basic, continuing, and vocational education of Kalmykya, united by KalmSU named after B.B. Gorodovikov, i.e. the Regional Resource Center of the School League Program of ROSNANO;
- portal schoolnano.ru as a tool for organizing activities and disseminating information;
- support on the external Internet resources, primarily, on the portal kalmsu.ru (KalmSU) and on the social networks that complement the activities of the main portal;
- calendar of activities for all network organizations on the implementation of the Program in the unity of the annual key events;
- Expert Council of the Program, consisting of federal and regional experts, leaders of the Program, active participants in the modernization of Russian education;
- system of distance training for teachers;
- educational programs of continuing education in the Nanograd format;
- competitive educational programs of natural science, including nanotechnology and technology-oriented businesses (School in the palm of your hand, Vacation schools Nanograd. Kalmykiya and Agrograd. Kalmykiya);
- pedagogical research and development of educational programs, aids, methods and technologies for educational institutions;
- network creative laboratory of critical thinking for schoolchildren, students and teachers of Kalmykiya;
- access to media resources of the educational plan on the website of the School League of ROSNANO for all participants of the Program;
- interaction with business, universities as well as development and implementation of a joint project All-Russian School Week of High Technologies and Technological Entrepreneurship;
- monitoring the quality of learning outcomes in schools in the field of research and project work, analysis and processing of information in the educational process;
• organization of self-assessment and expert evaluation of the activities of educational
  organizations in the field of more active use in the educational process of research, design, case
  technologies, use of the potential of electronic education;
• scientific and methodological support provided to educational organizations, teachers and
  students.

It should be noted that the regional network is constantly expanding. Today, it includes 32
educational institutions of various legal organizations (15 schools, 10 gymnasiums, 4 lyceums, OOO Little
Einstein), the Republican Center for Children’s and Youth Tourism and Local History, as well as Kalmyk
Medical College named after T. Khakhlynova) (Darzhinova, 2018).

When designing the spiritual and moral development of an individual, we elaborated the principles
of teaching students in the network educational paradigm:
• humanistic-based learning;
• use of individualized learning technologies;
• introduction of critical thinking technologies;
• integration of traditional and virtual educational space;
• implementation of project, case and research methods;
• mutual training of network members;
• conducting local research and familiarization with their results, the object of which is limited
  from the point of view of territory, chronology and problems (the life history of a particular
  person: era, family, village, etc.);
• conducting their own research by participants. Stated principles of design.

The general calendar of activities of the network participants includes the following events: NANO
year; local history week; Republican business competition Journalist; Scientific lecture; Discussion Club
Round Table; educational travels; Republican Conference of Tourist and Local History Movement
BichnTorskm (My Little Homeland); All-Russian High Technology and Technological Entrepreneurship
Week; interregional videoconference Networking of University and School in the Regional Education
System; scientific and practical museum conference Personality in the paradigm of intercultural
communication: language - culture - education - museum (theoretical and applied problems); public
hearings of the participants of the federal network educational program School League ROSNANO, and
other.

Each activity enriches the participants both spiritually and morally, helps to make their lives
interesting and vibrant. When designing a situational and eventual context for the spiritual and moral
development of an individual in a network, we strive to ensure that participants comprehend the study space
of activity, view reality from different angles, that is, act as active experts. At the same time, in the
conditions of the ever-increasing volume of scientific information, the intellectual spiritual and moral
development of a person is not determined by the amount of various information and knowledge that is
memorized, but by his/her ability to critically analyze the necessary information, comprehend it and the
ability to make the right decision independently.

In this regard, the development of critical thinking of participants in the network educational
paradigm acquires especially great importance, since it indicates the independent, meaningful position of
personality, becomes the basis of his or her spiritual and moral attitude to him or herself and the world. Due to variability, awareness and reflexivity, such a position significantly increases the reliability of education and ensures the spiritual, moral and communicative potential of an individual. Working on the Critical Thinking technology, the participants of laboratory, who are students and schoolchildren of Kalmykiya realize their needs and opportunities in solving problems on their own, as well as evaluating and analyzing their activities. Various topics were proposed for discussion, among which were the following: “Man in the global educational space”, “The role of family education”, “The culture of reading”, “Art and man in the context of analysis of the novel by O. Wilde Portrait of Dorian Gray”. At the same time the participants were role-playing, made presentations and trainings, had discussions and conversations, used video and musical compositions, etc.

When creating the conditions for spiritual and moral development of participants, we included geographic, cultural and ethnoregional features, as well as local experience in the content of events. For example, within the framework of the project, a business game competition Journalist is held annually, during which the participants have an opportunity to get in close contact with real production and science, and then come up with real journalistic materials. In a sense, the game is an opportunity for thoughtful and useful acquaintance of schoolchildren with enterprises, professions, social and economic issues of the region and the formation of personal relations towards them. Today there are games of various subjects: “University by the eyes of schoolchildren”, “Mirror for the region”, “Is it easy to be young?”, etc. They have become a guidance tool for Kalmyk schoolchildren. With the help of the game, students have an opportunity to learn about the issues of the region and the youth, learn to define their priorities for the future. The leaders of the region, youth leaders, as well as university staff look at themselves from the outside, i.e. by the eyes of students.

In the context of the identified problem, it is very important that, by offering various network projects, the organizers and participants carry out a great educational work aimed at building civil society and further development of Russia as a strong state. Various situations (life, social, personal, psychological, acute modern issues and historical issues), which are discussed in the framework of the scientific lecture course and the Round Table discussion club, induce internal collisions and urge for change. As a result, the participants come to the dialogical level of interaction with the world, get an opportunity to evaluate themselves, define values, develop meanings, make an independent decision. Thus, the “subject” (author) component becomes the “building material” for the inner world of an individual and the condition for the development of human integrity.

It should be noted that the technology of critical thinking is aimed at the cooperation between teachers and students, active participation of students, as well as establishment of comfortable conditions that relieve psychological stress in the learning process. In the process of formation of spiritual and moral qualities of participants, their motivation for self-education and self-knowledge of the surrounding world, individual and differentiated approaches were used.

For example, teachers improved their skills through distance learning programs, got the opportunity to communicate and collaborate with colleagues, as well as promote their ideas in the pedagogical environment. They developed and offered to the pedagogical community interdisciplinary integration
programs, various educational and research projects; besides, they mastered new techniques and constantly updated educational content.

Students and schoolchildren act as moderators and event organizers. The schoolchildren, who participated in the Nanograd Summer School in Sochi, offered to organize Standup show, to hold a dance marathon in the style of Dance my PhD, to tell about their scientific ideas in the Scienceslam style. Students conduct psychological trainings, act as presenters, tutors, etc. As a result, they gain invaluable experience of interacting with other people and collaborating with various bodies. All this, of course, contributed to the achievement of high personal results.

Another important aspect of this project is parents’ involvement, who are always interested in increasing the motivation of children to learn and get an interesting profession. Taking part in our network events, many parents noted that they were pleased to have children’s access to modern high-tech production and scientific equipment of KalmSU and the opportunity to interact with their children in the process of participating in the Program; forming their portfolio for getting additional points when entering a university.

The students involved into the psychological media conducted a survey among parents of our participants to find out their interest in the project. 56 people took part in it. The results showed that the greatest value from the participation of children in the program was their involvement in the process, formation of their psychological readiness to study at university, as well as development of various competencies (educational, research, etc.).

It should be noted that the network interaction expanded the educational potential of each educational institution and each participant, equalized the possibilities of rural and urban schools. When we have included the real experience of teachers and students in the content of training, we communicatively and structurally created various educational paths that became the basis for their spiritual and moral development. As a result, the participants generated new ideas, produced individual and joint practices, which became a worthy example for others. So, there were network events initiated by the participants, i.e. the days of interdisciplinary integration on the basis of the Russian National Gymnasium named after St. Sergius of Radonezh, a festival of STA-studios based on secondary school No. 10 in Elista, a field-oriented workshop in the format of the School League of ROSNANO in Priyutnensky Lyceum named after I. Karpenko. This format indicates a new quality of education in the network educational paradigm, when participants go beyond the narrow professional approach and can summarize the real facts of educational activity in teaching schoolchildren and students from the standpoint of interdisciplinary, integrative and metadisciplinary approach, which creates spiritual prerequisites for the development of an individual.

Thus, when designing the spiritual and moral development of an individual in the network educational paradigm, we created favorable prerequisites for participants in assigning creative samples and transforming their own creative experience as an important source of personal growth, as well as spiritual and moral development. The implementation of the presented model has shown that the material basis and spatial arrangement of the subjects in the network educational paradigm are secondary. Human relationships are important, which arise, maintain and are able to exert a beneficial effect on the spiritual and moral component of personality.
7. Conclusion

Both the spiritual and moral development of an individual in the network educational paradigm showed that the educational elements are not the educational organizations, but teams consisting of schoolchildren, students, schoolteachers, teachers of universities, parents, and business community representatives. Such a network paradigm is not a hierarchically organized system. This is a self-organizing system where the primary element of association is the community, therefore, it is inherent in heterogeneity, irregularity and complexity.

At the same time, modern network education is informal, democratic, devoid of rigid schemes and extends to all groups of society. It can introduce different human experiences and intercultural dialogue, in accordance with various social ideals and can indirectly influence the formation of personality as a whole (spiritual world, mind, feelings, will, etc.).

Moreover, innovations spread faster, unique models are developed, as well as new programs, alternative courses, etc. As a result, the forms and mechanisms of spiritual and moral development of students are expanded, which ensure the formation process of common framework, common spiritual and moral semantic field when teaching young people. An essential function, that preserves the spiritual and moral essence of network educational paradigm, involves an approval of pedagogical ideas, their comparison and generation of new meanings.

At the same time, the educational potential of each educational institution and each participant expands, the possibilities of rural and urban schools become equal, and the introduction of real experience of teachers and students into educational content enables them to generate new ideas that can be the basis for the design of spiritual and moral development of individual in the network educational paradigm.

References


