

VII International Forum on Teacher Education

Factors of Shaping the Image of the Professions of the Future among High School Students

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Abstract

The paper reveals the concept of “the image of the professions of the future” and the relevance of its formation in modern life conditions. The factors influencing the formation of images of the future, as well as methods of studying the image of the professions of the future among high school students, have been determined. The image of the professions of the future, being one of the most important components of a holistic picture of the world, is a set of ideas about the profession, its value in society and about oneself as a possible representative of the professional community with the necessary competencies. The study of the process of shaping the image of the professions of the future in adolescents contributes to scientific ideas about the development of their worldview. The research in this area, which actualizes modern trends in the study of the characteristics of the younger generation, is presented. One of the important areas of interest for high school students is to study and plan options for their future profession. Scientists consider the image of the professions of the future as a connection between the current life situation of a student and the promising life aspirations of a high school student, which determine the possibility of their implementation in the future. According to the principles of career guidance, high school students are at the stage of studying professional growth, which includes crystallizing and clarifying their professional preferences, as well as making preliminary decisions about choosing a profession.

Keywords: image of the future, image of the professions of the future, professional self-determination, picture of the world, socio-cultural space.

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Published by Kazan federal university and peer-reviewed under responsibility of IFTE-2021 (VII International Forum on Teacher Education)

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Introduction

The concept of the image of the future is very multidimensional, it includes various ideas of a person about what can happen in a certain or indefinite period of time. That is why this phenomenon is considered by various sciences.

From the point of view of philosophy, the future is something that has not yet happened, a definite assumption, which, on the one hand, is based on the results of a person's life experience, on the other hand, it cannot be determined precisely, because nobody knows what circumstances can be expected in a minute or a year (Zheltikova I.V., 2020). The future, according to a philosophical definition, is a variable view of what might happen. A person assumes several different options, but most often they are general, not specified with specific details.

In philosophy, the future has two specific characteristics (Zheltikova I.V., 2020):

- eventfulness: the future presupposes the presence of certain events that must occur in a chronological and logical sequence;
- anthropological characteristic: the image of the future is formed in the present and is an assumption created by a person in consciousness or felt at the emotional (subconscious) level.

The image of the future consists of several components (Solntsev S.A., 2019):

1. Visual characteristics of events that may occur. The person imagines what will look like what is about to happen. This image includes certain faces, colors, objects, etc.
2. Sound characteristics of events: it is possible to imagine who and how will speak in the future, what kind of music can accompany it, what extraneous sounds may be present during events that are about to happen.
3. Emotional characteristics of events: this is an idea of how the person representing it will perceive the events that should happen in the future.
4. Other characteristics: for example, whether a person will experience physical pain, pleasure, illness, etc.
5. Consequences to which events presumably occurring in the future can lead. A person can not only imagine his future and imagine what it can lead to, whether it is positive or negative for his life path, whether it does not contradict his principles and moral laws in general.

All these characteristics are inseparable in the mind of a person thinking about the future and are rarely considered separately. The most interesting for a person is a complex image of the future, which makes it possible to plan, imagine and dream (Notin A.I., 2017).

From the point of view of psychology, the image of the future is considered as a result of human mental activity, in which a number of mental processes are involved (Mikhalskiy A.V., 2010). First of all, it is important to note that the basis of the image of the future is such mental processes as representation and imagination. A person imagines certain situations that were encountered in his life, and then the prognostic function of consciousness and imagination is turned on, when new elements are superimposed on the already existing images of the past and present, creating the image of the future.

It should be noted that a person who does not remember his past will not be able to build an image of the future, since memory is also involved in this process, which allows one to create certain standard ideas about possible events based on life experience (Petrova V.N., 2019). In the process of creating an image of the future, logical connections are formed between the events of the past and the present, the basic laws of life are determined in connection with the characteristics of the behavior and social situation of a person's life. This requires thinking. All created images are fixed verbally, with certain words, phrases and sentences. Therefore, we can talk about the importance of speech in creating an image of the future. All mental processes are necessary for the formation of the image of the future. Methods and forms of pedagogical work can be based on this (Novikova A.A., 2013).

Another psychological factor that needs to be considered in the study of the formation of the image of the future is the personality traits of the person who imagines it. The formation of the image of the future is greatly influenced by the orientation of the personality, temperament, character and abilities. Some people are optimistic about the possible development of events in their lives, while others believe that "it will only get worse in the future". The emotional nature of the formation of the image of the future depends on the type of person's temperament., Usually choleric and melancholic people vividly imagine what will happen. Only their perception of the image of the future has the opposite emotional coloring (Zheltikova I.V., 2020).

For our study, it is important to consider the professional aspect of the image of the future, ideas about the professions of the future of modern schoolchildren. To do this, it is necessary to analyze studies devoted to those professions that, presumably, will be relevant in the coming years, since without this idea, it is quite difficult to orientate today's adolescents and help them choose the right career path.

In their article, V.T. Gabeev, I.E. Kulikovskaya and E.N. Mironova consider in detail the concept of the image of the profession of the future. Researchers note the fact that in connection with the new technological capabilities of modern society, the list of professions of the future is constantly transforming. At the same time, there is a problem that in the process of this transformation, the quality and focus of Russian education remain at the same level as many years ago, and schoolchildren do not receive the necessary skills that would enable them to be successful in the professions of the future (Gabeev V.T., Kulikovskaya I.E., Mironova E.N., 2021).

Predictive studies suggest that future specialists, who are still schoolchildren today, will have difficulties with career development, finding themselves and their professional niches. Every day, new technologies appear that need to be constantly mastered, but for this there are not enough teachers who are able to form the necessary competencies. At the same time, the database of innovative technologies is updated almost every day, if we look at this moment from the point of view of the process of world globalization (Chistyakova S.N., 2016).

According to sources, jobs will be significantly reduced by 2025, especially in manufacturing. It is planned to cut 25 million jobs, which is directly related to the process of automation of plants and factories. In fact, workers, even the most skilled ones, will not be needed anymore, since they will be replaced by various technical devices (Petrova V.N., 2019).

The same fate awaits engineers, designers and technologists, since every day more and more computer programs appear that are capable of performing the absolute majority of their functions.

It is assumed that in the near future, the most popular professions will be those that somehow function in the field of digital technologies. The constant introduction and expansion of these technologies creates new forms of entrepreneurial activity, leads to the emergence of new jobs and business ideas (Novikova A.A., 2013).

In addition, professions related to analytical work in the field of computer technology, design and creation of computer programs, maintenance and development of social networks, advertising and other marketing activities will be popular in the next 5 years.

Teachers who have developed their own training programs for new specialties will be in demand in the labor market. Their work will most likely be carried out online, without personal contact with students (Zheltikova I.V., 2020).

Some researchers note a pronounced tendency to transfer the majority of workplaces to a remote form of interaction - with management, clients, customers, partners. Today it is associated with a pandemic, but in a couple of years it will become absolutely normal and standard when people stop going to work, performing their usual functions as an employee of the company (Gabeev V.T., Kulikovskaya I.E., Mironova E.N., 2021). It is much more convenient for employers to keep their employees on a freelance basis, not to pay them wages in the absence of completed work, not to rent an office, etc. (Petrova V.N., 2019).

At the same time, it should be noted that it is currently not possible to fully form a guaranteed image of the professions of the future, since the socio-economic conditions for the existence of society are changing so quickly that in a year a new economic reality may appear, in which there will be other priorities that are unknown to us now.

So, the image of the future and the professional component that it contains is a complex psychological formation based on various factors of an external and internal nature.

Purpose and objectives of the study

The problem of this study is the issue of what values today form the image of future professions in an adolescent of senior school age. Based on the analysis of the value orientations of adolescents, it is possible to identify those factors that form the specified image in them. The study considers, on the one hand, the value system of modern high school students who are on the path of choosing a profession and type of work activity, on the other hand, the factors that form this system. The values of a modern adolescent create an axiosphere that includes components of the adolescent's picture of the future world in personal, social and professional aspects (Kulikovskaya, 2019).

The purpose of this study is to determine the factors of shaping the image of the future in a modern adolescent of senior school age, as well as the image of the future profession.

Literature review

Dictionary definition of the concept of a factor (from the Latin "factor" - doing, producing) - the cause, the driving force of any change, phenomenon.

The study of the architectonics of the value-semantic sphere of adolescents serves as the basis for the research of scientists in the field of psychology, sociology, philosophy, pedagogy and other sciences.

To determine the factors of the formation of the image (picture) of the future, we studied the value world of a high school student, and for this, the most appropriate method is to study the value-semantic sphere of life of high school students. The studies of T. Teofilov, O. Sande, J. Galtung, Anita Rubin, Thomas Lombardo, I.E. Kulikovskaya, P.I. Arapova, M.V. Grigorieva, N.V. Petrikova, M.A. Kanishcheva, A.K. Belousova and others were analyzed.

Numerous studies of the picture of the future in the perception of adolescents are carried out by scientists from around the world. In Bulgaria, T. Teofilov identified forty-two professions of the future. All of these professions concentrate on new and modern technologies. The researcher believes that a kind of reboot in the professional sphere is obvious. The professions of the future form a new context for research in this area (Teofilov, 2019).

O. Sande (Sande, 1972) considers the concept of “awareness of the future”, defines it as an active thought process connecting the future, present and past. Psychologically, the future seems to be a field for building its individual and social behavior, and society determines its place in the historical perspective.

J. Galtung argues that the future must be comprehended and subjectively experienced in the same way as the present, and it is necessary to treat it in the same way as the phenomena (Galtung, 1997). The researcher speaks of the need to study this relationship, as it helps to understand the motives that determine the actual behavior of individuals and social groups.

Finnish researcher Anita Rubin (Rubin, 2002) studied the attitude towards the future of student youth. She studied the answers of her respondents to the question of what can and should happen in the future. Research data, in her opinion, help to understand how ideas about the future are related to the present day and how they affect the actual behavior of young people (Zheltikova I.V., 2020).

Thomas Lombardo defines future awareness as a multifaceted psychological ability of a person, which includes several psychological processes such as perception, emotional attitude, motivation, memory, thinking, planning, intuition and imagination, self-identification and social interaction (Lombardo, 2017).

Russian scientists are also studying the problem of shaping the image of the future in the perception of a child (P.I. Arapova, M.V. Grigorieva, M.A. Kanishcheva, I.E. Kulikovskaya, N.V. Petrikov, L.S. Samsonenko and others). For our research, the approach of I.E. Kulikovskaya, who believes that reality for a child, especially at a young age, is no different from a fantastic vision of the world. The world for a child is a kind of fairy tale, and a child does not think about too deep problems if an adult does not tell him about them (Kulikovskaya, 2007).

I.E. Kulikovskaya connects the formation of a child's perception of the future with the socio-cultural space where the child develops. The researcher considers the socio-cultural space much broader than the cultural environment or socializing environment. The socio-cultural space is a space for the multifaceted development of a child. Dr. Kulikovskaya considers this space to be the most powerful in terms of socialization. This space includes family, school, media, and peer groups. This space is constantly changing, it is transforming, but at the same time it itself acts as a transforming factor. With a change in the socio-cultural space, there is a change in the child's perception of the world around him. Since the picture of the future is built on this perception, it is, therefore, a changing parameter (Kulikovskaya, 2008.).

Also I.E. Kulikovskaya thoroughly studies the problem of the formation of the image of the future in the perception of the child at the philosophical and pedagogical level. The scientist examines children's wisdom, which is not always can be understood by adults. Children may be interested in questions about how a person arose, what size the Universe is and what is beyond its boundaries, what dreams are and much more. I.E. Kulikovskaya sharply criticizes all attitudes associated with the child's rigid abidance to stereotypes and standards on the part of adults. In her opinion, it is necessary to provide children with a wide space for self-development, which is almost not done in modern education (Kulikovskaya, 2009).

The scientist analyzed the patterns that are laid down in the psychological and social development of adolescents and which determine the process of forming the image of the future. In her opinion, the image of the future is what is formed in consciousness and ultimately determines the picture of the world (Kulikovskaya, 2015). This image is formed in two planes (aspects): in the psychological and in the social ones. In the psychological aspect, the image of the future is a corresponding internal construct that has cognitive, emotional and behavioral components. In the social aspect, the image of the future is a product of socialization. At the same time, I.E. Kulikovskaya calls the idea of the future categorical. These categories, with which the child thinks and draws the future, also come from the agents of socialization (their sources can be family and school, a group of peers).

I.E. Kulikovskaya believes that the development and upbringing of a child in a changing world should find other, innovative methodological foundations. The problem is that adults are committed to old, stereotypical forms of upbringing, which is not suitable for modern times. Analyzing this problem from a philosophical and pedagogical position, the researcher suggests two ways:

- changing the forms and methods of upbringing in accordance with the requirements of the time (the easy way);

- a radical deformation of the system of upbringing methods with a view of the future (a difficult, but more constructive way) (Kulikovskaya, 2019).

Finally, the structure of a child's idea of his future is formed at an older age. Researcher P.I. Arapova revealed that in adolescence, schoolchildren imagine their future worse than in youth (Arapova, 2015). This study confirms the facts established by I.E. Kulikovskaya. Indeed, in youth, the child already imagines his future, has stable interests, but all this is analyzed in comparison with adolescence, when stable psychological constructs and social attitudes have not yet been formed.

However, the picture of the future, even in youth, is not sufficiently formed. In its most general form, the image of the future depends on many factors. M.V. Grigorieva in her research calls socialization as a factor shaping this picture. The researcher notes, for example, that the picture of the future is differentiated among rural and urban youth due to differences in the nature of socialization. For example, the desire for material well-being among urban boys and girls is much more pronounced than among rural ones. This is explained by the differences in rural and urban living conditions (Grigorieva, 2012).

Most fully the image of the future of high school students is analyzed in the works by N.V. Petrikova. The researcher identifies two intersecting areas: personal-social and professional. The researcher connects the second area with the development of professional self-determination of senior pupils. In the area of intersection, according to the researcher, the formation of productive constructs takes place, which are responsible for the formation of a picture of the future in the mind of a high school student. However, high school graduates find themselves more attached to the issues of the professional aspect of the future. As N.V. Petrikova states, the professional component of the image (picture) of the future is most strongly developed. The researcher connects this regularity with external influence on the sphere of perception of the future by a high school student. At the same time, the researcher writes about the immediate plan of the future (the distant aspect is not developed in high school students). It is at the nearest level that the values, ideas and plans of young men and women are formed. All these components of the image of the future ultimately lead to the formation of ideas about the profession of the future (Petrikova, 2015).

L.S. Samsonenko studies in detail the issue of the life plans of modern boys and girls. Among the plans, first of all, the question of professional well-being is raised. At the same time, material well-being is in the first place, but no less young men and women dream of a career, of an interesting profession. The internally studied young men and women have not yet found their position on a professional level. Of the existing professions, young people mainly choose the profession of a manager and want to understand business.

Today's young people show a desire to have a strong, friendly family, but at the same time they believe that it is necessary first to get a decent job. According to the researcher, this is a constructive desire. Modern young men and women take a balanced and reasonable approach to the process of creating a family in the future. They consider this a great responsibility, they do not shift this responsibility either to parents or to the state. At the same time, today's young people are confident that the family should be supported at all levels. Fewer teenagers dream of leisure and wealth, putting self-development, self-knowledge and a constructive life in the foreground (Samsonenko, 2019).

M.A. Kanishcheva structurally approaches the description of the image (picture) of the future and the image of the profession among young people, connecting these images into a single motivational complex (Kanishcheva, 2016). The researcher notes that the image of the future begins to form earlier than the image of the future profession. However, with age, the latter becomes the leading component in the formation of a picture of the future.

A.K. Belousova writes about differentiation in the formation of the image of the future and the image of the future profession, depending on the national-territorial characteristics of childhood development (Belousova, 2014). Indeed, the formation of the image (picture) of the future and the image of the future profession does not proceed uniformly. The process depends on many factors, but the place of birth and the place of growing up are the most important factors in shaping the image of the future and the image of the future profession.

All these studies form the theoretical and methodological basis for studying the image (picture) of the future in modern high school students, but they do not answer the question of the ontogeny of the formation of children's ideas about the professions of the future. In addition, individual studies in this area do not allow us to single out precisely those formative factors that determine the image of the future professions among modern high school students.

Methodology

We have defined a set of methods for studying the features of the formation of the image (picture) of the professions of the future. These methods have been tested in various educational systems at the psychological and pedagogical level.

To study the competence of high school students in the formation of an image (picture) of the future, the method of motivational induction by J. Nutten is used. The Belgian scientist published a book in 1980, which described the methodology for studying the motivational sphere of adolescents.

This technique efficiently explores the image (picture) of the future in the time frame. Besides, the study proceeds in the context of representativeness.

For each object under study, the following become relevant:

- current goals;
- distant goals.

Distant goals are also called target ones. Such goals are defined by J. Nutten as motivational. The content of J. Nutten's methodology lies in the actualization of sixty unfinished sentences, which are divided into inductors:

- forty positive inductors;
- twenty negative inductors.

The Russian version of the J. Nutten's methodology, developed by D.A. Leontiev, contains only forty sentences. For the analysis and evaluation of the results, it is proposed to use three elements:

- real time code;
- social time code;
- content analysis code.

Content motives are analyzed. The purpose of the analysis is to classify motivational subjects terminologically - in those categories that actually have a motivating effect, make it possible to establish behavioral connections. Behavioral connections are of a nature that integrates motives, needs, and activities. Relationships are also reflected in the image (picture) of the future object of research. It is possible to fully study this image in terms of those motivational attitudes and logical connections between motives, needs and activities that form the directly studied picture of the future.

The subject generally expresses a specific object, but the analysis should focus on the interaction of the individual with the world when certain behavioral attitudes are manifested. These attitudes are encoded in a specific way, in particular, for example, in the needs of physiological survival. Also, if the focus is on social contacts, then they are encoded in the needs of social interaction.

Symbols are used for encoding. These same symbols systematize motivation. Symbols have a complex structure: they consist of motives that define two main components:

- striving for a tangible or intangible object;
- behavioral reactions and attitudes.

Periodization when coding is important, because a person has different priorities at different times. In the near future, a high school student may strive to successfully pass exams, enter a university, and in the long term, for example, go abroad with his parents. All this is determined by a different set of motives. For example, a high school student is focused on learning foreign languages. Foreign languages can be important:

- a) for successful admission to the relevant faculty (near-term perspective);
- b) for the successful life abroad (long-term perspective).

These perspectives can be logically related. For example, a high school student understands that without successful admission to the relevant faculty, a successful life abroad is impossible (dependence of a distant perspective on a near one).

High school students still cannot fully outline their prospects for a very distant future. Real-time codes that cover large periods are not available to them. However, an exemplary description, which provides insight rather than assurance, is available to them. This description is used to analyze the temporal picture of the future.

To study the value orientations of high school students in the process of forming an image (picture) of the future, M. Rokich test "Value orientations" is used. This test is aimed at studying the value-semantic sphere of human life. The test subject is offered a set of eighteen value cards. They must be arranged in order of importance for the subject personally. The results of the methodology are analyzed at a qualitative level. At the same time, the examiner can distinguish other categories of values:

- abstract and concrete;
- personal and social;
- leisure and professional.

To study the personal characteristics of high school students in shaping the image (picture) of the future, the questionnaire of G. Shmishek and K. Leonhard is used. This questionnaire allows identifying the types of character accentuations that determine the image (picture) of the future. Each type of accentuation determines a certain set of personality characteristics, on which the image (picture) of its future depends. In adolescence, this dependence is expressed quite clearly. High school students with a stuck type of accentuation, for example, find it much easier to choose a lifestyle, but difficult to choose a profession. There is a discrepancy between the image (picture) of the future and the image of the future profession.

However, the establishment of the type of accentuation does not allow one to unambiguously determine the future preferences of high school students, since the parameter of personal characteristics is flexible in nature. This parameter can be subject to significant changes. It is important to establish the relationship between the identified accentuation and behavioral responses. The stronger this relationship, the more productive the process of identifying the image (picture) of the future high school student and the image of the future profession will be. High school students answer the questionnaire. One point is assigned to the answer. Assessment of accentuation by the method is as follows. The number of answers is multiplied by a certain coefficient, which sets the limit of twenty-four points. The accentuation is updated from a specific number of points.

In practical psychology of personality, there are three scales for establishing accentuation:

- twelve-point;
- fifteen-point;
- nineteen-point.

The nineteen-point scale is currently preferred. Moreover, this choice turns out to be justified. If twelve points are chosen as a determinant of accentuation, then the following comes out: at twelve, six answers are enough to establish the type of accentuation. However, there is precisely the boundary range of values, equal to the scale from fifteen to nineteen. It is this area that determines exclusively the orientation of the personality towards the development of this type of accentuation. In this area, accentuation is weak, insignificant, therefore, it is unacceptable to draw conclusions on its basis. However, even after reaching nineteen points, the accentuation turns out to be rather weak. At the same time, at twenty-four points, the threshold of very strong accentuation is already reached.

It is for this reason that a twelve-point scale for assessing accentuation should be adopted, which may also be associated with the following points:

- 1) a twelve-point scale is determined by a sufficient set of criteria to judge the type of accentuation in terms of choosing a way to conceptualize data and results, interpreting the latter in accordance with the goals and objectives of a research nature;
- 2) half of the answers is a sufficient and normal indicator to determine the type of accentuation.

If we choose the twelve-point scale as the determining one, then the equality to twelve or the excess of this number may serve as a reason for formulating a conclusion about the severity of the type of accentuation of this category.

To study the motives of high school students to choose a profession of the future, the test questionnaire "Motives for choosing a profession" (S.S. Grunshpun) is used. Twenty-four motives for choosing a future profession are proposed. High school students should evaluate the importance of each motive for themselves personally. Significance is the indicator that determines the image (picture) of the future of the person. The choice is made in a fairly stable format - self-orientation. At the same time, the high school student chooses those motives that he will be guided by both when choosing a style of future life and when choosing a future profession. This is very important for the prospective assessment, which is made according to the results of empirical research in this area. Then it will be possible to establish relevant links with the type of accentuation.

To study the professional orientations of high school students, the test by E. Klimov is used. This test was actively used in Soviet times to analyze the choice of profession by high school students. At the same time, the author identifies several types of professions:

Man-nature.

Man-technology.

Man-man.

Man-sign system.

Man-artistic image.

To determine the influence on the formation of the image (picture) of the future, it is necessary to study the value world of a high school student, and for this, the most appropriate method is to study the value-semantic sphere of life of high school students. Also, the formation of an image (picture) of the future depends directly on the personal qualities of the student himself, and for this, a survey is the most suitable.

Results

The modern schoolchild demonstrates adherence to completely different values than it was even two decades ago. This is a natural process involving changes that connect the child's inner world and the world around him. Values also change under the influence of active agents of socialization (families, schools). We found that intragroup interactions in adolescents influence the choice of future profession, since peers have more influence than adults. Accordingly, a picture of the world of adolescents is formed, including a picture of the future. The content of the picture of the future world directly includes the image of the future formed in the process of socialization and education of children.

One of the components of the adolescents' picture of the world is the image of the professions of the future, which will replace the well-known and familiar professions of today. The image of the professions of the future includes not only individual human functions, but also values that are the driving force behind the development of the younger generation.

Discussion

For modern high school students, the image (picture) of the future certainly includes the image of future professions, since the majority thinks about the prospective professional activity. The image of the professions of the future is an important element of the image (picture) of the future as a whole. Choosing the professional trajectory is based on perceptions of the possible options. The following aspects contribute to the formation of the image (picture) of the future and the image of the profession among high school students:

- personal;
- social;
- professional.

Among the personal motives that form the image of the future profession among high school students, material well-being dominates. Among the social motives that form the image of the future profession among high school students, the dominant feature is the ability to benefit society.

Conclusion

It can be concluded that the formation of the image of the future and the image of the profession of the future is influenced by both economic, socio-cultural factors, and personal characteristics of a person. To organize effective events for the formation of a positive, high-quality image of the profession of the future among high school students in a modern Russian school, it is necessary to provide a number of pedagogical conditions associated not only with the provision of a sufficient material and technical base, but also with the formation of special methods and technologies for working with schoolchildren, both of theoretical and practical nature.

The paper was prepared with the financial support of the Russian Foundation for Basic Research within the framework of the scientific project No. 20-313-90057.

References

- Arapova P.I. (2015) The image of the future and the choice of life path in adolescence. Moscow: Vestnik of PSTGU, 1 (36).
- Belousova A.K. (2014) Features of the semantic layer of the image of the world of students of different nationalities in the south of Russia. Moscow: Psychology of teaching, 2, 5–18.
- Gabeev V.T., Kulikovskaya I.E., Mironova E.N. (2021) The problem of the formation of the image of the professions of the future in modern research. Moscow: Modern teacher Education, 1, 19-24.
- Grigorieva M.V. (2012) High school students' ideas about their future depending on the conditions of socialization. Moscow: Theory and practice of social development.
- Zheltikova I.V. (2020) Studies of the future and the place of the concept “image of the future” in them. Moscow: Philosophical Thought, 2020, 2, 15 - 32. DOI: 10.25136/2409-8728.2020.2.32302
- Kanishcheva M.A. (2016) Features of the image of the future in students with different levels of subjective control. M.A. Kanishcheva: abstract of the thesis of Ph.D. in Psychology: 19.00.13. Rostov-on-Don, 2016, 190.
- Kulikovskaya I.E. (2009) The wisdom of the child's heart: philosophical and pedagogical understanding of the problem (Chapter of the monograph). Monograph “Problems of spiritual values in philosophy and culture”. Book 2. Novosibirsk: CDSC.
- Kulikovskaya I.E. (2019) Child's attitude to information in the context of modern megatrends (Chapter of the collective monograph). Humanitarian problems of our time: man and society. Book 9. Novosibirsk: CDSC.
- Kulikovskaya I.E. (2008) Developing upbringing of a child in a changing socio-cultural space (Chapter of the monograph). Modern educational technologies: psychology and pedagogy: Monograph / Ed. E.V. Korotaeva, S.S. Chernov. Book 2. Novosibirsk: CDSC, Sibprint, 74–104.
- Kulikovskaya I.E. (2007) Child in the space and time of a fairy tale (Monograph). Rostov-on-Don: PI SFU.
- Mikhalskiy A.V. (2010) Formation of the image of the future: development of ability. Novosibirsk: Psychology and pedagogy: methods and problems of practical application.
- Novikova A.A. (2013) The image of the future and its formation in society. Tver: Tver State University.

- Notin A.I. (2017) On the meaning of the formation of the image of the future. Moscow: Pereprava. Orthodox electronic journal.
- Petrikova N.V. (2015) Features of the structure of the image of the future of modern high school students. Moscow: Psychological sciences.
- Petrova V.N. (2019) The image of the future as a predictor of professional development. Abstract of the thesis for the degree of Doctor of Psychology. Tomsk: National Research Tomsk State University.
- Samsonenko L.S. (2019) Study of life plans in modern high school students. Bulgaria, Plovdiv: Balkan Scientific Review. Vol. 3, 3 (5), 58–61.
- Solntsev S.A. (2019) The image of the future: important aspects of human upbringing or what kind of person does society need? MediaMera. Informational portal. - [Electronic resource] <https://mediamera.ru/post/28740> (Access date: 25.03.2021)
- Chistyakova S.N. (2016) Professional self-determination and professional career of youth. Moscow: Education, 106.
- Galtung J., Inayatullah S. (1997) (Eds.) Macrohistory and macrohistorians: Perspectives on individual, social, and civilizational change. Westport: Praeger, 1997.
- Kulikovskaya I. E. (2013) Axiological Sphere of Dialogue of Cultures: Phenomenon, Architectonics, Ontogenesis. Rostov-on-Don: World Applied Sciences Journal 25 (10): 1416-1422, 2013. ISSN 1818-4952. © IDOSI Publications, 2013. DOI: 10.5829/idosi.wasj.2013.25.10.13421
- Kulikovskaya, I. E., Veresov N.N. (2015) Human World-Outlook Evolution: From L.S. Vygotsky to Modern Times. Mediterranean Journal of Social Sciences. Vol 6 No 3 S1. ISSN 2039-2117 (online) ISSN 2039-9340 (print). Doi:10.5901/mjss.2015.v6n3s1p570. 570-574.
- Lombardo T. (2017) Future consciousness: The path to purposeful evolution. Changemakers Books.
- Rubin A. (2002) Tulevaisuudentutkimuksen käsitteitä [Concepts of futures research]. Kamppinen, O. Kuusi, S. Söderlund (Eds.). Tulevaisuudentutkimus: perusteet ja sovelluksia [Futures research: foundations and applications] (pp. 889–908). Helsinki: Suomalaisen kirjallisuuden Seura.
- Sande Ö. (1972) Future consciousness. Journal of Peace Research. 9.

Teofilov T. (2019) Careers of the Future: 42 Professions of Tomorrow [Electronic resource] // The startup.
Access mode: <https://medium.com/swlh/careers-of-the-future-42-new-professions-of-tomorrow-5d3905f8513>.