

**FORMATION OF THE IMAGE OF THE WORLD DURING THE DIGITAL
TRANSFORMATION OF EDUCATION**

**FORMAÇÃO DA IMAGEM DO MUNDO DURANTE A TRANSFORMAÇÃO DIGITAL
DA EDUCAÇÃO**

**FORMACIÓN DE LA IMAGEN DEL MUNDO DURANTE LA TRANSFORMACIÓN
DIGITAL DE LA EDUCACIÓN**

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ABSTRACT: The formation of the world's image in a person at each age stage of their development is a relevant problem due to this phenomenon's multidisciplinary and unique nature. This article focuses on the concept of the professional image of the world and reveals its integrity and consistency in the generalized views of future teachers about the learning process. The authors considered the research problem from the global digital transformation of education. To assess the manifestations, levels, and quality of the formed image of the world of the individual during the digital transformation of education, the authors experimented in Yelets State Bunin University. The research is useful for educators designing the content, technologies, and management tools for the professional training of a future teacher.

KEYWORDS: Image of the world. Professional image of the world. Digital transformation of education. Digital technologies. Digital educational environment.

RESUMO: *A formação da imagem do mundo em uma pessoa em cada fase de seu desenvolvimento é um problema relevante devido à natureza multidisciplinar e única desse fenômeno. Este artigo enfoca o conceito de imagem profissional do mundo e revela sua integridade e consistência nas visões generalizadas de futuros professores sobre o processo de aprendizagem. Os autores consideraram o problema de pesquisa na perspectiva da transformação digital global da educação. Para avaliar as manifestações, níveis e qualidade da imagem formada do mundo do indivíduo durante a transformação digital da educação, os autores realizaram um experimento na Universidade Estadual de Yelets Bunin. A pesquisa é útil para educadores que projetam conteúdos, tecnologias e ferramentas de gestão para a formação profissional de um futuro professor.*

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PALAVRAS-CHAVE: *Imagem do mundo. Imagem profissional do mundo. Transformação digital da educação. Tecnologias digitais. Ambiente educacional digital.*

RESUMEN: *La formación de la imagen del mundo en una persona en cada etapa etaria de su desarrollo es un problema relevante debido al carácter multidisciplinario y único de este fenómeno. Este artículo se centra en el concepto de imagen profesional del mundo y revela su integridad y consistencia en las visiones generalizadas de los futuros docentes sobre el proceso de aprendizaje. Los autores consideraron el problema de investigación desde la perspectiva de la transformación digital global de la educación. Para evaluar las manifestaciones, los niveles y la calidad de la imagen formada del mundo del individuo durante la transformación digital de la educación, los autores realizaron un experimento en la Universidad Estatal de Yelets Bunin. La investigación es de utilidad para los educadores que diseñan los contenidos, tecnologías y herramientas de gestión para la formación profesional de un futuro docente.*

PALABRAS CLAVE: *Imagem del mundo. Imagen profesional del mundo. Transformación digital de la educación. Tecnologías digitales. Entorno educativo digital.*

Introduction

We decided to explore the formation of the world's image during the digital transformation of education since this process is long and takes place throughout an individual's entire life, namely, at all age stages of their development. As we know, the child forms the basic idea of the world in the family.

Then the world's image continues to develop at all stages of education that the individual goes through, reflecting its directions and majors. In addition, the very phenomenon of the world's image evolves during additional education throughout the life of a person and their various activities (SASSIN, 2019).

Recent publications on psychology, pedagogy and the theory and practice of education define the world's image as integral and consistent generalized multilevel ideas that a person (personality) has about themselves, their achievements, activities, and the world they live in. This also refers to one's ideas about natural, cultural, and other objects of the world, its population, education, and learning. The process of forming a unique image of the world engages almost all separate manifestations of activity: perception, imagination, thinking, etc. This means we can perceive the world's image as a special integral characteristic inherent to the personality.

In this paper, we explored this problem regarding the special conditions arising during the digital transformation of education.

It is a well-known fact that

the information society changes the ontology of education since the space (*topos*) and the time of the lifeworld (temporality) of a person change. In the information society, one observes changes at the level of the deep basis of time that manifest themselves in the desynchronization of processes in real and virtual reality (IGNATOVA, 2017, p. 26).

At present, the concept of the digital transformation of education has already become a set phrase denoting a set of digital transformation processes and educational processes affected by it (SASSIN, 2020).

Consequently, at the present stage of education development, teachers should realize the significance of creating a high-quality digital educational environment. These professionals should be good at using digital educational technologies to facilitate the modernization of educational organizations of all levels, focusing on their digital transformation.

At the same time, digital technologies “... are the technologies that use computers and/or other modern gadgets to record code pulses and signals in a certain sequence and with a certain frequency” (ACADEMIC DICTIONARY, [n.d.]).

The digitalization of society transforms human values, which are a complex adaptive system. All aspects of human life, jobs, and interaction methods are changing fast. At present, the world needs individuals with system and structured thinking, sorting out information, quickly reacting to social changes and prompt decision-making.

In the modern digital world, the typical characteristics of human life and the digital components of modern life merge. The new digital reality gives rise to a new digital environment. As a result, this necessitates the revision of the traditional semantic foundations of a person's life and affects their values and motivation for success. All this transforms the qualitative characteristics of the world's image during the digital transformation of education.

An important stage is an entry of the young generation into adulthood during the digital era, which means that the youth should be prepared for this as well as possible. Therefore, the problem we explored in this paper is especially acute and requires close interdisciplinary study. Thus, our addressing this problem is relevant and timely. We considered the phenomenon of the world's image and its specifics thoroughly and constructively, relying on a wide range of research works.

First, this phenomenon is associated with emotional and sensory experiences. The brightness and meaningfulness of these experiences are significant as they affect the individual's behavior, activity, and priorities.

Second, this phenomenon underlies the subjective picture of the world. It contains the distinctive features of the personality, its development, relations with relatives, classmates, and primary caregivers (according to N.F. Golovanova (2005), this is “social space”), as well as the way of interaction with the outside world – natural and social objects, or society representatives (according to N.F. Golovanova (2005), this is “physical space”). This also refers to the specifics of perception and comprehension of norms and values (according to N.F. Golovanova (2005), this is “moral space”) and the specifics of self-understanding and self-acceptance (according to N.F. Golovanova (2005), this is “personal space”).

Third, the world's image contributes to understanding the artistic and aesthetic content in the works of art and the real world. A person who perceives the surrounding world as both the whole and its aesthetics can see the beauty and comprehend the entire image of the world.

Fourth, to perceive oneself as a real creator of this world, a person should participate in practical activities (collective and creative) and communicate in various situations.

Fifth, the world's image structure includes various components referring to emotions and senses, cognition and evaluation, personality and activity, and signs and symbols.

As researchers, we consider the world's image a unique phenomenon, special integrity, and consistency of generalized ideas about a person about themselves, activities, the world, and people. This phenomenon is extremely dynamic, changeable, and evolves during one's activity.

Considering the formation of a person's image of the world using digital technologies, we believe it is necessary to examine the term "edutainment." This is "a special type of learning based on entertainment, when the primary interest in the subject is formed due to enjoyment of the learning process and an enduring interest in the learning process" (ZHELEZNYAKOVA; DYAKOVA, 2013, p. 67). Since we consider motivation an important basis for knowledge, we believe that the knowledge obtained in this type of training will be persistent and thoroughly understood.

The relevance of the research problem stems from several factors. At the *scientific and theoretical level*, it involved defining the content and specifics of the world's image and the conditions for its formation. At the *scientific and methodological level*, we examined the differences between the real practice of pedagogical support for solving the problem and its

scientific and theoretical substantiation and the search and development of a system of prerequisites for forming a professional image of the world in future teachers.

The important aspects of the formation of the image of the world during the digital transformation of education include:

- The understanding that scientific and theoretical publications on psychology and pedagogy give different interpretations of the phenomenon of the image of the world;
- The formation of the professional image of the world of a future teacher has not been explored properly;
- Society and the state have a great demand for the digital transformation of education.

The research goal was to theoretically analyze and empirically determine the concept of the world's image and describe its formation during the digital transformation of education.

Literature review

Researchers working in different fields have examined the concept of the world's image. We believe that it is viable to use an interdisciplinary approach (in the context of our research) as philosophy, sociology, psychology, and pedagogy have explored various aspects of this phenomenon.

For example, encyclopedias give a narrow definition of the concept “image” as “appearance” or “looks.” We are interested in the broader meaning of this term. Psychological papers interpret the “image” as “a subjective picture of the world or its fragments.”

A person begins to form the subjective image of the world as a unique system of ideas about the surrounding reality. It refers to a range of questions such as "Who am I?", "Where am I?", and “What is around me? What kind of nature and its objects?", "In what society am I growing up? Who is in my inner circle? Whom will I meet?", "What is my place in the world?", "What should my attitude be to this reality and myself?" and "What determines my (personal) position?".

A. N. Leontiev gave the best-known definition of this concept in the 20th century. He considered this phenomenon as a special methodological feature, which implied that the researcher must establish the individual's cognitive processes when studying their subjective (personal) picture of the world since the individual is forming it during the development of their cognitive activity.

C.G. Jung (2002), one of the founders of analytical psychology, identified various aspects of the world's image. In numerous works exploring this phenomenon, he noted that the world's image is a dynamic formation: it can change, as well as a person's opinion about themselves and the knowledge about the world around them (JUNG, 2002, p. 187). This means that the individual's mental activity and discoveries can transform their image of the world, increasing its content and diversity.

A range of researchers examined other dimensions of the image of the world. A. N. Leontiev, A. V. Petrovsky, S. L. Rubinstein, D. I. Feldstein and others consider the "image" as a special form of the existence of a value, which regulates the personality's activity.

In the late 20th century, N. F. Golovanova linked the formation of the world's image with the social experience. She points to the fact that "objects of the external world do not directly affect the personality but having transformed into activity and turning into its products (objects, action plan, rules, norms, and values), they underlie the formation of the image of the world" (GOLOVANOVA, 2005). The researcher mentions several characteristics that we consider extremely important:

- As a rule, the image of the world that a child develops reflects the characteristics of the image of the world of their immediate environment (mother, father, etc.) in certain ways, similar to the work of the genetic code (GOLDSMITH, N.; TOYCH, K.), and all this can be corrected throughout a person's life;
- Family traditions affect the emerging image of the world, and they can also be corrected if necessary, by pedagogical means of education that influence the motivational and value sphere of the individual;
- Family values and attitudes determine the content of the image of the world; therefore, the child should be taught adequate analysis, reflection, and evaluation techniques;
- The experience of participating in activities and real social practices affect the formed image of the world (GOLOVANOVA, 2005).

In his study published in 2005, V.P. SERKIN notes that "the image of the world is a motivating and orienting subsystem of the entire system of the subject's activities (lifestyle)" (SERKIN, 2009, p. 113). He also claims three mechanisms responsible for developing the world's image: practical activity, communication, and self-generation. V. P. Serkin proposed several structures that are parts of the world's image (activity, procedural, and functional models). They fully comply with the requirements he determined for a complex mental phenomenon model. The author's development of lifestyle's psychological concept is dichotomous to the world's image.

In the paper published in 2009, V.V. Rusevich defines the image of the world as an integral system of ideas of "... a child aged 5-7 years old about the world, other people, themselves, and their activity. It is based on the image of the self and the emotional and value perception and attitude to the surrounding reality, mediated through personal experience" (RUSEVICH, 2009, p. 7).

E. Yu. Artemyeva considers the image of the world as

[...] A source of subjective certainty, which allows one to comprehend ambiguous situations objectively. The system of apperceptive expectations that emerges from the image of the world in a particular situation causes illusions and perception errors, which affects the content of one's perceptions and ideas (ARTEMYEVA, 1999).

E.Yu. Artemyeva understands the image of the world as "the integrator of traces of human interaction with objective reality" (ARTEMYEVA, 1999, p. 193).

This means we will consider this phenomenon based on the publications listed above.

1. The world's image is unique in all possible senses and interpretations.
2. The world's image is unique integrity and system of the generalized and ordered ideas of a person (child or adult) about their personality, the surrounding natural and social reality, and other people.
3. The world's image is changeable and extremely dynamic and often transforms during various activities.

This phenomenon is always crucial for personal development and eras. Technology-oriented professional development plays an important role in the information or digital society age (CLARK-WILSON; RO BUTTI; SINCLAIR, 2014). However, teachers should keep developing their world's image in their professional development and help their students do the same.

We agree with the opinion of Yu.V. Senko (2011), who claimed that the professional image of the world of a future teacher, as a rule, includes:

- A holistic system of ideas of the teacher about the educational process, themselves, and other participants and the understanding of the value of professional activity;
- The essence of education as the macrocosm;
- New pedagogical thinking;
- Mastery of new tools to meet the digital transformation requirements of education, digital technologies, and digital educational environment.

At present, the professional image of the world is forming under the conditions of the digital transformation of education. "In this situation, the professionalism of a modern teacher becomes an especially acute issue as the most significant component and strategic resource that ensures the success and effectiveness of their daily teaching activities in a digital educational environment" (MOROZOV; SAMBORSKAYA, 2018, p. 43). Such characteristics as the breadth of knowledge, erudition, open-mindedness, creativity, good breeding, and spirituality will facilitate the formation of a person's image of the world during the digital transformation of education.

In a broad sense, there are many definitions of the concept of "digital transformation."

- It is a set of digital technologies described and characterized differently (ANTONOVA; OSPENNIKOVA; SPIRIN, 2018).
- A. Prokhorov and L. Konik note that "one of the first meanings of the term "digital transformation" is the transition from analog data to digital data (nowadays commonly called digitalization) (PROKHOROV; KONIK, 2019, p. 16).
- Digital transformation of education implies renewing its content, methods, techniques, forms of the educational process, and outcomes.

Having analyzed the current state and prospects for the development of education in general and higher education in particular, we agree with E.V. Romanov, who claimed that "stimulating the creation of breakthrough social and technological innovations in higher educational institutions" is a matter of the near future (ROMANOV, 2018). We believe that technological innovations should refer to the digitalization of education.

When managing the process of digitalization in Russian education, including universities, one should rely on the accumulated experience (for example, the practices of universities in the Ural Federal District of the Russian Federation (PEREVALOV *et al.*; 2020)). This experience (and other cases and publications) proves the need to use digital technologies during the digitalization of education.

The work "Rethinking Learning for a Digital Age" addresses learners' complex and diverse experiences in a world filled with digital technologies (BEETHAM; SHARPE, 2013). A new outlook on pedagogy in the digital age convincingly proves that digital technologies are the future.

Some publications examine the concept of "digital technologies". The researchers note that "the emergence and dominance of digital technologies will, in turn, lead to the emergence of even newer, breakthrough technologies that improve modern society and simplify the lives of many people in terms of finding information, processing, and using it" (MASHEVSKAYA,

2020). We are convinced that it is vital not to lose oneself, one's world, and one's image of the world during this process. The latter is unique, and its transformation will certainly be reflected in the transformation of the surrounding world through practical activities.

The concept of the digital society and digital culture has a huge impact on forming a person's values, consciousness, worldview, culture, and identity. The digital world implies receiving and processing a huge amount of information, creating algorithms, thereby, voluntarily or involuntarily, reformatting the entire physical world familiar to us.

The new technological era transforms how we build and maintain relationships, create hierarchical structures, and expand our capabilities.

Our primary task is to manage complex technologies that affect people, the world around us, and ourselves in the digital world. For this purpose, we will have to form a new consciousness, thinking, and worldview. Consequently, we should explore in more detail how digital technologies affect a person and their values (ANDRYUKAITENE *et al.*, 2017).

Thus, exploring the research topic, we established that there is no uniform approach to defining its basic concepts as, firstly, it is an interdisciplinary phenomenon, and secondly, the considered concepts are just evolving in the new conditions.

Having studied and analyzed the publications, we concluded that international and Russian scientists apply diverse approaches and have different opinions on the phenomenon under consideration. Nevertheless, the creation and development of the information society is an obvious and significant process. One cannot ignore its consequences. The information society is “a society in which information and the level of its application and accessibility radically affect the economic and socio-cultural conditions of people’s lives” (DEVELOPMENT STRATEGY, 2017). Thus, as E. Instefjord and E. Munthe (2017) note, digital technologies will improve teachers' education and digital competence. The teacher should master digital technologies to apply them while forming their image of the world and their students.

Methodology

The methodological basis of this study was the ideas of modern philosophy, sociology, psychology, and pedagogy about personality and its development. We applied a set of theoretical methods (methodological and theoretical analysis, interpretation, and comparison), as well as some empirical methods (questionnaires and creative tasks done by the respondents

such as writing an essay on a given topic or describing their image of the world with signs and symbols).

We considered the impact of digitalization on the transformation of education, values, and the formation of the world's image under current conditions with a set of methods such as axiological, synergistic, and culture creation. This enabled us to gain a more detailed and deep insight into the essence of the concepts under study. The axiological method implies the study of values and includes principles, norms, rules, perspective expectations, and goals that influence values formation. The synergistic method allowed us to explore the research problem more deeply and evaluate the impact of digitalization on the changes in values and the world's image during the digitalization of education and society.

Since the transformation of education, the image of the world, and digitalization are sophisticated dialectical processes, we applied the synergetic method to study these complex adaptive systems and the rational formation of a new image of the world based on the principles of a new worldview, a new person, and a new society of the future.

We chose the synergetic method due to the unpredictability of the processes that form the world's image in transforming education. It allowed us to deal with the uncertainty and chaotic social and cultural processes and establish their common basis in the new complex digital world. The study was conducted from January 2020 up to March 2021, that is, for almost two years.

Results

Working on the research, we surveyed 65 students of the first, second, third, and fifth years of study (the course 44.03.05 Pedagogical Education with two training specialties). The respondents answered the following questions.

1. Choose the most accurate, from your point of view, the definition of the image of the world out of the given options: a) the image of the world is a holistic, multilevel, and ordered system of a person's ideas about oneself, one's activities, and the world around them as a whole; b) the image of the world is a dynamic system that changes and enriches itself during one's practical activity; c) the image of the world is a complex formation with integrative characteristics; d) the image of the world is everything that surrounds us.

2. What, in your opinion, is the basis for the motivated activity of the individual and the formation of their image of the world? Choose only one answer from the options below:

a) The certain level of knowledge about a person, society, and nature;

- b) A person's values;
- c) Skills required to transform the world; and
- d) Information technology.

3. Choose the components of the image of the world out of the options given below:

- a) Emotional and sensual;
- b) Cognitive and evaluative;
- c) Activity and personal; and
- d) Sign and symbolic.

4. Choose no more than two features of a teacher's professional image of the world out of the options given below:

- a) Interaction between a teacher and a student;
- b) The understanding of one's pedagogical position;
- c) The ability to transform a socio-cultural situation into a pedagogical situation; and
- d) Supporting students during the transformational processes that integrate traditional and digital educational environments.

5. Predict how the student's image of the world will change due to the digital transformation of education. Give your answer.

6. Choose out of the options given some positive aspects that influence the formation of one's image of the world during the digital transformation of education:

- a) Free access to online sources of information;
- b) Life-long self-development and self-improvement;
- c) Lower costs (digitalization promotes e-learning tools); and
- d) Mastering new digital technologies (the digital world keeps developing, and the resources constantly update).

7. Choose out of the options given some possible risks that affect the formation of one's image of the world during the digital transformation of education.

- a) Decreased mental activity;
- b) Decreased social activity;
- c) Physical health problems; and
- d) The lack of proper conditions for developing one's creative abilities.

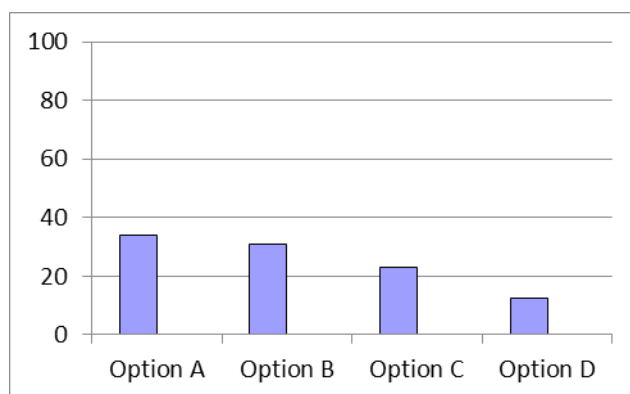
The questionnaire contained questions of different types. The fifth question was open-ended, while the rest had four options to choose from.

The results obtained were processed and presented in tables and figures.

Table 1 – The results of the answers to Question 1 of the questionnaire

Question 1	Answer options	Results
From your point of view, choose the most accurate definition of the world's image out of the options given.	a) The image of the world is a holistic, multilevel, ordered system of a person's ideas about oneself, one's activities, and the world around them as a whole;	22 respondents (33.8 %)
	b) The image of the world is a dynamic system that changes and enriches itself during one's practical activity;	20 respondents (30.8%)
	c) The image of the world is a complex formation with integrative characteristics;	15 respondents (23.1%)
	d) The image of the world is everything that surrounds us.	8 respondents (12.3%)

Source: Prepared by the authors

Figure 1 – The answers to Question 1 of the questionnaire

Source: Prepared by the authors

The respondents chose the content characteristics of the phenomenon under study, and their choice was accurate and reasonable. Even first-year students rarely (only eight times) chose the literal meaning of the term, which indicates that they applied an interdisciplinary approach when selecting the definition (in other words, they used knowledge from different subjects). What is more, the respondents realized that this term's psychological and pedagogical content might vary.

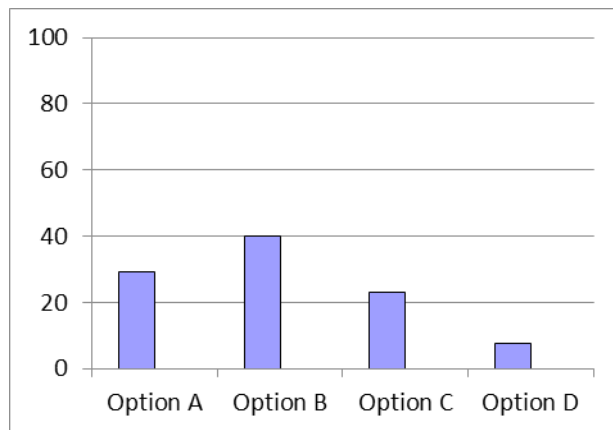
Table 2 – The answers to Question 2 of the questionnaire

Question 2	Answer options	Results
What, in your opinion, is the basis for the motivated activity of the individual and the formation of their image of the world? Choose only one answer out of the options below.	a) The certain level of knowledge about a person, society, and nature;	19 respondents (29.2%)
	b) A person's values;	26 respondents (40%)
	c) Acquired skills to transform the world;	15 respondents (23.1%)

	d) Information technology.	5 respondents (7.7%)
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Source: Prepared by the authors

Figure 2 – The answers to Question 2 of the questionnaire



Source: Prepared by the authors

Future teachers clearly understood and defined the basis for the motivated activity of the individual and the formation of their image of the world. Moreover, we asked the respondents to choose only one option, ranking the characteristics. Quite a rightly, most respondents ranked Option B the highest (a person's values). Option A ranked second (certain level of knowledge about a person, society, and nature). Option C ranked third (acquired skills to transform the world), while the last one was Option D – information technology. The small number of answers D indicates that the respondents chose this option intuitively, but this result proves that students think about the role and significance of the digital transformation of education in the formed image of the world. The largest result (80%) for Option C to the third question of the questionnaire and the creative tasks done confirmed this assumption.

Table 3 – The results of the answers to Questions 3, 4, 6, and 7 of the questionnaire

Questions	Answer options	Results
Question 3 Choose the components of the world's image out of the options given.	a) Emotional and sensual;	48 respondents (73.8%)
	b) Cognitive and evaluative;	37 respondents (56.9%)
	c) Activity and personal;	52 respondents (80%)
	d) Sign and symbolic.	13 respondents (20%)
Question 4 Choose no more than two features of a teacher's professional image of the world	a) Interaction between a teacher and a student;	65 respondents (100%)
	b) The understanding of one's pedagogical	4 respondents

out of the options given below.	position;	(6.2%)
	c) The ability to transform the socio-cultural situation into a pedagogical situation;	31 respondents (47.7%)
	d) Supporting students during the transformational processes that integrate traditional and digital educational environments.	30 respondents (46.1%)
Question 6 Choose some positive aspects that influence the formation of one's image of the world during the digital transformation of education out of the options given.	a) Free access to online sources of information;	65 respondents (100%)
	b) Life-long self-development and self-improvement;	65 respondents (100%)
	c) Lower costs (digitalization promotes learning tools);	16 respondents (24.6%)
	d) Mastering new digital technologies (the digital world keeps developing, and the resources constantly update).	61 respondents (93.8%)
Question 7 Choose some possible risks that affect the formation of one's image of the world during the digital transformation of education out of the options given below.	a) Decreased mental activity;	54 respondents (83%)
	b) Decreased social activity;	65 respondents (100%)
	c) Physical health problems;	65 respondents (100%)
	d) The lack of proper conditions for developing one's creative abilities.	37 respondents (56.9%)

Source: Prepared by the authors

The respondents' answer to Question 4 demonstrated that future teachers have the correct understanding of the professional image of the world, no matter what year they were in.

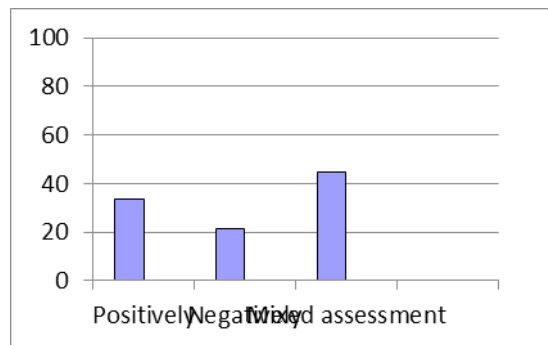
Question 5 was open-ended. However, all answers are divided into three groups: a positive assessment of the change in a student's image of the world due to the digital transformation of education, a negative assessment of it, or the mixed assessment. We presented the analysis of the answers in Table 4 and illustrated it with a figure.

Table 4 – The answers to Question 5 of the questionnaire

Question 5	Answer options	Results
Predict how the image of the student's world will change due to the digital transformation of education.	Positively	22 respondents (33.8%)
	Negatively	14 respondents (21.6%)
	Mixed assessment	29 respondents (44.6%)

Source: Prepared by the authors

Figure 3 – The answers to Question 5 of the questionnaire



Source: Prepared by the authors

The answers to Questions 6 and 7 reflected the influence of the following factors on the formation of a person's image of the world during the digital transformation of education:

1) Positive aspects and their ranking:

1st place – a) free access to online sources of information and b) life-long self-development and self-improvement (100%).

2nd place – d) mastering new digital technologies (93.8%).

3rd place – c) lower costs (24.6%).

2) Possible risks and their ranking:

1st place – b) decreased social activity and c) physical health problems (100%).

2nd place – a) decreased mental activity (83%).

3rd place – d) the lack of proper conditions for developing one's creative abilities (56.9%).

By analyzing the answers to the questions, we could identify and assess the specifics of the formation of students' image of the world during the digital transformation of education.

We asked the respondents to do the first creative task (to write an essay) to determine which trends they associated with the image of the world during the digital transformation of education:

– The introduction of digital technologies in traditional educational programs and academic disciplines;

– The development of online education;

The creation of a virtual (digital) educational environment without harming all parties' physical and mental health in the learning process.

Here are some quotes from the essays:

1) "To my mind, the image of the world during the digital transformation of education will expand due to the inclusion of digital technologies into educational programs at different levels of training" (written by a fifth-year student).

2) "The development of online education opens up opportunities for designing your educational routes, according to the needs of the labor market" (written by a fifth-year student).

3) "A person has a unique image of the world shaped by our characteristics. The digitalization of education transforms our understanding of the surrounding reality. The main thing is not to lose touch with reality" (written by a third-year student).

4) "Despite the digital transformations of education, the image of the world of the future generation should have lots of face-to-face communication and genuine emotions" (written by a third-year student).

5) "The illusory nature of the virtual world may result in a person's degradation and the loss of oneself in the real world" (written by a second-year student).

6) "Digital transformations of education should not exclude live human communication. Without it, world civilization has no future. Otherwise, it will be like in the cartoon "WALL-E" (written by a first-year student).

These excerpts demonstrate the evolution of students' understanding and views from comparative (using examples) to an independent, original philosophical perception of the content and significance of the world's image during the digital transformation of education.

The second creative task allowed us to examine the sign and symbolic interpretation the students gave off the world's image and the professional image of the world.

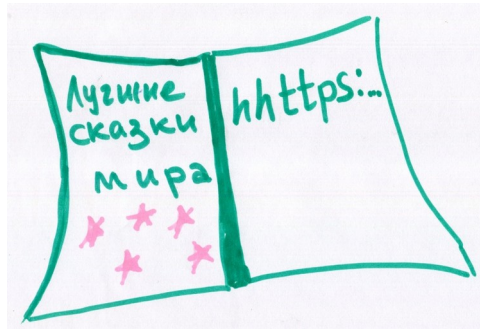
Here are some examples of this task.

Figure 4 – Creative task 2 done by a first-year student ("My world").



Source: Prepared by the authors

Figure 5 – Creative task 2 done by a second-year student ("Best Fairy-Tales of the World")



Source: Prepared by the authors

Figure 6 – Creative task 2 done by a third-year student



Source: Prepared by the authors

Figure 7 – Creative task 2 done by a fifth-year student ("We" is in the middle and "I" is on the rays)



Source: Prepared by the authors

Once again, these works prove that a person's image of the world is unique, creative, and filled with emotions. The created images of the world demonstrate a combination of the

traditional worldview and digital realities. The drawings demonstrate that there are fragments of the professional image of the world in the future teacher.

These tasks and extracurricular activities (for example, participation in student pedagogical team “Bonus” of Yelets State Bunin University) connected with students’ creative and personal development enabled us to define the image of the world more accurately, as well as to determine the specifics of its formation in future teachers. Russian researchers T. A. Boronenko (2019), N. F. Golovanov (2005), A. F. Kaisin (2019), V. V. Rusevich (2009), and V. P. Serkin (2009) have the same opinion, as well as some international researchers, for example, G. Kuh (1995). The latter developed a comprehensive approach to diagnosing the outcomes of students’ social activity, which highlights such important aspects as:

- 1) Personal competence (self-awareness, autonomy, confidence, social competence, and purposefulness);
- 2) Cognitive complexity (reflexive judgment and application of knowledge);
- 3) Knowledge and academic skills;
- 4) Practical competence (practical and professional competence);
- 5) Humanism (altruism and aesthetics) (KUH, 1995).

Research and developments in higher education (MCINNIS, 2001) help future teachers form the professional image of the world.

Conclusion

Having conducted the research, we drew some conclusions.

1. A person's image of the world is a unique phenomenon, special integrity, and a peculiar system of generalized ideas about themselves, their future job, and the world around them as a whole. This phenomenon is extremely dynamic and changeable since it acquires certain content during practical activity. Its important aspects are brightness meaningfulness, which affects the behavior, activity, and priorities in the practical activity of the individual.

One can consider a person's image of the world as a personal characteristic and a component of a subjective picture of the world. It reflects the specifics of personality traits, their development, relationships with relatives, classmates, primary caregivers, interaction with the outside world (natural and social objects), perception and comprehension of norms and values, and the specifics of self-understanding and self-acceptance.

The person enriches their world's image and fills it with content as they do practical activities (collective and creative) and communicate in various situations. This enables the person to feel like a real creator of the world.

2. The professional image of the world of the future teacher is a conscious integral system of generalized ideas that students have about the educational process, themselves, and other participants in it. One must understand the significance of the professional activity, the role of education as a macrocosm, the degree of mastery of new pedagogical thinking, and, of course, proficiency in using new tools to meet the requirements of the digital transformation of education, digital technologies, and digital educational environment.

To form the professional image of the world successfully, one should consider the professionalism of a modern teacher and such components as broad knowledge, erudition, creativity, and good breeding.

3. We identified some conditions for the digital transformation of education that are crucial for the successful formation of the world's image as long as education is considered necessary. In this case, digital technologies become an indispensable part of professional activities, while the digital educational environment is understood as an available set of information systems to solve various learning process tasks.

Therefore, the world's image reflects the individual's inner world during the digital transformation of education. However, even in this context, the image of a person's world should contain face-to-face communication, genuine emotions, and all possible aspects of the subjective reflection of the world in which the individual lives and develops.

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